U.S. DEPARTMENT OF ENERGY

Determination of Duty Cycle for Energy Storage Systems Integrated with Microgrids

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VV Viswanathan
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Microgrids Sub Group of the ESS Protocol Working Group

June 2014

Pacific Northwest NATIONAL LABORATORY

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PNNL-23390

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Purpose

This report supplements the report, “Protocol for Uniformly Measuring and Expressing the Performance of Energy Storage Systems,” PNNL-22010, Rev. 1, June 2014. It provides the background and documentation associated with the determination of a duty cycle to be applied to an energy storage system (ESS) in a microgrid operated in an islanded mode, for the purpose of measuring and expressing ESS performance in accordance with the June 2014 protocol for measuring and expressing ESS performance.

Acronyms and Abbreviations

ESS	energy storage system(s)
kVA	kilovolt-ampere
kVAR	kilovolt-amperes reactive
MVAR	megavolt-amperes reactive
MW	megawatt
PV	photovoltaic
RTE	round-trip efficiency
SOC	state of charge
VAR	volt-ampere reactive

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1.0 Background

When the initial effort was undertaken to develop a protocol for measuring and expressing the performance of energy storage systems (ESS) in early 2012, it was recognized that, due to the range of ESS applications, not all ESS applications could be addressed at the same time. As a result, it was determined to focus on those applications considered to have the highest priority (i.e., peak shaving and frequency regulation), and after completion of an initial protocol the application of the protocol to additional ESS applications would be pursued. After the initial protocol was published in November 2012, the protocol working group[1] was polled to determine which applications they felt should be addressed by the next edition of the protocol. The application of ESS for microgrids and photovoltaic (PV) smoothing received the highest level of support. The working group was polled to identify members who were interested in participating in subgroups to develop criteria for each of these new applications. Those serving on the microgrid subgroup are listed below.

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Jae Choi	Fiamm
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Dave Klapp	American Electric Power
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Jason Zielke	Clean Energy Trust
Jim Reilly	Jim Reilly Associates
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Xiaoyu (Shawn) Wang	Brookhaven National Laboratory
Yu Zhang	Pacific Northwest National Laboratory
Matthias Engels	Pacific Northwest National Laboratory

[1] See Foreword to the 2012 Protocol; all stakeholders interested in this activity were invited to join a working group responsible for providing direction and input on the effort.
[2] Now with ERCOT

From the formation of the microgrid subgroup (July 17, 2013) until the completion of their work (May 12, 2014) there were approximately 10 web meetings and a number of drafts and redrafts of criteria leading up to proposed enhancements to the 2012 Protocol to cover microgrid applications. These enhancements focused on needed terms and definitions, metrics applicable to ESS performance in an islanded microgrid application, the duty cycle to be applied to the ESS, and the manner in which operational data would be captured; from those data, performance of the ESS would be reported.

In defining a microgrid, the definition from the Microgrid Exchange Group[1] was adopted and included in the criteria developed, with the caveat that the microgrid as addressed in the protocol would be operated in an islanded mode. Specifically, the subgroup considered a microgrid to be a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that act as a single controllable entity with respect to the main grid and can connect to and disconnect from the grid to enable it to operate in either grid-connected or island mode. They further felt that the definition of a microgrid should not be limited by size, but rather by functionality. Any ESS capable of performing the duty cycle developed for use in assessing an ESS in an islanded microgrid should be able to use the protocol to determine ESS performance.

A typical microgrid is connected to the main grid, and should have the flexibility to operate in an islanded mode. The applications associated with a microgrid while connected to the grid are quite large in number, and in actuality would be assessed pursuant to the protocol as would any other ESS based on the application(s) they are intended to address (peak shaving, frequency regulation, etc.). For this reason the microgrids subgroup focused on operation of an ESS in an islanded mode. The following use cases for this application of an ESS were considered for inclusion in the protocol:

- microgrid with renewables (where renewables consisted of a mix of solar and wind generation)
- microgrid with renewables but no frequency regulation
- microgrid with no renewables and no frequency regulation

Each use case above involves storing some energy in excess of what is being used and providing it when needed, which is addressed in the peak-shaving application criteria in the protocol. All of the above three use cases include volt-ampere reactive (VAR) support, power quality, frequency response and black start.

The subgroup discussed addressing other use cases such as serving critical loads, baseload, modeling, life and safety, but did not pursue those in developing enhancements to the protocol to address an islanded microgrid application. The critical load was assumed to be 25% of peak load, and was assumed to be serviced by the gensets[2] available. Modeling, while considered important, was not considered a use case, and hence was considered to be outside the scope of the work associated with the protocol enhancements. It was also agreed that the effort would not include determining failure mechanisms for the ESS because those were not considered to be within the scope of the protocol. Periodic capacity tests were considered to be a good proxy for the state of health of the ESS. In addition, safety related issues were not considered, as they are also outside the scope of the protocol.

[1] experts and implementers of microgrid technologies
[2] genset refers to the generator set that provides power to the loads associated with the microgrid

The microgrids subgroup spent considerable time discussing and developing an appropriate duty cycle for assessing the performance of an ESS in an islanded microgrid application.

After finalizing the duty cycle, the microgrids subgroup discussed what metrics should initially be applied to measuring and expressing the performance of an ESS in an islanded microgrid application. It was determined that all of the metrics applicable to frequency regulation as listed below, and included in the 2012 Protocol as updated in the June 2014 Protocol, were relevant to an ESS in an islanded microgrid application:

- round-trip efficiency (RTE) for the entire duty cycle
- energy capacity stability
- response time
- ramp rate
- reference signal tracking
- maximum excursion of state of charge (SOC)

2.0 Approach to Development of the Duty Cycle

Development of the duty cycle for an ESS in an islanded application was pursued through a number of discussions and review of available information as well as consideration of how the duty cycles already in the protocol had been developed. The load and generation mix as shown in Table 2.1 and Table 2.2 was assumed to be present. The peak load supplied by the ESS in an islanded mode was assumed to be100 kW.

Note that while these assumptions and the resultant duty cycles may not fully align with what every user of the protocol would agree constitutes a microgrid, they represent what was considered appropriate within the context of the protocol. Specifically, the value of the protocol or any standards based on the protocol is standardization and the ability to compare different systems on the same basis of performance. Allowing each user to make up their own duty cycle would mean that, while the data for each different system maybe "better" from the eyes of those providing the data, the data from system to system are not comparable. As such, one uniform duty cycle must be applied to each ESS application. Note that the 2014 Protocol does allow users to apply additional duty cycles if they so choose, but the duty cycle presented in the 2014 Protocol must still be used. Any performance information measured and expressed based on the application of any additional duty cycles must be noted as such along with a description of those duty cycles.

Assumptions:

1. Critical load is 25% of peak load and 42% of average load.
2. Maximum wind and solar generation is 35% (each) of maximum peak load.
3. Wind provides 41% of total load on average, and solar provides 16%.
4. Gas turbines and/or diesel generators provide 43% of average load.
5. Assuming an ESS RTE of 0.8, additional generation with 4% of average load capacity is needed to charge the ESS. Hence the amount of on-line generation capacity supports 47% of average load (critical load is only 42% of average load). Hence, no additional generator capacity is needed to support critical load when renewable generation stops.
6. For the case in which 25% of generators are out of commission, the extra generation capacity to maintain critical loads is calculated to be 9% of average load. The ESS energy capacity required to provide this power for 20 minutes while backup generators come on line is calculated to be 1.7 kWh.
7. With this amount of generation capacity, the ESS can sustain failure of up to 25% of on-line generators, with 1.24 kWh (maximum depth of discharge [DOD] of 99.5%) of energy storage needed to allow 3.7 kW of backup generator capacity to come on line to support critical loads. In order to have the same amount of on-line generator capacity as before, failure of 25% of on-line generators (28.4 kW or 47% of average load), 7.1 kW of backup generation needs to come on line, with 2.4 kWh of ESS energy capacity (99% maximum DOD).

Table 2.1. Peak and Average Load and Generation in the Microgrid when Renewables Present

	Peak (kW)	Average (kW)	Percent of Average Load (%)
Load	100	59.9	
Critical load		25	42.0
Wind	35	24.6	41.1
Solar	35	9.3	15.5
Gas turbine / diesel[(a)]	26.3	26.3	43.4
Backup generation needed if 25% of generators disabled	5.2	5.2	
Energy storage sizing (w/o regulation)	246.5 kWh, 53.5 kW discharge, 30 kW charge		
Energy storage sizing (with regulation)	246.5 kWh, 90 kW discharge, 75 kW charge		

(a) The gas turbine or diesel generator is assumed to operate at constant power. The RTE of the ESS has been taken into account to calculate the additional genset capacity needed to charge the ESS. It is also assumed the total gas turbine or diesel generator capacity is sufficient to support critical loads in case wind/solar output is insufficient.

Table 2.2. Peak and Average Load and Generation in the Microgrid for No Renewables

	Peak (kW)	Average (kW)	Percent of Average Load (%)
Load	100	59.9	
Critical load		25	42.0
Wind			
Solar			
Gas turbine / diesel[(a)]	62.3	62.3	62.3
Backup generation needed if 25% of generators disabled	0	0	
Energy storage sizing (w/o regulation)	233 kWh, 39.5 kW discharge, 28 kW charge		
Energy storage sizing (with regulation)	Did not analyze		

(a) The gas turbine or diesel generator is assumed to operate at constant power. The RTE of the ESS has been taken into account to calculate additional genset capacity needed to charge the ESS. It is also assumed the total gas turbine or diesel generator capacity is sufficient to support critical loads in case wind/solar output is insufficient.

The average load, wind generation and solar generation were calculated, and from that information the average power from gensets was determined. Additional genset capacity to account for ESS RTE was also determined. The ESS SOC was calculated by multiplying the charge energy by the RTE. The initial SOC was set such that the SOC never goes negative during the 24-hour duty cycle, and also never exceeds 100% SOC. This analysis for ESS SOC took into account only the energy discharged and charged by the ESS to balance generation and load, without taking into account the ESS duty cycles corresponding to frequency regulation, VAR support, power quality, frequency response or black start . The ESS power capacity rating included the maximum power the ESS is subjected to when frequency

regulation service is included. It was assumed that the other services (VAR support, power quality, frequency response and black start), would not affect the ESS power rating due to their short duration and infrequent occurrence.

This work is not specific to any particular location. Rather than spend a significant amount of time gathering wind generation, solar generation and load data across various regions and then creating a representative dataset for each, data from the literature as shown below was used.

Load and solar generation information was obtained from Sowder (2013). This load was at the Rankin Avenue substation in Mount Holly, NC, with a 1.2 MW solar PV facility located 3 miles from the substation on a 12.47 kW distribution circuit.

The solar output is given below in Figure 2.1:

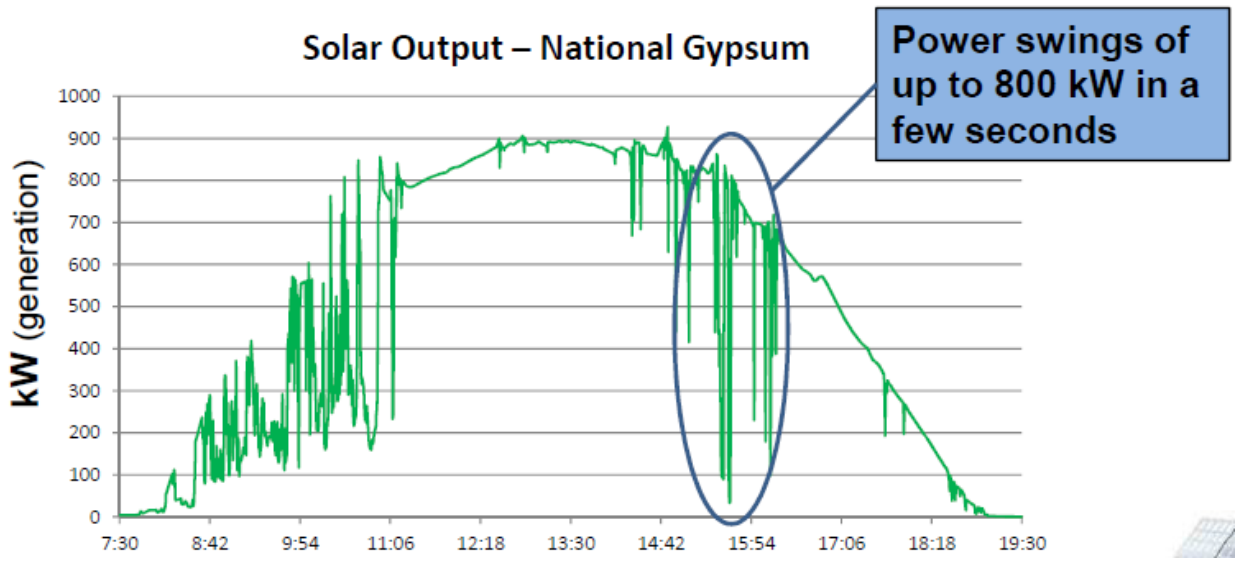

Figure 2.1. Solar Output at the Rankin Avenue Substation in Mount Holly, NC (Sowder 2013)

The output between 7:30 AM and 7:30 PM was digitized at Pacific Northwest National Laboratory (PNNL). The digitization was done with varying time steps, with the smallest time step being 0.01 min.

The wind generation data was provided by a south-central Washington State commercial wind generation facility. The data has been scaled such that peak output is 35 kW and is shown in Figure 2.2.

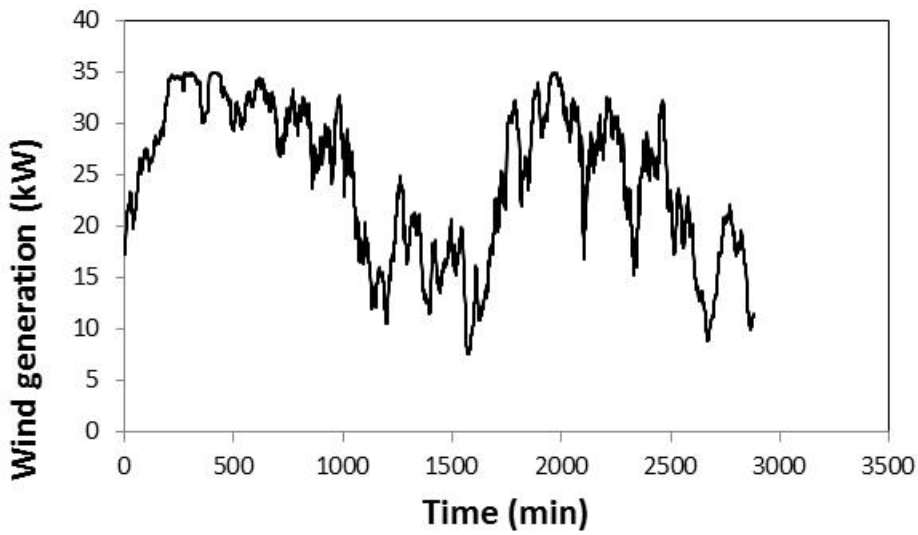

Figure 2.2. Wind Generation Data Provided by a South-Central Washington State Commercial Wind Generation Facility.

The load fluctuations between 7:30 AM and 7:30 PM were assumed to be the same as those at the Rankin Avenue substation as shown below in Figure 2.3. (Sowder 2013).

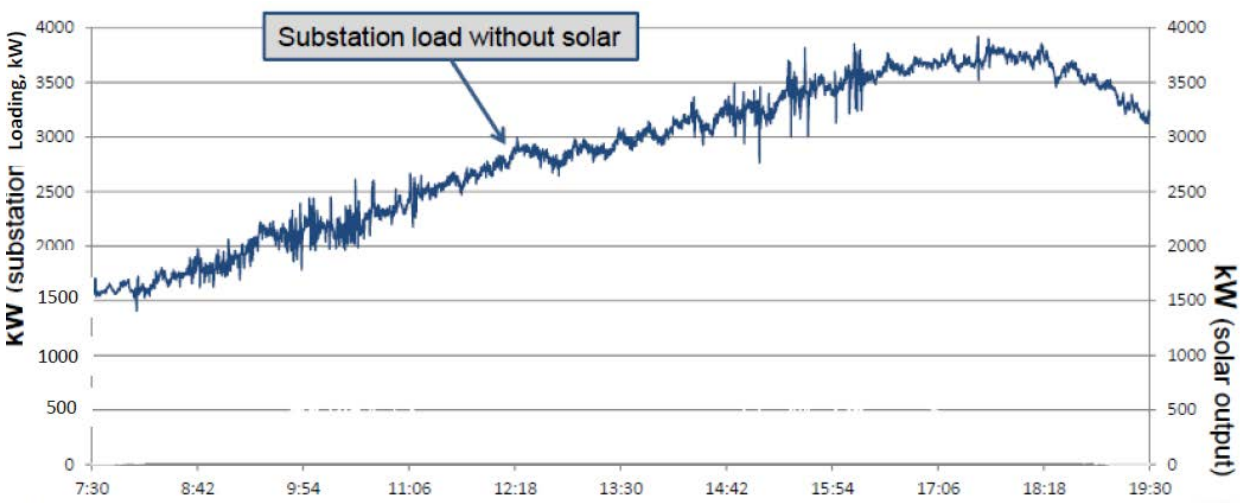

Figure 2.3. Load at the Rankin Avenue Substation in Mount Holly, NC (Sowder 2013)

To generate a 24-hour load, the load profile of a community or facility served by a 25 kilovolt-ampere (kVA) transformer was used as shown in Figure 2.4 (Pipattanasomporn et al. 2011). Note that the peak load in this figure is about 14.5 kW. The load was scaled to 100 kW peak, and the load at night calculated. A small adjustment was made to ensure continuity at the end points of 7:30 AM and 7:30 PM at the Rankin Avenue substation.

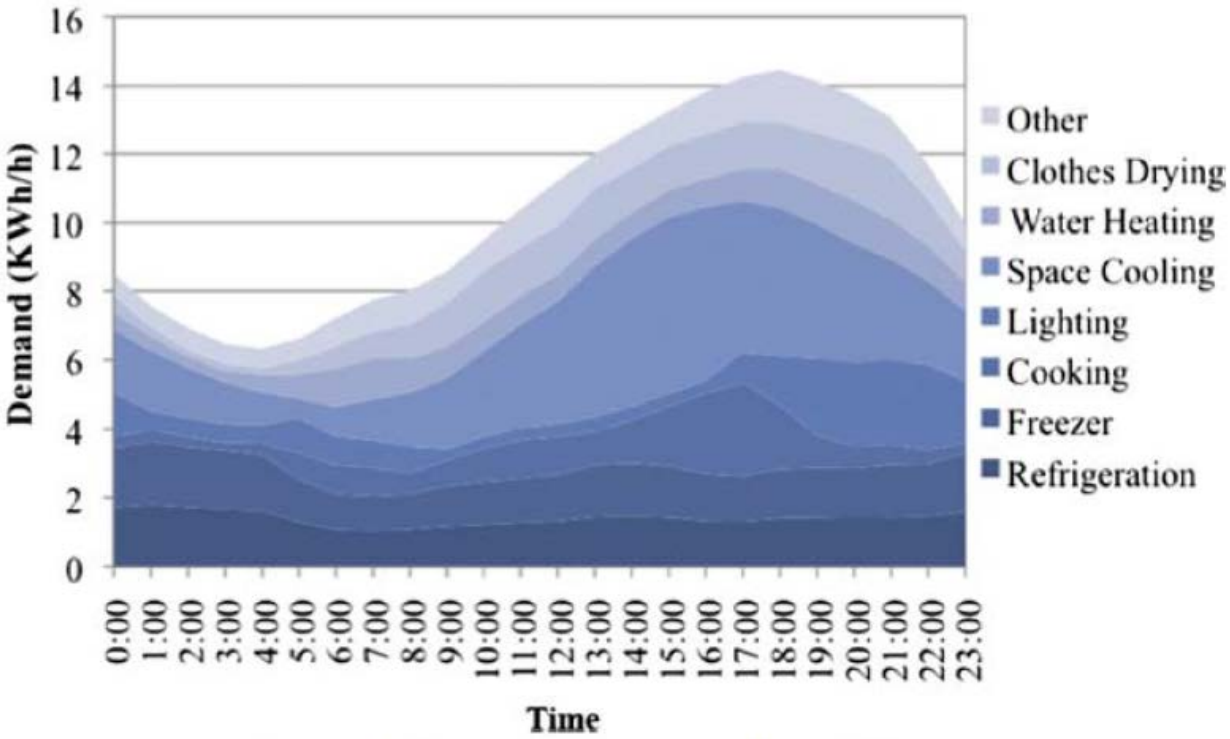

Figure 2.4. Load Profile used to Calculate Load from 7:30 PM to 7:30 AM (Pipattanasomporn et al. 2011)

The net load was calculated by subtracting load from renewable generation. The capacity of the generators was set to the average of this net load. The ESS discharges when the net load is positive and charges when the net load is negative, as shown in Figure 2.5. Note that the gas turbine output of 23.8 kW does not include the additional 2.5 kW generation capacity needed to bring the ESS back to its starting SOC.

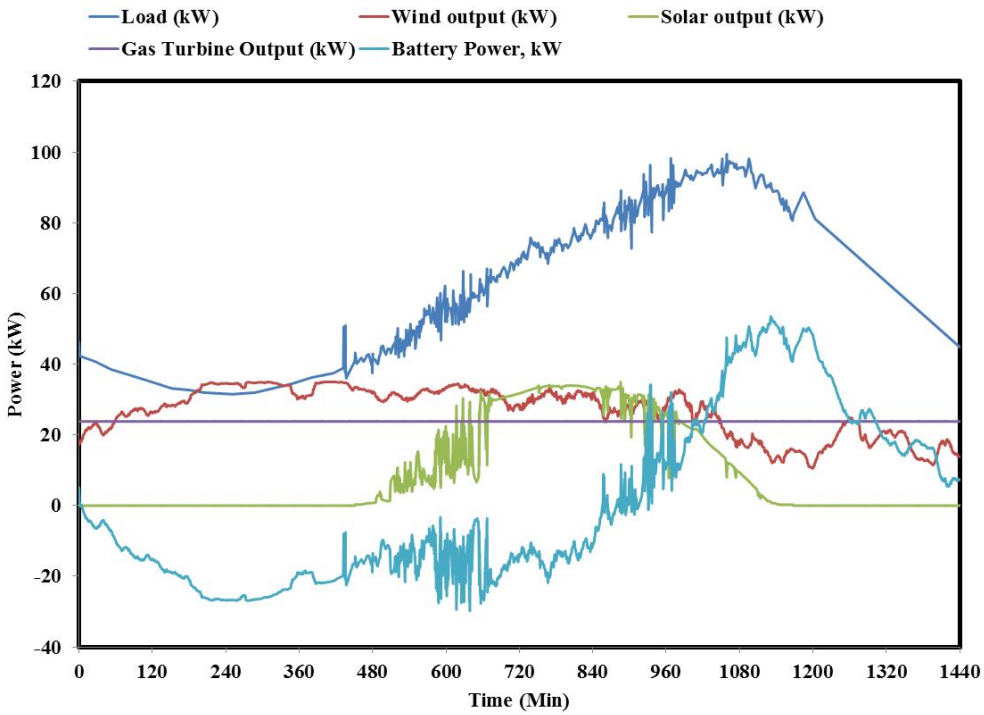

Figure 2.5. Generation, Load and ESS Power in the Microgrid (kW) during a 24-Hour Period

The change in capacity of the ESS was calculated over a 24-hour period. Since the RTE was assumed to be 80%, and the gas turbine generator capacity was equal to average of net load, the ESS capacity is lower than the starting SOC. Hence, the starting SOC is adjusted such that the ESS SOC is always positive. In applying the protocol, it is up to the vendor to specify the SOC range the ESS will be subjected to, which would determine the starting SOC for the ESS. The ESS energy capacity over a 24-hour period is shown in Figure 2.6.

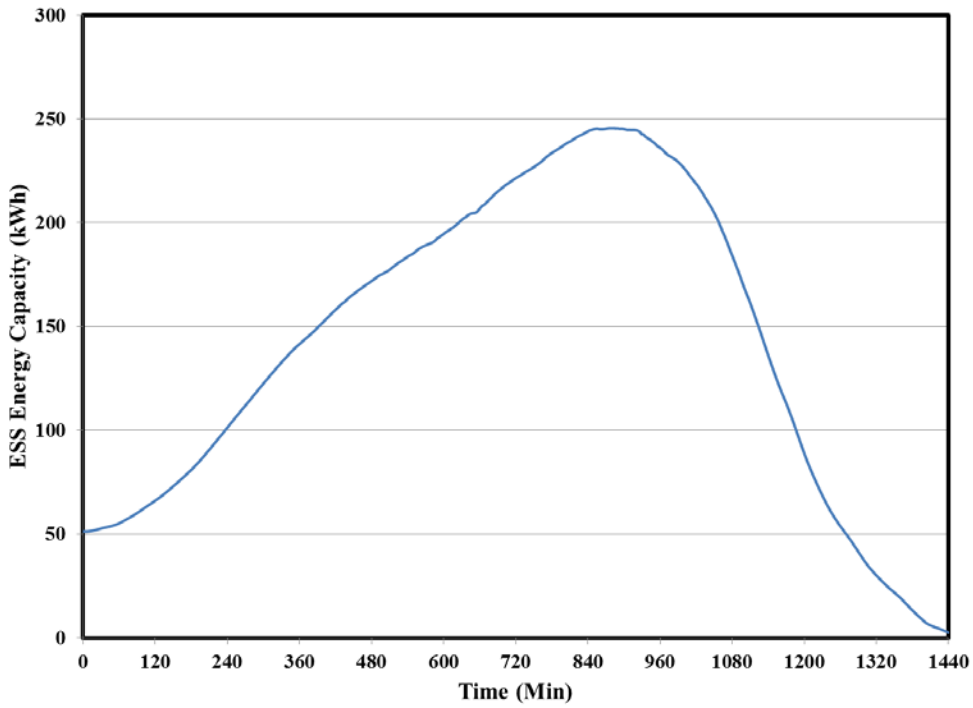

Figure 2.6. The ESS Energy Capacity for a 24-Hour Period

The ESS charge-discharge power, along with ramp rate, is shown in Figure 2.7 (charge is below the x-axis). The ramp rate is calculated over one minute.

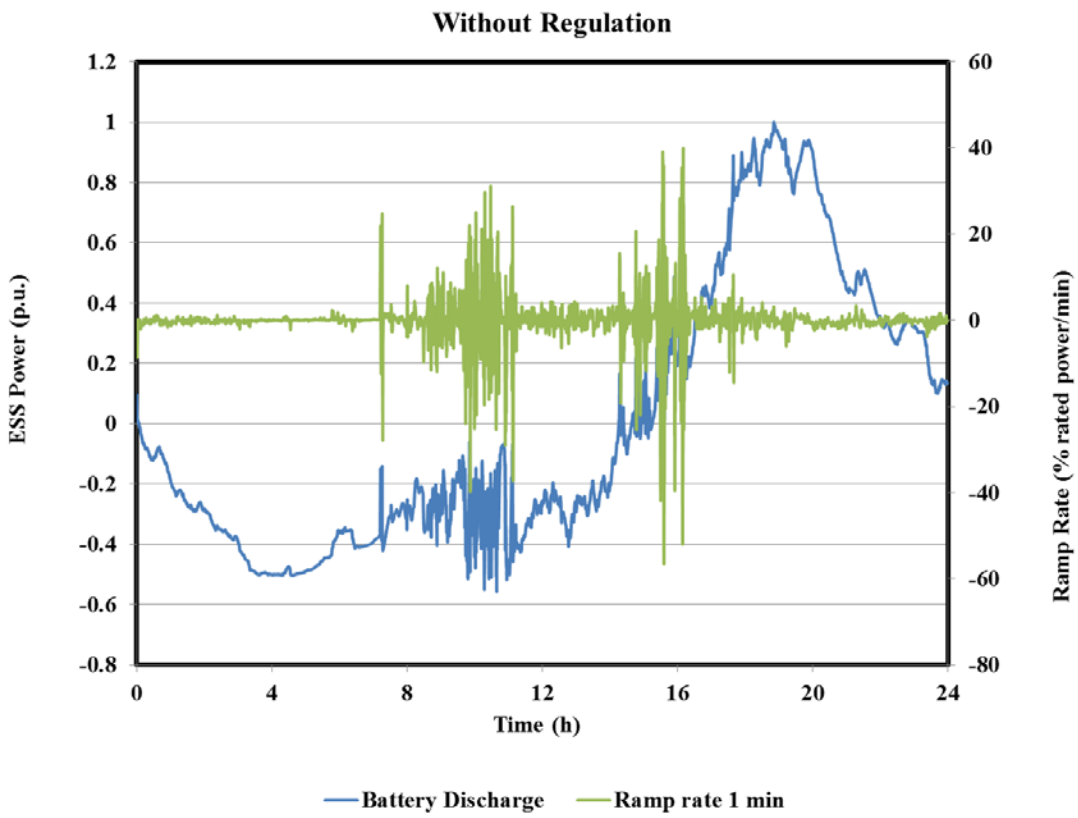

Figure 2.7. The ESS Charge-Discharge Power and One-Minute Ramp Rate

The frequency regulation duty cycle applied in the 2012 Protocol was superimposed on the ESS charge/discharge curve (Figure 2.8). The balancing signal is simply generation minus load. Hence, when the balancing signal is negative, the ESS needs to discharge. In performing this aggregation of curves, discharge of the ESS was considered to have a positive sign and charge to have a negative sign. Thus, the balancing signal, which ranges from −1 to 1 power unit (p.u.) was multiplied by −1 to get the correct sign for the ESS charge or discharge.

The signal was applied to the ESS rated power, which is taken to be the maximum of charge or discharge power in Figure 2.5. The superimposed signal is shown in Figure 2.8.

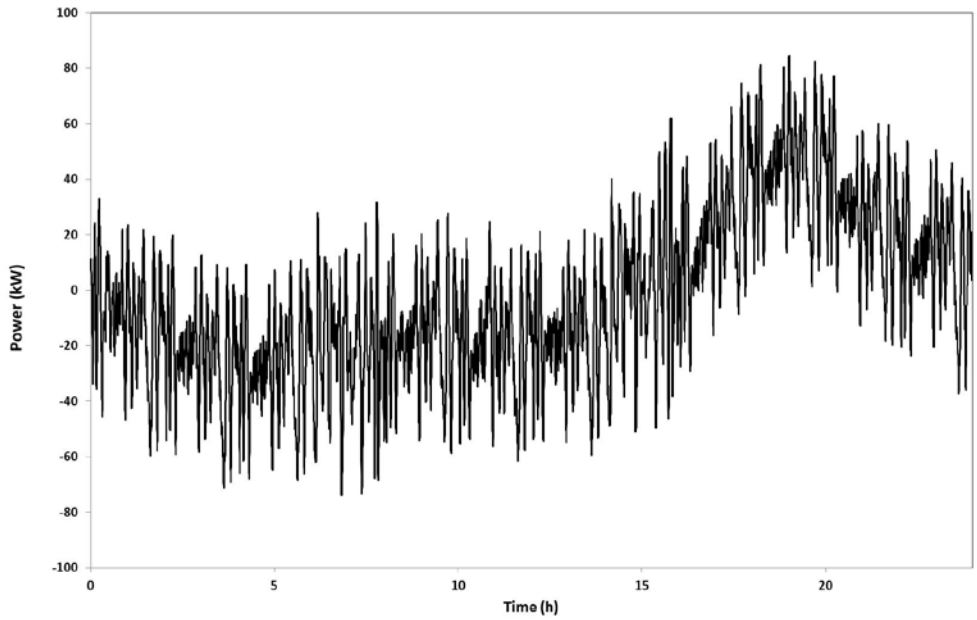

Figure 2.8. Consolidated Duty Cycle, with Solar and Wind 35% of Peak Power, and with Regulation, but without VAR support, Power Quality, Frequency Response, or Black Start

Clearly, the ESS power trend is the same as seen in Figure 2.5 and Figure 2.7, where frequency regulation is not considered. The spikes in Figure 2.8 are due to the frequency regulation signal. The maximum power of the duty cycle in Figure 2.8 is taken to be the ESS rated power for this application. For this figure, the rated power (around 80 kW) corresponds to maximum discharge power.

In addition, VAR support, power quality, frequency response and black start were other services that were included in the duty cycle. A brief description of the duty cycle for each of these services is given below.

3.0 VAR Support

The unit for apparent power S in an AC circuit, volt-amperes (VA), is the product of the root mean square (RMS) voltage and the RMS current; the unit for reactive power Q is VAR, while the unit for real power P is watts. The three are related to each other by the following Pythagorean relationship:

$$S = \sqrt{P^2 + Q^2}$$

An ESS can provide voltage ride-through during voltage sags or voltage increases based on the need to inject or absorb reactive power to mitigate voltage sag or increase, respectively. This compensation can be done by the ESS power conversion system. The capacitor injects reactive power, while an inductor absorbs reactive power.

The ESS has a specific rated voltage as determined by the protocol. To compensate for reactive power, the real power of the ESS is used. Based on efficiency of conversion for, say, 1 MVAR, the MW of storage power needed would vary.

It is not clear what the ESS duty cycle would be for VAR support. It can be assumed that VAR support may be needed for up to 4 seconds at a time. It is also assumed that if rated power is 100 kW of storage, the ESS can provide a maximum of 100 kVA, assuming the conversion efficiency of the ESS is 1. If all of the power provided is reactive, it can provide a maximum of 100 kilovolt-amperes reactive (kVAR), ignoring losses associated with inefficiency of conversion of real power to reactive power.

As a result, if 100 kVAR is needed from the ESS for 4 seconds, the ESS will be subjected to 100 kW discharge for 4 seconds. Assuming this happens twice in one hour and VAR absorption of 100 kVAR also happens twice in an hour, then charge at 100 kW for 4 seconds will occur twice in an hour.

The EPRI-DOE Handbook,[1] (page 7-26), states that the grid voltage stability duty profile is up to 2 seconds full power discharge. The duty cycle suggested for an ESS in an islanded microgrid application was 1 second full power discharge, 1 event per day, 10 events per year.

The power quality duty cycle was represented by a 2-second full power discharge, 1 event per hour, 100 events per year.

For this work, it was assumed that the ESS would absorb as well as provide reactive power. The VAR support and power quality duty cycles were combined into one 8-second discharge every 30 minutes and one 8-second charge every 30 minutes at half the ESS rated power, which is peak power with regulation. In other words, every 15 minutes, a charge or a discharge of 8 seconds occurs.

[1] *EPRI-DOE Handbook of Energy Storage for Transmission and Distribution Applications*, Electric Power Research Institute 10001834, December 2003.

4.0 Frequency Response

Frequency response consists of primary, secondary and tertiary response (Eto et al. 2010). Primary frequency response involves charging or discharging the ESS for 30 seconds. Secondary response simply is a response to the frequency regulation signal. Tertiary frequency response corresponds to tertiary frequency control provided by generators that are on standby mode, and is therefore not relevant to ESS. For the purpose of determining the duty cycle for an ESS in an islanded mode, the power used is considered half the rated power of the ESS, which is the same as peak power with regulation. During the duty cycle, one charge and one discharge will be applied per day, separated by 12 hours.

The determination and reporting of ratings for ESS to be applied in an islanded microgrid would then be based on using the above duty cycle and the metrics as discussed in the Background section above.

5.0 Black Start

Black start refers to the process of restoring electric power from a complete blackout, without relying on an external power source. In terms of the microgrid, a black start means the failure of all generating sources within the microgrid. If any renewable energy sources are part of the power system, they will not be able to come back on line until grid voltage and frequency are restored and stable. If we want the ESS to have black start capability, the following are required:

- capacity to operate expected maximum microgrid demand by itself for up to 60 seconds **OR** automated load management to disconnect any noncritical loads and capacity to operate all critical loads by itself for up to 60 seconds
- capacity to provide electrical power to start offline generators
- capability to operate in isochronous speed control while other generation sources are offline
- capability to hand off isochronous speed control to any one generator that comes back on line and go to droop speed control
- possible capability to keep operating in isochronous speed control with other generating sources in droop speed control[1]

For this work, the black start duty cycle must correspond to discharge at rated power for 60 seconds once in 24 hours. Note that during black start, the ESS is not used for any other application such as regulation, voltage/VAR support, or frequency response.

[1] Email from PNNL's Matt Engels forwarded to Microgrid subgroup January 28, 2014.

6.0 Duty-Cycle Signal

. (Excel file is attached to this document. See paperclip icon at the upper left corner. Double-click to open up the Excel file.)

As discussed above, the duty cycles to be applied in determining the performance of an ESS as an islanded microgrid were developed for three scenarios:

1. microgrid with renewables (where renewables consisted of a mix of solar and wind generation)
2. microgrid with renewables but no frequency regulation
3. microgrid with no renewables and no frequency regulation

Each use case above involves storing some excess energy and providing it when needed, which is addressed in the peak-shaving application criteria in the protocol. All of the above include VAR support, power quality, frequency response and black start.

Data used as the basis for the duty cycles are presented in Table 6.1.

Table 6.1. Duty-Cycle Signal for Islanded Microgrid Applications of Energy Storage Systems

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:00:00	0.596379603	1.143436201	0.153789913	**0:00:04**	0.590236735	1.131070024	0.146708472
0:00:08	0.584093866	1.131202602	0.139627031	**0:00:12**	0.077950997	0.631335181	-0.367454409
0:00:16	0.071808129	0.631467768	-0.37453585	**0:00:20**	0.06566526	0.631600347	-0.381617291
0:00:24	0.059522391	0.631732925	-0.388698731	**0:00:28**	0.053379523	0.621239281	-0.395780172
0:00:32	0.047236654	0.610745645	-0.402861613	**0:00:36**	0.041093785	0.09216628	-0.409943053
0:00:40	0.034950917	0.070891678	-0.417024494	**0:00:44**	0.028808048	0.049617072	-0.424105935
0:00:48	0.022665179	0.032657309	-0.431187375	**0:00:52**	0.016522311	0.015697544	-0.438268816
0:00:56	0.011348193	0.003776007	-0.444037681	**0:01:00**	0.510353559	-0.001193438	0.055856299
0:01:04	0.510457807	-0.005507854	0.055750278	**0:01:08**	0.510562056	0.002932331	0.055644258
0:01:12	0.510666305	0.011372516	0.055538238	**0:01:16**	0.510770554	0.01603817	0.055432217
0:01:20	0.510874802	0.016929291	0.055326197	**0:01:24**	0.510979051	0.017820413	0.055220176
0:01:28	0.5110833	0.011067174	0.055114156	**0:01:32**	0.511187549	0.004313935	0.055008136
0:01:36	0.011291798	-0.003365068	-0.445097885	**0:01:40**	0.011396046	-0.01135266	-0.445203905
0:01:44	0.011500295	-0.019340252	-0.445309926	**0:01:48**	0.011604544	-0.032340314	-0.445415946
0:01:52	0.011708793	-0.045340377	-0.445521967	**0:01:56**	0.011813041	-0.054165179	-0.445627987
0:02:00	0.01191729	-0.061598232	-0.445734007	**0:02:04**	0.011151098	-0.069550138	-0.445840028
0:02:08	0.010384906	-0.075047729	-0.445946048	**0:02:12**	0.009618714	-0.080545321	-0.446052069
0:02:16	0.008852522	-0.09492275	-0.446158089	**0:02:20**	0.00808633	-0.118180026	-0.446264109
0:02:24	0.007320138	-0.141437292	-0.44637013	**0:02:28**	0.006553945	-0.166657852	-0.44647615
0:02:32	0.005787753	-0.19187842	-0.446582171	**0:02:36**	0.005021561	-0.218613003	-0.446688191
0:02:40	0.004255369	-0.2468616	-0.446794211	**0:02:44**	0.003489177	-0.274861172	-0.446900232
0:02:48	0.002722985	-0.302113631	-0.447006252	**0:02:52**	0.001956793	-0.32936609	-0.447112273
0:02:56	0.001190601	-0.358684158	-0.447218293	**0:03:00**	0.000424409	-0.390067835	-0.447324314
0:03:04	0.000590996	-0.420895496	-0.447430334	**0:03:08**	0.000757583	-0.429272055	-0.447536354
0:03:12	0.00092417	-0.437648615	-0.447642375	**0:03:16**	0.001090757	-0.439077292	-0.447748395
0:03:20	0.001257344	-0.433558017	-0.447854416	**0:03:24**	0.001423931	-0.428038742	-0.447960436
0:03:28	0.001590518	-0.414721722	-0.448066456	**0:03:32**	0.001757105	-0.393606921	-0.448172477
0:03:36	0.001923692	-0.366101837	-0.448278497	**0:03:40**	0.002090279	-0.332206505	-0.448384518
0:03:44	0.002256866	-0.298311138	-0.448490538	**0:03:48**	0.002423453	-0.257753972	-0.448596558
0:03:52	0.00259004	-0.217196824	-0.448702579	**0:03:56**	0.002756627	-0.177005504	-0.448808599

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:04:00	0.002923214	-0.13718003	-0.44891462	**0:04:04**	0.001826977	-0.098107307	-0.44902064
0:04:08	0.00073074	-0.075209327	-0.449126661	**0:04:12**	-0.000365497	-0.052311356	-0.449232681
0:04:16	-0.001461734	-0.038276839	-0.449338701	**0:04:20**	-0.002557971	-0.033105785	-0.449444722
0:04:24	-0.003654208	-0.02793473	-0.449550742	**0:04:28**	-0.004750445	-0.02153294	-0.449656763
0:04:32	-0.005846682	-0.015131152	-0.449762783	**0:04:36**	-0.006942919	-0.005010248	-0.449868803
0:04:40	-0.008039157	0.008829768	-0.449974824	**0:04:44**	-0.009135394	0.022669784	-0.450080844
0:04:48	-0.010231631	0.028137038	-0.450186865	**0:04:52**	-0.011327868	0.033604294	-0.450292885
0:04:56	-0.012424105	0.040715143	-0.450398905	**0:05:00**	-0.013520342	0.049469582	-0.450504926
0:05:04	-0.013473462	0.058905419	-0.450610946	**0:05:08**	-0.013426583	0.076528164	-0.450716967
0:05:12	-0.013379703	0.0941509	-0.450822987	**0:05:16**	-0.013332824	0.106580436	-0.450929008
0:05:20	-0.013285944	0.1172789	-0.451035028	**0:05:24**	-0.013239065	0.127977364	-0.451141048
0:05:28	-0.013192185	0.142448357	-0.451247069	**0:05:32**	-0.013145306	0.156919324	-0.451353089
0:05:36	-0.013098426	0.168718817	-0.45145911	**0:05:40**	-0.013051547	0.177846819	-0.45156513
0:05:44	-0.013004667	0.186974803	-0.45167115	**0:05:48**	-0.012957788	0.192762313	-0.451777171
0:05:52	-0.012910908	0.198549822	-0.451883191	**0:05:56**	-0.012864029	0.203445756	-0.451989212
0:06:00	-0.012817149	0.208044487	-0.452095232	**0:06:04**	-0.014152747	0.211819145	-0.452201252
0:06:08	-0.015488345	0.218606945	-0.452307273	**0:06:12**	-0.016823943	0.225394763	-0.452413293
0:06:16	-0.018159541	0.235752912	-0.452519314	**0:06:20**	-0.019495139	0.24968143	-0.452625334
0:06:24	-0.020830737	0.263609929	-0.452731354	**0:06:28**	-0.022166335	0.279711976	-0.452837375
0:06:32	-0.023501933	0.295814023	-0.452943395	**0:06:36**	-0.02483753	0.304442352	-0.453049416
0:06:40	-0.026173128	0.305596894	-0.453155436	**0:06:44**	-0.027508726	0.306751471	-0.453261457
0:06:48	-0.028844324	0.296274645	-0.453367477	**0:06:52**	-0.030179922	0.285797783	-0.453473497
0:06:56	-0.03151552	0.270385372	-0.453579518	**0:07:00**	-0.032851118	0.250037394	-0.453685538
0:07:04	-0.033161102	0.230300768	-0.453791559	**0:07:08**	-0.033471087	0.21786197	-0.453897579
0:07:12	-0.033781071	0.20542319	-0.454003599	**0:07:16**	-0.034091056	0.19467831	-0.45410962
0:07:20	-0.03440104	0.18562733	-0.45421564	**0:07:24**	-0.034711025	0.17657635	-0.454321661
0:07:28	-0.035021009	0.164810373	-0.454427681	**0:07:32**	-0.035330994	0.153044378	-0.454533701
0:07:36	-0.035640978	0.136128573	-0.454639722	**0:07:40**	-0.035950962	0.114062933	-0.454745742
0:07:44	-0.036260947	0.091997301	-0.454851763	**0:07:48**	-0.036570931	0.068595319	-0.454957783
0:07:52	-0.036880916	0.045193342	-0.455063804	**0:07:56**	-0.0371909	0.019979632	-0.455169824
0:08:00	-0.037500885	-0.007045811	-0.455275844	**0:08:04**	-0.038075843	-0.034229199	-0.455381865
0:08:08	-0.038650801	-0.062862419	-0.455487885	**0:08:12**	-0.039225759	-0.091495635	-0.455593906
0:08:16	-0.039800718	-0.112574856	-0.455699926	**0:08:20**	-0.040375676	-0.131136073	-0.455805946
0:08:24	-0.040950634	-0.149697289	-0.455911967	**0:08:28**	-0.041525592	-0.159821596	-0.456017987
0:08:32	-0.04210055	-0.169945911	-0.456124008	**0:08:36**	-0.042675509	-0.180510524	-0.456230028
0:08:40	-0.043250467	-0.191515427	-0.456336048	**0:08:44**	-0.043825425	-0.202520329	-0.456442069
0:08:48	-0.044400383	-0.232587468	-0.456548089	**0:08:52**	-0.044975341	-0.262654625	-0.45665411
0:08:56	-0.045550299	-0.275407557	-0.45676013	**0:09:00**	-0.046125258	-0.282389109	-0.456866151
0:09:04	-0.046671495	-0.289353524	-0.456972171	**0:09:08**	-0.047217733	-0.317174961	-0.457078191
0:09:12	-0.04776397	-0.344996398	-0.457184212	**0:09:16**	-0.048310207	-0.36517427	-0.457290232
0:09:20	-0.048856445	-0.377708559	-0.457396253	**0:09:24**	-0.049402682	-0.390242848	-0.457502273
0:09:28	-0.04994892	-0.402777136	-0.457608293	**0:09:32**	-0.050495157	-0.415311425	-0.457714314
0:09:36	-0.051041395	-0.420179073	-0.457820334	**0:09:40**	-0.051587632	-0.417380114	-0.457926355
0:09:44	-0.052133869	-0.414581155	-0.458032375	**0:09:48**	-0.052680107	-0.400129617	-0.458138395
0:09:52	-0.053226344	-0.385678044	-0.458244416	**0:09:56**	-0.053772582	-0.377456268	-0.458350436
0:10:00	-0.054318819	-0.371311043	-0.458456457	**0:10:04**	-0.055080336	-0.365294143	-0.458562477
0:10:08	-0.055841853	-0.351628615	-0.458668498	**0:10:12**	-0.056603369	-0.337963087	-0.458774518
0:10:16	-0.057364886	-0.323198989	-0.458880538	**0:10:20**	-0.058126403	-0.307336305	-0.458986559
0:10:24	-0.05888792	-0.291473603	-0.459092579	**0:10:28**	-0.059649436	-0.277930367	-0.4591986
0:10:32	-0.060410953	-0.264387113	-0.45930462	**0:10:36**	-0.06117247	-0.248535958	-0.45941064
0:10:40	-0.061933986	-0.230376884	-0.459516661	**0:10:44**	-0.062695503	-0.21221781	-0.459622681
0:10:48	-0.06345702	-0.186731542	-0.459728702	**0:10:52**	-0.064218537	-0.161245265	-0.459834722
0:10:56	-0.064980053	-0.136221644	-0.459940742	**0:11:00**	-0.06574157	-0.111352242	-0.460046763
0:11:04	-0.065937268	-0.08614556	-0.460152783	**0:11:08**	-0.066132965	-0.058276246	-0.460258804
0:11:12	-0.066328663	-0.030406932	-0.460364824	**0:11:16**	-0.066524361	-0.018287462	-0.460470845
0:11:20	-0.066720058	-0.011417941	-0.460576865	**0:11:24**	-0.066915756	-0.00454842	-0.460682885
0:11:28	-0.067111454	0.008635392	-0.460788906	**0:11:32**	-0.067307151	0.021819203	-0.460894926

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:11:36	-0.067502849	0.03917938	-0.461000947	**0:11:40**	-0.067698547	0.06071592	-0.461106967
0:11:44	-0.067894244	0.082252459	-0.461212987	**0:11:48**	-0.068089942	0.108416445	-0.461319008
0:11:52	-0.068285639	0.134580432	-0.461425028	**0:11:56**	-0.068481337	0.157279608	-0.461531049
0:12:00	-0.068677035	0.176513975	-0.461637069	**0:12:04**	-0.068470348	0.195988197	-0.461743089
0:12:08	-0.068263661	0.211791788	-0.46184911	**0:12:12**	-0.068056974	0.227595378	-0.46195513
0:12:16	-0.067850288	0.238801783	-0.462061151	**0:12:20**	-0.067643601	0.245410968	-0.462167171
0:12:24	-0.067436914	0.25202017	-0.462273191	**0:12:28**	-0.067230227	0.263214726	-0.462379212
0:12:32	-0.06702354	0.274409247	-0.462485232	**0:12:36**	-0.066816854	0.285603803	-0.462591253
0:12:40	-0.066610167	0.296798324	-0.462697273	**0:12:44**	-0.06640348	0.306480784	-0.462803294
0:12:48	-0.066196793	0.311626992	-0.462909314	**0:12:52**	-0.065990106	0.316773164	-0.463015334
0:12:56	-0.06578342	0.321206084	-0.463121355	**0:13:00**	-0.065576733	0.32492575	-0.463227375
0:13:04	-0.066182146	0.328161337	-0.463333396	**0:13:08**	-0.06678756	0.331396923	-0.463439416
0:13:12	-0.067392974	0.334632509	-0.463545436	**0:13:16**	-0.067998387	0.344275362	-0.463651457
0:13:20	-0.068603801	0.360325481	-0.463757477	**0:13:24**	-0.069209214	0.376375635	-0.463863498
0:13:28	-0.069814628	0.391083702	-0.463969518	**0:13:32**	-0.070420042	0.405791733	-0.464075538
0:13:36	-0.071025455	0.412910541	-0.464181559	**0:13:40**	-0.071630869	0.412440091	-0.464287579
0:13:44	-0.072236282	0.411969641	-0.4643936	**0:13:48**	-0.072841696	0.39866906	-0.46449962
0:13:52	-0.07344711	0.38536848	-0.464605641	**0:13:56**	-0.074052523	0.369112813	-0.464711661
0:14:00	-0.074657937	0.349902022	-0.464817681	**0:14:04**	-0.075048812	0.330819115	-0.464923702
0:14:08	-0.075439687	0.313415754	-0.465029722	**0:14:12**	-0.075830562	0.296012358	-0.465135743
0:14:16	-0.076221437	0.28772236	-0.465241763	**0:14:20**	-0.076612312	0.288545761	-0.465347783
0:14:24	-0.077003188	0.289369127	-0.465453804	**0:14:28**	-0.077394063	0.278206221	-0.465559824
0:14:32	-0.077784938	0.267043316	-0.465665845	**0:14:36**	-0.078175813	0.261133184	-0.465771865
0:14:40	-0.078566688	0.260475791	-0.465877885	**0:14:44**	-0.078957563	0.259818398	-0.465983906
0:14:48	-0.079348438	0.260624354	-0.466089926	**0:14:52**	-0.079739313	0.261430346	-0.466195947
0:14:56	-0.080130189	0.260659258	-0.466301967	**0:15:00**	-0.580521064	-0.241688837	-0.966407988
0:15:04	-0.580859507	-0.244005715	-0.966514008	**0:15:08**	-0.58119795	-0.254742315	-0.966620028
0:15:12	-0.081536393	0.234521103	-0.466726049	**0:15:16**	-0.081874837	0.223784503	-0.466832069
0:15:20	-0.08221328	0.21304792	-0.46693809	**0:15:24**	-0.082551723	0.20231132	-0.46704411
0:15:28	-0.082890166	0.189219369	-0.46715013	**0:15:32**	-0.083228609	0.176127418	-0.467256151
0:15:36	-0.083567053	0.163317589	-0.467362171	**0:15:40**	-0.083905496	0.150789898	-0.467468192
0:15:44	-0.084243939	0.138262207	-0.467574212	**0:15:48**	-0.084582382	0.110679376	-0.467680232
0:15:52	-0.084920826	0.083096562	-0.467786253	**0:15:56**	-0.085259269	0.056945298	-0.467892273
0:16:00	-0.085597712	0.031271221	-0.467998294	**0:16:04**	-0.085254748	0.006003316	-0.468104314
0:16:08	-0.084911785	-0.017199966	-0.468210335	**0:16:12**	-0.084568821	-0.04040325	-0.468316355
0:16:16	-0.084225857	-0.059539866	-0.468422375	**0:16:20**	-0.083882894	-0.074609816	-0.468528396
0:16:24	-0.08353993	-0.089679764	-0.468634416	**0:16:28**	-0.083196966	-0.090060161	-0.468740437
0:16:32	-0.082854003	-0.090440553	-0.468846457	**0:16:36**	-0.082511039	-0.095441837	-0.468952477
0:16:40	-0.082168075	-0.105064014	-0.469058498	**0:16:44**	-0.081825112	-0.11468619	-0.469164518
0:16:48	-0.081482148	-0.13021751	-0.469270539	**0:16:52**	-0.081139185	-0.145748818	-0.469376559
0:16:56	-0.080796221	-0.15876363	-0.469482579	**0:17:00**	-0.080453257	-0.169261931	-0.4695886
0:17:04	-0.080383791	-0.179923259	-0.46969462	**0:17:08**	-0.080314326	-0.199774534	-0.469800641
0:17:12	-0.08024486	-0.219625809	-0.469906661	**0:17:16**	-0.080175394	-0.231604994	-0.470012682
0:17:20	-0.080105928	-0.235712071	-0.470118702	**0:17:24**	-0.080036462	-0.239819148	-0.470224722
0:17:28	-0.079966996	-0.252547204	-0.470330743	**0:17:32**	-0.079897531	-0.26527526	-0.470436763
0:17:36	-0.079828065	-0.283007562	-0.470542784	**0:17:40**	-0.079758599	-0.305744073	-0.470648804
0:17:44	-0.079689133	-0.328480603	-0.470754824	**0:17:48**	-0.079619667	-0.348013943	-0.470860845
0:17:52	-0.079550201	-0.367547284	-0.470966865	**0:17:56**	-0.079480736	-0.385219949	-0.471072886
0:18:00	-0.07941127	-0.401031975	-0.471178906	**0:18:04**	-0.079620488	-0.41701012	-0.471284926
0:18:08	-0.079829705	-0.426297297	-0.471390947	**0:18:12**	-0.080038923	-0.435584438	-0.471496967
0:18:16	-0.080248141	-0.45005944	-0.471602988	**0:18:20**	-0.080457359	-0.469722269	-0.471709008
0:18:24	-0.080666577	-0.489385097	-0.471815028	**0:18:28**	-0.080875794	-0.476671792	-0.471921049
0:18:32	-0.081085012	-0.463958486	-0.472027069	**0:18:36**	-0.08129423	-0.465262809	-0.47213309
0:18:40	-0.081503448	-0.480584761	-0.47223911	**0:18:44**	-0.081712666	-0.495906749	-0.472345131
0:18:48	-0.081921884	-0.501116927	-0.472451151	**0:18:52**	-0.082131101	-0.506327104	-0.472557171
0:18:56	-0.082340319	-0.509848498	-0.472663192	**0:19:00**	-0.082549537	-0.512806963	-0.472769212
0:19:04	-0.082947156	-0.515877768	-0.472875233	**0:19:08**	-0.083344776	-0.507120159	-0.472981253

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:19:12	-0.083742395	-0.498362514	-0.473087273	**0:19:16**	-0.084140015	-0.485057283	-0.473193294
0:19:20	-0.084537634	-0.467204394	-0.473299314	**0:19:24**	-0.084935253	-0.449351506	-0.473405335
0:19:28	-0.085332873	-0.423868856	-0.473511355	**0:19:32**	-0.085730492	-0.398386241	-0.473617375
0:19:36	-0.086128112	-0.378881768	-0.473723396	**0:19:40**	-0.086525731	-0.365355473	-0.473829416
0:19:44	-0.08692335	-0.351829178	-0.473935437	**0:19:48**	-0.08732097	-0.336083131	-0.474041457
0:19:52	-0.087718589	-0.320337083	-0.474147478	**0:19:56**	-0.088116209	-0.300914665	-0.474253498
0:20:00	-0.088513828	-0.277815878	-0.474359518	**0:20:04**	-0.088817624	-0.254661182	-0.474465539
0:20:08	-0.08912142	-0.228291163	-0.474571559	**0:20:12**	-0.089425215	-0.201921163	-0.47467758
0:20:16	-0.089729011	-0.181840036	-0.4747836	**0:20:20**	-0.090032807	-0.168047791	-0.47488962
0:20:24	-0.090336603	-0.154255554	-0.474995641	**0:20:28**	-0.090640399	-0.152377029	-0.475101661
0:20:32	-0.090944194	-0.150498504	-0.475207682	**0:20:36**	-0.09124799	-0.149679271	-0.475313702
0:20:40	-0.091551786	-0.149919347	-0.475419722	**0:20:44**	-0.091855582	-0.150159422	-0.475525743
0:20:48	-0.092159378	-0.143134001	-0.475631763	**0:20:52**	-0.092463173	-0.136108589	-0.475737784
0:20:56	-0.092766969	-0.129083172	-0.475843804	**0:21:00**	-0.093070765	-0.122057755	-0.475949825
0:21:04	-0.093501812	-0.115108191	-0.476055845	**0:21:08**	-0.093932859	-0.103290579	-0.476161865
0:21:12	-0.094363906	-0.091472965	-0.476267886	**0:21:16**	-0.094794954	-0.081651557	-0.476373906
0:21:20	-0.095226001	-0.073826354	-0.476479927	**0:21:24**	-0.095657048	-0.066001149	-0.476585947
0:21:28	-0.096088095	-0.067915629	-0.476691967	**0:21:32**	-0.096519142	-0.069830107	-0.476797988
0:21:36	-0.096950189	-0.071744587	-0.476904008	**0:21:40**	-0.097381237	-0.073659065	-0.477010029
0:21:44	-0.097812284	-0.075573544	-0.477116049	**0:21:48**	-0.098243331	-0.08250467	-0.477222069
0:21:52	-0.098674378	-0.089435798	-0.47732809	**0:21:56**	-0.099105425	-0.095336261	-0.47743411
0:22:00	-0.099536472	-0.100206059	-0.477540131	**0:22:04**	-0.100130521	-0.10517302	-0.477646151
0:22:08	-0.100724569	-0.106199228	-0.477752172	**0:22:12**	-0.101318617	-0.107225437	-0.477858192
0:22:16	-0.101912665	-0.108627435	-0.477964212	**0:22:20**	-0.102506713	-0.110405214	-0.478070233
0:22:24	-0.103100761	-0.112182994	-0.478176253	**0:22:28**	-0.10369481	-0.110991421	-0.478282274
0:22:32	-0.104288858	-0.109799848	-0.478388294	**0:22:36**	-0.104882906	-0.108608276	-0.478494314
0:22:40	-0.105476954	-0.107416703	-0.478600335	**0:22:44**	-0.106071002	-0.10622513	-0.478706355
0:22:48	-0.10666505	-0.097862362	-0.478812376	**0:22:52**	-0.107259099	-0.089499594	-0.478918396
0:22:56	-0.107853147	-0.088838802	-0.479024416	**0:23:00**	-0.108447195	-0.095879985	-0.479130437
0:23:04	-0.108261184	-0.102456189	-0.479236457	**0:23:08**	-0.108075172	-0.099959123	-0.479342478
0:23:12	-0.107889161	-0.097462056	-0.479448498	**0:23:16**	-0.10770315	-0.096258551	-0.479554519
0:23:20	-0.107517138	-0.096348607	-0.479660539	**0:23:24**	-0.107331127	-0.096438663	-0.479766559
0:23:28	-0.107145116	-0.09529784	-0.47987258	**0:23:32**	-0.106959105	-0.09415702	-0.4799786
0:23:36	-0.106773093	-0.095376769	-0.480084621	**0:23:40**	-0.106587082	-0.098957087	-0.480190641
0:23:44	-0.106401071	-0.102537405	-0.480296661	**0:23:48**	-0.10621506	-0.116944934	-0.480402682
0:23:52	-0.106029048	-0.131352462	-0.480508702	**0:23:56**	-0.105843037	-0.141199575	-0.480614723
0:24:00	-0.105657026	-0.146486261	-0.480720743	**0:24:04**	-0.106238981	-0.15223073	-0.480826763
0:24:08	-0.106820937	-0.148879582	-0.480932784	**0:24:12**	-0.107402892	-0.145528434	-0.481038804
0:24:16	-0.107984848	-0.147239391	-0.481144825	**0:24:20**	-0.108566803	-0.154012445	-0.481250845
0:24:24	-0.109148758	-0.160785507	-0.481356865	**0:24:28**	-0.109730714	-0.170345834	-0.481462886
0:24:32	-0.110312669	-0.17990616	-0.481568906	**0:24:36**	-0.110894625	-0.188978704	-0.481674927
0:24:40	-0.11147658	-0.197563455	-0.481780947	**0:24:44**	-0.112058536	-0.206148215	-0.481886968
0:24:48	-0.112640491	-0.202148771	-0.481992988	**0:24:52**	-0.113222447	-0.198149327	-0.482099008
0:24:56	-0.113804402	-0.193192996	-0.482205029	**0:25:00**	-0.114386357	-0.187279761	-0.482311049
0:25:04	-0.11475597	-0.181239951	-0.48241707	**0:25:08**	-0.115125582	-0.169775183	-0.48252309
0:25:12	-0.115495194	-0.158310423	-0.48262911	**0:25:16**	-0.115864807	-0.144144861	-0.482735131
0:25:20	-0.116234419	-0.1272785	-0.482841151	**0:25:24**	-0.116604032	-0.110412138	-0.482947172
0:25:28	-0.116973644	-0.113603712	-0.483053192	**0:25:32**	-0.117343256	-0.11679528	-0.483159212
0:25:36	-0.117712869	-0.113676614	-0.483265233	**0:25:40**	-0.118082481	-0.104247709	-0.483371253
0:25:44	-0.118452093	-0.094818803	-0.483477274	**0:25:48**	-0.118821706	-0.079549677	-0.483583294
0:25:52	-0.119191318	-0.064280551	-0.483689315	**0:25:56**	-0.11956093	-0.050076564	-0.483795335
0:26:00	-0.119930543	-0.036937712	-0.483901355	**0:26:04**	-0.119790346	-0.023494974	-0.484007376
0:26:08	-0.119650148	-0.032252235	-0.484113396	**0:26:12**	-0.119509951	-0.041009496	-0.484219417
0:26:16	-0.119369754	-0.05217719	-0.484325437	**0:26:20**	-0.119229557	-0.065755314	-0.484431457
0:26:24	-0.11908936	-0.079333439	-0.484537478	**0:26:28**	-0.118949163	-0.072587843	-0.484643498
0:26:32	-0.118808965	-0.065842248	-0.484749519	**0:26:36**	-0.118668768	-0.057069497	-0.484855539
0:26:40	-0.118528571	-0.046269593	-0.484961559	**0:26:44**	-0.118388374	-0.035469689	-0.48506758

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:26:48	-0.118248177	-0.029507333	-0.4851736	**0:26:52**	-0.11810798	-0.023544975	-0.485279621
0:26:56	-0.117967782	-0.023037203	-0.485385641	**0:27:00**	-0.117852803	-0.024362652	-0.485525829
0:27:04	-0.117872379	-0.025768313	-0.485670479	**0:27:08**	-0.117891955	-0.025296041	-0.485815129
0:27:12	-0.117911531	-0.024823768	-0.485959779	**0:27:16**	-0.117931107	-0.026208889	-0.486104429
0:27:20	-0.117950684	-0.028213144	-0.486249079	**0:27:24**	-0.11797026	-0.0302174	-0.486393729
0:27:28	-0.117989836	-0.017995376	-0.486538379	**0:27:32**	-0.118009412	-0.005773352	-0.486683029
0:27:36	-0.118028989	-0.003342805	-0.486827679	**0:27:40**	-0.118048565	-0.010703727	-0.486972329
0:27:44	-0.118068141	-0.018064649	-0.487116979	**0:27:48**	-0.118087717	-0.029475341	-0.487261629
0:27:52	-0.118107293	-0.040886029	-0.487406279	**0:27:56**	-0.11812687	-0.061027106	-0.487550929
0:28:00	-0.118146446	-0.089898565	-0.487695579	**0:28:04**	-0.118359212	-0.11604129	-0.487840229
0:28:08	-0.118571978	-0.133652328	-0.487984879	**0:28:12**	-0.118784744	-0.151263361	-0.488129529
0:28:16	-0.11899751	-0.160322102	-0.488274179	**0:28:20**	-0.119210276	-0.160828551	-0.488418828
0:28:24	-0.119423042	-0.161334992	-0.488563478	**0:28:28**	-0.119635808	-0.166367852	-0.488708128
0:28:32	-0.119848575	-0.171400712	-0.488852778	**0:28:36**	-0.120061341	-0.169089378	-0.488997428
0:28:40	-0.120274107	-0.15943384	-0.489142078	**0:28:44**	-0.120486873	-0.149778302	-0.489286728
0:28:48	-0.120699639	-0.140122769	-0.489431378	**0:28:52**	-0.120912405	-0.130467231	-0.489576028
0:28:56	-0.121125171	-0.118431894	-0.489720678	**0:29:00**	-0.121337937	-0.105603292	-0.489865328
0:29:04	-0.121150171	-0.092535938	-0.490009978	**0:29:08**	-0.120962405	-0.083169764	-0.490154628
0:29:12	-0.120774638	-0.07380359	-0.490299278	**0:29:16**	-0.120586872	-0.062326449	-0.490443928
0:29:20	-0.120399106	-0.04873834	-0.490588578	**0:29:24**	-0.12021134	-0.035150232	-0.490733228
0:29:28	-0.120023573	-0.030805421	-0.490877878	**0:29:32**	-0.119835807	-0.026460603	-0.491022528
0:29:36	-0.119648041	-0.023178314	-0.491167178	**0:29:40**	-0.119460275	-0.020958541	-0.491311828
0:29:44	-0.119272508	-0.018738768	-0.491456478	**0:29:48**	-0.119084742	-0.020222234	-0.491601128
0:29:52	-0.118896976	-0.021705699	-0.491745778	**0:29:56**	-0.11870921	-0.023189165	-0.491890428
0:30:00	0.381478557	0.475327369	0.007964922	**0:30:04**	0.382088579	0.474095604	0.007820272
0:30:08	0.382698601	0.475396019	0.007675622	**0:30:12**	-0.116691377	-0.023303566	-0.492469028
0:30:16	-0.116081355	-0.018265723	-0.492613678	**0:30:20**	-0.115471333	-0.009490445	-0.492758328
0:30:24	-0.11486131	-0.000715172	-0.492902978	**0:30:28**	-0.114251288	9.3996E-05	-0.493047628
0:30:32	-0.113641266	0.000903164	-0.493192278	**0:30:36**	-0.113031244	-0.001981674	-0.493336928
0:30:40	-0.112421222	-0.008560508	-0.493481578	**0:30:44**	-0.1118112	-0.016274618	-0.493626228
0:30:48	-0.111201178	-0.027394545	-0.493770878	**0:30:52**	-0.110591155	-0.038514468	-0.493915528
0:30:56	-0.109981133	-0.047938462	-0.494060178	**0:31:00**	-0.109371111	-0.055666521	-0.494204828
0:31:04	-0.109677985	-0.063941128	-0.494349478	**0:31:08**	-0.10998486	-0.078815803	-0.494494127
0:31:12	-0.110291734	-0.093690481	-0.494638777	**0:31:16**	-0.110598608	-0.11022356	-0.494783427
0:31:20	-0.110905483	-0.128415051	-0.494928077	**0:31:24**	-0.111212357	-0.146606537	-0.495072727
0:31:28	-0.111519231	-0.160910702	-0.495217377	**0:31:32**	-0.111826105	-0.175214866	-0.495362027
0:31:36	-0.11213298	-0.188236056	-0.495506677	**0:31:40**	-0.112439854	-0.199974269	-0.495651327
0:31:44	-0.112746728	-0.211712474	-0.495795977	**0:31:48**	-0.113053603	-0.214442455	-0.495940627
0:31:52	-0.113360477	-0.217172428	-0.496085277	**0:31:56**	-0.113667351	-0.219902401	-0.496229927
0:32:00	-0.113974225	-0.222632391	-0.496374577	**0:32:04**	-0.113402704	-0.224838766	-0.496519227
0:32:08	-0.112831182	-0.227045141	-0.496663877	**0:32:12**	-0.112259661	-0.229251515	-0.496808527
0:32:16	-0.111688139	-0.227848813	-0.496953177	**0:32:20**	-0.111116618	-0.222837016	-0.497097827
0:32:24	-0.110545096	-0.217825219	-0.497242477	**0:32:28**	-0.109973575	-0.205619712	-0.497387127
0:32:32	-0.109402053	-0.193414214	-0.497531777	**0:32:36**	-0.108830532	-0.185448503	-0.497676427
0:32:40	-0.10825901	-0.181722595	-0.497821077	**0:32:44**	-0.107687489	-0.177996678	-0.497965727
0:32:48	-0.107115967	-0.167414021	-0.498110377	**0:32:52**	-0.106544446	-0.156831365	-0.498255027
0:32:56	-0.105972924	-0.151012766	-0.498399677	**0:33:00**	-0.105401403	-0.149958243	-0.498544327
0:33:04	-0.105534362	-0.146930034	-0.498688977	**0:33:08**	-0.105667322	-0.136720977	-0.498833627
0:33:12	-0.105800282	-0.126511916	-0.498978277	**0:33:16**	-0.105933241	-0.117873228	-0.499122927
0:33:20	-0.106066201	-0.110804908	-0.499267577	**0:33:24**	-0.10619916	-0.103736589	-0.499412227
0:33:28	-0.10633212	-0.108623368	-0.499556877	**0:33:32**	-0.106465079	-0.113510147	-0.499701527
0:33:36	-0.106598039	-0.115080913	-0.499846177	**0:33:40**	-0.106730999	-0.113335675	-0.499990827
0:33:44	-0.106863958	-0.111590438	-0.500135477	**0:33:48**	-0.106996918	-0.115125154	-0.500280127
0:33:52	-0.107129877	-0.11865987	-0.500424776	**0:33:56**	-0.107262837	-0.115756716	-0.500569426
0:34:00	-0.107395796	-0.106415692	-0.500714076	**0:34:04**	-0.106570436	-0.096503427	-0.500858726
0:34:08	-0.105745076	-0.097629348	-0.501003376	**0:34:12**	-0.104919716	-0.098755268	-0.501148026
0:34:16	-0.104094356	-0.093813528	-0.501292676	**0:34:20**	-0.103268996	-0.082804127	-0.501437326

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:34:24	-0.102443635	-0.071794725	-0.501581976	**0:34:28**	-0.101618275	-0.052785281	-0.501726626
0:34:32	-0.100792915	-0.033775838	-0.501871276	**0:34:36**	-0.099967555	-0.017699382	-0.502015926
0:34:40	-0.099142195	-0.004555918	-0.502160576	**0:34:44**	-0.098316834	0.008587545	-0.502305226
0:34:48	-0.097491474	0.010617442	-0.502449876	**0:34:52**	-0.096666114	0.012647339	-0.502594526
0:34:56	-0.095840754	0.013107547	-0.502739176	**0:35:00**	-0.095015394	0.011998061	-0.502883826
0:35:04	-0.094934687	0.010600651	-0.503028476	**0:35:08**	-0.09485398	0.009671097	-0.503173126
0:35:12	-0.094773273	0.008741538	-0.503317776	**0:35:16**	-0.094692565	0.007811984	-0.503462426
0:35:20	-0.094611858	0.015320081	-0.503607076	**0:35:24**	-0.094531151	0.022828174	-0.503751726
0:35:28	-0.094450444	0.024506904	-0.503896376	**0:35:32**	-0.094369737	0.026185643	-0.504041026
0:35:36	-0.09428903	0.024650135	-0.504185676	**0:35:40**	-0.094208323	0.022043202	-0.504330326
0:35:44	-0.094127616	0.01846207	-0.504474976	**0:35:48**	-0.094046909	0.01195829	-0.504619626
0:35:52	-0.093966202	0.005454518	-0.504764276	**0:35:56**	-0.093885495	-0.004028896	-0.504908926
0:36:00	-0.093804788	-0.014505526	-0.505053576	**0:36:04**	-0.093065386	-0.021480651	-0.505198226
0:36:08	-0.092325985	-0.019129182	-0.505342876	**0:36:12**	-0.091586584	-0.016777714	-0.505487526
0:36:16	-0.090847183	-0.018668046	-0.505632176	**0:36:20**	-0.090107782	-0.021972311	-0.505776826
0:36:24	-0.089368381	-0.024413253	-0.505921476	**0:36:28**	-0.08862898	-0.024264231	-0.506066126
0:36:32	-0.087889578	-0.024115206	-0.506210776	**0:36:36**	-0.087150177	-0.020878801	-0.506355426
0:36:40	-0.086410776	-0.016613266	-0.506500075	**0:36:44**	-0.085671375	-0.010165306	-0.506644725
0:36:48	-0.084931974	0.002829941	-0.506789375	**0:36:52**	-0.084192573	0.015825188	-0.506934025
0:36:56	-0.083453172	0.026569728	-0.507078675	**0:37:00**	-0.08271377	0.036564028	-0.507223325
0:37:04	-0.082546784	0.043709314	-0.507367975	**0:37:08**	-0.082379797	0.043331168	-0.507512625
0:37:12	-0.08221281	0.042953023	-0.507657275	**0:37:16**	-0.082045823	0.051771477	-0.507801925
0:37:20	-0.081878836	0.063655461	-0.507946575	**0:37:24**	-0.081711849	0.069786551	-0.508091225
0:37:28	-0.081544863	0.058658984	-0.508235875	**0:37:32**	-0.081377876	0.047531417	-0.508380525
0:37:36	-0.081210889	0.035293636	-0.508525175	**0:37:40**	-0.081043902	0.022685781	-0.508669825
0:37:44	-0.080876915	0.003796535	-0.508814475	**0:37:48**	-0.080709928	-0.033936873	-0.508959125
0:37:52	-0.080542942	-0.071670284	-0.509103775	**0:37:56**	-0.080375955	-0.098356007	-0.509248425
0:38:00	-0.080208968	-0.125041723	-0.509393075	**0:38:04**	-0.080207073	-0.151364623	-0.509537725
0:38:08	-0.080205179	-0.176303821	-0.509682375	**0:38:12**	-0.080203285	-0.201243019	-0.509827025
0:38:16	-0.08020139	-0.205002234	-0.509971675	**0:38:20**	-0.080199496	-0.201701471	-0.510116325
0:38:24	-0.080197602	-0.198400708	-0.510260975	**0:38:28**	-0.080195707	-0.195099936	-0.510405625
0:38:32	-0.080193813	-0.191799174	-0.510550275	**0:38:36**	-0.080191919	-0.193269841	-0.510694925
0:38:40	-0.080190024	-0.196330991	-0.510839575	**0:38:44**	-0.08018813	-0.200713338	-0.510984225
0:38:48	-0.080186236	-0.209059238	-0.511128875	**0:38:52**	-0.080184341	-0.217405139	-0.511273525
0:38:56	-0.080182447	-0.218531873	-0.511418175	**0:39:00**	-0.080180553	-0.217252183	-0.511562825
0:39:04	-0.079926383	-0.21834337	-0.511707475	**0:39:08**	-0.079672213	-0.226998288	-0.511852125
0:39:12	-0.079418042	-0.235653206	-0.511996775	**0:39:16**	-0.079163872	-0.239656721	-0.512141425
0:39:20	-0.078909702	-0.24210975	-0.512286075	**0:39:24**	-0.078655532	-0.240012618	-0.512430724
0:39:28	-0.078401362	-0.233365359	-0.512575374	**0:39:32**	-0.078147192	-0.226718082	-0.512720024
0:39:36	-0.077893022	-0.216753904	-0.512864674	**0:39:40**	-0.077638852	-0.205684087	-0.513009324
0:39:44	-0.077384682	-0.195127874	-0.513153974	**0:39:48**	-0.077130512	-0.185085238	-0.513298624
0:39:52	-0.076876342	-0.175042603	-0.513443274	**0:39:56**	-0.076622172	-0.157349643	-0.513587924
0:40:00	-0.076368002	-0.137106568	-0.513732574	**0:40:04**	-0.077068813	-0.128791174	-0.513877224
0:40:08	-0.077769625	-0.131834194	-0.514021874	**0:40:12**	-0.078470436	-0.134877222	-0.514166524
0:40:16	-0.079171247	-0.14316781	-0.514311174	**0:40:20**	-0.079872059	-0.1532076	-0.514455824
0:40:24	-0.08057287	-0.15436693	-0.514600474	**0:40:28**	-0.081273682	-0.14664581	-0.514745124
0:40:32	-0.081974493	-0.13892469	-0.514889774	**0:40:36**	-0.082675305	-0.122635601	-0.515034424
0:40:40	-0.083376116	-0.103490525	-0.515179074	**0:40:44**	-0.084076928	-0.083847793	-0.515323724
0:40:48	-0.084777739	-0.062712102	-0.515468374	**0:40:52**	-0.08547855	-0.041576412	-0.515613024
0:40:56	-0.086179362	-0.02619629	-0.515757674	**0:41:00**	-0.086880173	-0.012734691	-0.515902324
0:41:04	-0.08698106	0.000368425	-0.516046974	**0:41:08**	-0.087081947	0.011323279	-0.516191624
0:41:12	-0.087182834	0.022278132	-0.516336274	**0:41:16**	-0.087283721	0.030954271	-0.516480924
0:41:20	-0.087384608	0.038870849	-0.516625574	**0:41:24**	-0.087485495	0.045336469	-0.516770224
0:41:28	-0.087586382	0.047449257	-0.516914874	**0:41:32**	-0.087687269	0.049562045	-0.517059524
0:41:36	-0.087788156	0.063987948	-0.517204174	**0:41:40**	-0.087889043	0.082518225	-0.517348824
0:41:44	-0.08798993	0.09527604	-0.517493474	**0:41:48**	-0.088090817	0.090716459	-0.517638124
0:41:52	-0.088191704	0.086156878	-0.517782774	**0:41:56**	-0.088292591	0.079052824	-0.517927424

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:42:00	-0.088393478	0.071100602	-0.518072074	**0:42:04**	-0.089146595	0.061127233	-0.518216724
0:42:08	-0.089899712	0.046256767	-0.518361374	**0:42:12**	-0.090652829	0.031386291	-0.518506023
0:42:16	-0.091405946	0.020969542	-0.518650673	**0:42:20**	-0.092159062	0.01203738	-0.518795323
0:42:24	-0.092912179	0.003653002	-0.518939973	**0:42:28**	-0.093665296	-0.003088017	-0.519084623
0:42:32	-0.094418413	-0.009829036	-0.519229273	**0:42:36**	-0.09517153	-0.018551006	-0.519373923
0:42:40	-0.095924647	-0.027933296	-0.519518573	**0:42:44**	-0.096677763	-0.038359885	-0.519663223
0:42:48	-0.09743088	-0.051919374	-0.519807873	**0:42:52**	-0.098183997	-0.065478862	-0.519952523
0:42:56	-0.098937114	-0.074358192	-0.520097173	**0:43:00**	-0.099690231	-0.081677468	-0.520241823
0:43:04	-0.099620817	-0.088676317	-0.520386473	**0:43:08**	-0.099551403	-0.096184766	-0.520531123
0:43:12	-0.099481989	-0.103693219	-0.520675773	**0:43:16**	-0.099412575	-0.111955495	-0.520820423
0:43:20	-0.099343161	-0.120469048	-0.520965073	**0:43:24**	-0.099273747	-0.128541757	-0.521109723
0:43:28	-0.099204333	-0.135291924	-0.521254373	**0:43:32**	-0.09913492	-0.1420421	-0.521399023
0:43:36	-0.099065506	-0.150448763	-0.521543673	**0:43:40**	-0.098996092	-0.15940758	-0.521688323
0:43:44	-0.098926678	-0.167609274	-0.521832973	**0:43:48**	-0.098857264	-0.173539582	-0.521977623
0:43:52	-0.09878785	-0.179469881	-0.522122273	**0:43:56**	-0.098718436	-0.170329397	-0.522266923
0:44:00	-0.098649022	-0.161188905	-0.522411573	**0:44:04**	-0.098680384	-0.150383992	-0.522556223
0:44:08	-0.098711746	-0.134405554	-0.522700873	**0:44:12**	-0.098743107	-0.118427121	-0.522845523
0:44:16	-0.098774469	-0.106716026	-0.522990173	**0:44:20**	-0.098805831	-0.096427383	-0.523134823
0:44:24	-0.098837193	-0.088165969	-0.523279473	**0:44:28**	-0.098868555	-0.085986246	-0.523424123
0:44:32	-0.098899916	-0.083806523	-0.523568773	**0:44:36**	-0.098931278	-0.078164201	-0.523713423
0:44:40	-0.09896264	-0.07136768	-0.523858073	**0:44:44**	-0.098994002	-0.065099482	-0.524002723
0:44:48	-0.099025363	-0.060416257	-0.524147373	**0:44:52**	-0.099056725	-0.055733033	-0.524292023
0:44:56	-0.099088087	-0.045011759	-0.524436672	**0:45:00**	-0.599119449	-0.532277803	-1.024581322
0:45:04	-0.599444392	-0.52158324	-1.024725972	**0:45:08**	-0.599769335	-0.516481853	-1.024870622
0:45:12	-0.100094279	-0.011380467	-0.525015272	**0:45:16**	-0.100419222	-0.005318316	-0.525159922
0:45:20	-0.100744165	0.001064084	-0.525304572	**0:45:24**	-0.101069109	0.006420563	-0.525449222
0:45:28	-0.101394052	0.008699289	-0.525593872	**0:45:32**	-0.101718995	0.010978016	-0.525738522
0:45:36	-0.102043939	0.01432894	-0.525883172	**0:45:40**	-0.102368882	0.018752052	-0.526027822
0:45:44	-0.102693825	0.023175165	-0.526172472	**0:45:48**	-0.103018769	0.02205641	-0.526317122
0:45:52	-0.103343712	0.020937664	-0.526461772	**0:45:56**	-0.103668655	0.024018982	-0.526606422
0:46:00	-0.103993599	0.031300373	-0.526751072	**0:46:04**	-0.104684486	0.038363631	-0.526895722
0:46:08	-0.105375373	0.046895478	-0.527040372	**0:46:12**	-0.10606626	0.055427326	-0.527185022
0:46:16	-0.106757147	0.058792755	-0.527329672	**0:46:20**	-0.107448034	0.056991772	-0.527474322
0:46:24	-0.108138921	0.05519079	-0.527618972	**0:46:28**	-0.108829808	0.038148963	-0.527763622
0:46:32	-0.109520695	0.021107136	-0.527908272	**0:46:36**	-0.110211582	0.003153159	-0.528052922
0:46:40	-0.110902469	-0.015712965	-0.528197572	**0:46:44**	-0.111593356	-0.034579092	-0.528342222
0:46:48	-0.112284243	-0.056064529	-0.528486872	**0:46:52**	-0.11297513	-0.077549966	-0.528631522
0:46:56	-0.113666017	-0.092869017	-0.528776172	**0:47:00**	-0.114356904	-0.102021681	-0.528920822
0:47:04	-0.114384159	-0.110778765	-0.529065472	**0:47:08**	-0.114411415	-0.109675751	-0.529210122
0:47:12	-0.114438671	-0.108572737	-0.529354772	**0:47:16**	-0.114465926	-0.109185914	-0.529499422
0:47:20	-0.114493182	-0.111515289	-0.529644072	**0:47:24**	-0.114520437	-0.11384466	-0.529788722
0:47:28	-0.114547693	-0.119930568	-0.529933372	**0:47:32**	-0.114574948	-0.126016476	-0.530078022
0:47:36	-0.114602204	-0.126390859	-0.530222672	**0:47:40**	-0.114629459	-0.121053717	-0.530367322
0:47:44	-0.114656715	-0.115716575	-0.530511971	**0:47:48**	-0.114683971	-0.110379433	-0.530656621
0:47:52	-0.114711226	-0.105042288	-0.530801271	**0:47:56**	-0.114738482	-0.095075072	-0.530945921
0:48:00	-0.114765737	-0.080477778	-0.531090571	**0:48:04**	-0.115377536	-0.066228923	-0.531235221
0:48:08	-0.115989335	-0.064866338	-0.531379871	**0:48:12**	-0.116601133	-0.063503752	-0.531524521
0:48:16	-0.117212932	-0.060459522	-0.531669171	**0:48:20**	-0.117824731	-0.055733645	-0.531813821
0:48:24	-0.11843653	-0.051007767	-0.531958471	**0:48:28**	-0.119048328	-0.046281891	-0.532103121
0:48:32	-0.119660127	-0.041556015	-0.532247771	**0:48:36**	-0.120271926	-0.034895001	-0.532392421
0:48:40	-0.120883725	-0.026298847	-0.532537071	**0:48:44**	-0.121495523	-0.017702695	-0.532681721
0:48:48	-0.122107322	-0.023937707	-0.532826371	**0:48:52**	-0.122719121	-0.030172723	-0.532971021
0:48:56	-0.123330919	-0.03179406	-0.533115671	**0:49:00**	-0.123942718	-0.028801721	-0.533260321
0:49:04	-0.124007467	-0.025483295	-0.533404971	**0:49:08**	-0.124072216	-0.011974146	-0.533549621
0:49:12	-0.124136965	0.001534997	-0.533694271	**0:49:16**	-0.124201714	0.005984787	-0.533838921
0:49:20	-0.124266463	0.007414781	-0.533983571	**0:49:24**	-0.124331211	0.008844776	-0.534128221
0:49:28	-0.12439596	0.009102238	-0.534272871	**0:49:32**	-0.124460709	0.009359699	-0.534417521

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:49:36	-0.124525458	0.009029496	-0.534562171	**0:49:40**	-0.124590207	0.00811161	-0.534706821
0:49:44	-0.124654956	0.007193732	-0.534851471	**0:49:48**	-0.124719705	0.009026008	-0.534996121
0:49:52	-0.124784453	0.010858293	-0.535140771	**0:49:56**	-0.124849202	0.019659946	-0.535285421
0:50:00	-0.124913951	0.035430985	-0.535430071	**0:50:04**	-0.125516449	0.050881471	-0.535574721
0:50:08	-0.126118947	0.06201359	-0.535719371	**0:50:12**	-0.126721444	0.073145708	-0.535864021
0:50:16	-0.127323942	0.085204068	-0.536008671	**0:50:20**	-0.12792644	0.098188672	-0.536153321
0:50:24	-0.128528937	0.111173275	-0.536297971	**0:50:28**	-0.129131435	0.114934303	-0.53644262
0:50:32	-0.129733933	0.118695331	-0.53658727	**0:50:36**	-0.13033643	0.125686657	-0.53673192
0:50:40	-0.130938928	0.135908299	-0.53687657	**0:50:44**	-0.131541426	0.14612994	-0.53702122
0:50:48	-0.132143923	0.163705263	-0.53716587	**0:50:52**	-0.132746421	0.181280603	-0.53731052
0:50:56	-0.133348919	0.201422445	-0.53745517	**0:51:00**	-0.133951416	0.224130825	-0.53759982
0:51:04	-0.133628132	0.247391031	-0.53774447	**0:51:08**	-0.133304848	0.260042797	-0.53788912
0:51:12	-0.132981564	0.272694562	-0.53803377	**0:51:16**	-0.132658279	0.279162683	-0.53817842
0:51:20	-0.132334995	0.279447161	-0.53832307	**0:51:24**	-0.132011711	0.279731638	-0.53846772
0:51:28	-0.131688427	0.283474298	-0.53861237	**0:51:32**	-0.131365143	0.287216924	-0.53875702
0:51:36	-0.131041858	0.288452381	-0.53890167	**0:51:40**	-0.130718574	0.28718067	-0.53904632
0:51:44	-0.13039529	0.285908959	-0.53919097	**0:51:48**	-0.130072006	0.281258722	-0.53933562
0:51:52	-0.129748721	0.276608449	-0.53948027	**0:51:56**	-0.129425437	0.264633647	-0.53962492
0:52:00	-0.129102153	0.245334281	-0.53976957	**0:52:04**	-0.129599295	0.225545872	-0.53991422
0:52:08	-0.130096436	0.190377582	-0.54005887	**0:52:12**	-0.130593578	0.155209293	-0.54020352
0:52:16	-0.131090719	0.127452615	-0.54034817	**0:52:20**	-0.131587861	0.102166493	-0.54049282
0:52:24	-0.132085002	0.076880352	-0.54063747	**0:52:28**	-0.132582144	0.048362448	-0.54078212
0:52:32	-0.133079285	0.019844544	-0.54092677	**0:52:36**	-0.133576427	-0.00130728	-0.54107142
0:52:40	-0.134073568	-0.015093023	-0.54121607	**0:52:44**	-0.13457071	-0.028878766	-0.54136072
0:52:48	-0.135067851	-0.045158527	-0.54150537	**0:52:52**	-0.135564993	-0.061438287	-0.54165002
0:52:56	-0.136062134	-0.076000531	-0.54179467	**0:53:00**	-0.136526532	-0.089970751	-0.541894955
0:53:04	-0.136866826	-0.103866995	-0.541983285	**0:53:08**	-0.13720712	-0.121278925	-0.542071615
0:53:12	-0.137547414	-0.138690858	-0.542159945	**0:53:16**	-0.137887707	-0.146997586	-0.542248276
0:53:20	-0.138228001	-0.14619911	-0.542336606	**0:53:24**	-0.138568295	-0.145400633	-0.542424936
0:53:28	-0.138908589	-0.142937896	-0.542513266	**0:53:32**	-0.139248883	-0.135482386	-0.542601597
0:53:36	-0.139589177	-0.131148538	-0.542689927	**0:53:40**	-0.139929471	-0.129936348	-0.542778257
0:53:44	-0.140269765	-0.128724158	-0.542866587	**0:53:48**	-0.140610059	-0.120101129	-0.542954918
0:53:52	-0.140950353	-0.1114781	-0.543043248	**0:53:56**	-0.141290646	-0.103587499	-0.543131578
0:54:00	-0.14163094	-0.096429325	-0.543219908	**0:54:04**	-0.142690559	-0.089699929	-0.543308238
0:54:08	-0.143750178	-0.091015186	-0.543396569	**0:54:12**	-0.144809796	-0.092330442	-0.543484899
0:54:16	-0.145869415	-0.097646488	-0.543573229	**0:54:20**	-0.146929034	-0.106963325	-0.543661559
0:54:24	-0.147988653	-0.116280162	-0.54374989	**0:54:28**	-0.149048271	-0.134213047	-0.54383822
0:54:32	-0.15010789	-0.152145935	-0.54392655	**0:54:36**	-0.151167509	-0.172768124	-0.54401488
0:54:40	-0.152227127	-0.194286755	-0.544103211	**0:54:44**	-0.153286746	-0.215805377	-0.544191541
0:54:48	-0.154346365	-0.23109136	-0.544279871	**0:54:52**	-0.155405984	-0.246377352	-0.544368201
0:54:56	-0.156465602	-0.25787765	-0.544456532	**0:55:00**	-0.157525221	-0.265592254	-0.544544862
0:55:04	-0.157653203	-0.272751525	-0.544633192	**0:55:08**	-0.157781186	-0.283596847	-0.544721522
0:55:12	-0.157909168	-0.294442169	-0.544809852	**0:55:16**	-0.158037151	-0.31108756	-0.544898183
0:55:20	-0.158165133	-0.333533002	-0.544986513	**0:55:24**	-0.158293116	-0.355978461	-0.545074843
0:55:28	-0.158421098	-0.379581468	-0.545163173	**0:55:32**	-0.15854908	-0.403184458	-0.545251504
0:55:36	-0.158677063	-0.420076956	-0.545339834	**0:55:40**	-0.158805045	-0.434732664	-0.545428164
0:55:44	-0.158933028	-0.44668089	-0.545516494	**0:55:48**	-0.15906101	-0.450506845	-0.545604825
0:55:52	-0.159188993	-0.454332836	-0.545693155	**0:55:56**	-0.159316975	-0.461414741	-0.545781485
0:56:00	-0.159444957	-0.469581928	-0.545869815	**0:56:04**	-0.159763451	-0.476176911	-0.545958146
0:56:08	-0.160081945	-0.477714462	-0.546046476	**0:56:12**	-0.160400438	-0.479252012	-0.546134806
0:56:16	-0.160718932	-0.483053994	-0.546223136	**0:56:20**	-0.161037425	-0.487610798	-0.546311466
0:56:24	-0.161355919	-0.494727069	-0.546399797	**0:56:28**	-0.161674413	-0.509521848	-0.546488127
0:56:32	-0.161992906	-0.524316627	-0.546576457	**0:56:36**	-0.1623114	-0.5284992	-0.546664787
0:56:40	-0.162629893	-0.529144358	-0.546753118	**0:56:44**	-0.162948387	-0.528241394	-0.546841448
0:56:48	-0.16326688	-0.522693884	-0.546929778	**0:56:52**	-0.163585374	-0.517146409	-0.547018108
0:56:56	-0.163903868	-0.505371553	-0.547106439	**0:57:00**	-0.164222361	-0.491520892	-0.547194769
0:57:04	-0.164658873	-0.47393666	-0.547283099	**0:57:08**	-0.165095384	-0.444940738	-0.547371429

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
0:57:12	-0.165531896	-0.415944816	-0.54745976	**0:57:16**	-0.165968408	-0.385758339	-0.54754809
0:57:20	-0.166404919	-0.355174981	-0.54763642	**0:57:24**	-0.166841431	-0.331347059	-0.54772475
0:57:28	-0.167277943	-0.314274557	-0.54781308	**0:57:32**	-0.167714454	-0.297202054	-0.547901411
0:57:36	-0.168150966	-0.268388096	-0.547989741	**0:57:40**	-0.168587478	-0.235660334	-0.548078071
0:57:44	-0.169023989	-0.206011008	-0.548166401	**0:57:48**	-0.169460501	-0.18559701	-0.548254732
0:57:52	-0.169897013	-0.165183016	-0.548343062	**0:57:56**	-0.170333524	-0.150353129	-0.548431392
0:58:00	-0.170770036	-0.13552324	-0.548519722	**0:58:04**	-0.171415548	-0.120145607	-0.548608053
0:58:08	-0.17206106	-0.102750989	-0.548696383	**0:58:12**	-0.172706572	-0.08535637	-0.548784713
0:58:16	-0.173352084	-0.068343438	-0.548873043	**0:58:20**	-0.173997596	-0.051457734	-0.548961374
0:58:24	-0.174643108	-0.036707023	-0.549049704	**0:58:28**	-0.17528862	-0.028361286	-0.549138034
0:58:32	-0.175934132	-0.02001555	-0.549226364	**0:58:36**	-0.176579644	-0.006165154	-0.549314694
0:58:40	-0.177225156	0.009520132	-0.549403025	**0:58:44**	-0.177870668	0.028542064	-0.549491355
0:58:48	-0.178516179	0.057573961	-0.549579685	**0:58:52**	-0.179161691	0.086605859	-0.549668015
0:58:56	-0.179807203	0.104126141	-0.549756346	**0:59:00**	-0.180452715	0.117809247	-0.549844676
0:59:04	-0.180790299	0.129016332	-0.549933006	**0:59:08**	-0.181127882	0.132244793	-0.550021336
0:59:12	-0.181465466	0.135473254	-0.550109667	**0:59:16**	-0.18180305	0.136743511	-0.550197997
0:59:20	-0.182140633	0.137361005	-0.550286327	**0:59:24**	-0.182478217	0.141045539	-0.550374657
0:59:28	-0.1828158	0.15393114	-0.550462988	**0:59:32**	-0.183153384	0.166816742	-0.550551318
0:59:36	-0.183490967	0.176386011	-0.550639648	**0:59:40**	-0.183828551	0.184849818	-0.550727978
0:59:44	-0.184166134	0.193052822	-0.550816308	**0:59:48**	-0.184503718	0.200473362	-0.550904639
0:59:52	-0.184841301	0.207893901	-0.550992969	**0:59:56**	-0.185178885	0.230384167	-0.551081299
1:00:00	0.314483531	0.757897651	-0.051169629	**1:00:04**	1	1	1
1:00:08	1	1	1	**1:00:12**	1	1	1
1:00:16	1	1	1	**1:00:20**	1	1	1
1:00:24	1	1	1	**1:00:28**	1	1	1
1:00:32	1	1	1	**1:00:36**	1	1	1
1:00:40	1	1	1	**1:00:44**	1	1	1
1:00:48	1	1	1	**1:00:52**	1	1	1
1:00:56	1	1	1	**1:01:00**	1	1	1
1:01:04	-0.198311168	0.189941822	-0.552582913	**1:01:08**	-0.198393074	0.191125407	-0.552671243
1:01:12	-0.198474981	0.192309028	-0.552759574	**1:01:16**	-0.198556887	0.194005693	-0.552847904
1:01:20	-0.198638793	0.195873362	-0.552936234	**1:01:24**	-0.1987207	0.19616619	-0.553024564
1:01:28	-0.198802606	0.191734424	-0.553112895	**1:01:32**	-0.198884512	0.187302658	-0.553201225
1:01:36	-0.198966419	0.175237985	-0.553289555	**1:01:40**	-0.199048325	0.160628999	-0.553377885
1:01:44	-0.199130231	0.145227174	-0.553466216	**1:01:48**	-0.199212138	0.127446833	-0.553554546
1:01:52	-0.199294044	0.109666492	-0.553642876	**1:01:56**	-0.19937595	0.097048662	-0.553731206
1:02:00	-0.199457857	0.086151681	-0.553819536	**1:02:04**	-0.200100378	0.073444724	-0.553907867
1:02:08	-0.2007429	0.056310376	-0.553996197	**1:02:12**	-0.201385421	0.039176029	-0.554084527
1:02:16	-0.202027943	0.015589683	-0.554172857	**1:02:20**	-0.202670464	-0.010147337	-0.554261188
1:02:24	-0.203312986	-0.033677688	-0.554349518	**1:02:28**	-0.203955507	-0.050588058	-0.554437848
1:02:32	-0.204598029	-0.067498428	-0.554526178	**1:02:36**	-0.20524055	-0.084408794	-0.554614509
1:02:40	-0.205883072	-0.101319164	-0.554702839	**1:02:44**	-0.206525594	-0.116908311	-0.554791169
1:02:48	-0.207168115	-0.128533793	-0.554879499	**1:02:52**	-0.207810637	-0.140159275	-0.55496783
1:02:56	-0.208453158	-0.144759995	-0.55505616	**1:03:00**	-0.20909568	-0.147019127	-0.55514449
1:03:04	-0.209154096	-0.150633922	-0.55523282	**1:03:08**	-0.209212513	-0.15936024	-0.55532115
1:03:12	-0.209270929	-0.168086557	-0.555409481	**1:03:16**	-0.209329346	-0.159366995	-0.555497811
1:03:20	-0.209387762	-0.144832138	-0.555586141	**1:03:24**	-0.209446179	-0.13029728	-0.555674471
1:03:28	-0.209504596	-0.120714899	-0.555762802	**1:03:32**	-0.209563012	-0.116084994	-0.555851132
1:03:36	-0.209621429	-0.117198217	-0.555939462	**1:03:40**	-0.209679845	-0.120225816	-0.556027792
1:03:44	-0.209738262	-0.123105616	-0.556116123	**1:03:48**	-0.209796678	-0.125542013	-0.556204453
1:03:52	-0.209855095	-0.12797841	-0.556292783	**1:03:56**	-0.209913511	-0.118152349	-0.556381113
1:04:00	-0.209971928	-0.1042388	-0.556469444	**1:04:04**	-0.210224049	-0.088265424	-0.556557774
1:04:08	-0.210476171	-0.065766165	-0.556646104	**1:04:12**	-0.210728292	-0.043266903	-0.556734434
1:04:16	-0.210980414	-0.030853476	-0.556822764	**1:04:20**	-0.211232535	-0.021801984	-0.556911095
1:04:24	-0.211484656	-0.014889104	-0.556999425	**1:04:28**	-0.211736778	-0.014392053	-0.557087755
1:04:32	-0.211988899	-0.013895001	-0.557176085	**1:04:36**	-0.212241021	-0.028566856	-0.557264416
1:04:40	-0.212493142	-0.048295017	-0.557352746	**1:04:44**	-0.212745263	-0.06884256	-0.557441076

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:04:48	-0.212997385	-0.091848268	-0.557529406	**1:04:52**	-0.213249506	-0.114853978	-0.557617737
1:04:56	-0.213501628	-0.1374554	-0.557706067	**1:05:00**	-0.213753749	-0.159922059	-0.557794397
1:05:04	-0.213986532	-0.178566597	-0.557882727	**1:05:08**	-0.214219315	-0.185779344	-0.557971058
1:05:12	-0.214452098	-0.192992091	-0.558059388	**1:05:16**	-0.214684881	-0.193979238	-0.558147718
1:05:20	-0.214917664	-0.192891188	-0.558236048	**1:05:24**	-0.215150447	-0.190970383	-0.558324378
1:05:28	-0.21538323	-0.186551322	-0.558412709	**1:05:32**	-0.215616013	-0.182132258	-0.558501039
1:05:36	-0.215848796	-0.17251763	-0.558589369	**1:05:40**	-0.216081579	-0.157707434	-0.558677699
1:05:44	-0.216314362	-0.142897238	-0.55876603	**1:05:48**	-0.216547145	-0.134770261	-0.55885436
1:05:52	-0.216779928	-0.126643283	-0.55894269	**1:05:56**	-0.217012711	-0.127995469	-0.55903102
1:06:00	-0.217245494	-0.138826818	-0.559119351	**1:06:04**	-0.217560956	-0.149707452	-0.559207681
1:06:08	-0.217876419	-0.189708732	-0.559296011	**1:06:12**	-0.218191881	-0.229710013	-0.559384341
1:06:16	-0.218507344	-0.268443498	-0.559472672	**1:06:20**	-0.218822806	-0.305909169	-0.559561002
1:06:24	-0.219138269	-0.343374859	-0.559649332	**1:06:28**	-0.219453731	-0.358534477	-0.559737662
1:06:32	-0.219769194	-0.373694095	-0.559825992	**1:06:36**	-0.220084656	-0.391493921	-0.559914323
1:06:40	-0.220400119	-0.41193392	-0.560002653	**1:06:44**	-0.220715581	-0.432373918	-0.560090983
1:06:48	-0.221031044	-0.438805578	-0.560179313	**1:06:52**	-0.221346506	-0.445237238	-0.560267644
1:06:56	-0.221661969	-0.454093496	-0.560355974	**1:07:00**	-0.221977431	-0.465374352	-0.560444304
1:07:04	-0.222120321	-0.476552374	-0.560532634	**1:07:08**	-0.22226321	-0.474721164	-0.560620965
1:07:12	-0.222406099	-0.472889917	-0.560709295	**1:07:16**	-0.222548989	-0.472652058	-0.560797625
1:07:20	-0.222691878	-0.47400755	-0.560885955	**1:07:24**	-0.222834768	-0.475363043	-0.560974286
1:07:28	-0.222977657	-0.475340066	-0.561062616	**1:07:32**	-0.223120546	-0.475317053	-0.561150946
1:07:36	-0.223263436	-0.471622893	-0.561239276	**1:07:40**	-0.223406325	-0.464257516	-0.561327606
1:07:44	-0.223549215	-0.456892138	-0.561415937	**1:07:48**	-0.223692104	-0.451423924	-0.561504267
1:07:52	-0.223834994	-0.445955746	-0.561592597	**1:07:56**	-0.223977883	-0.439576416	-0.561680927
1:08:00	-0.224120772	-0.43228597	-0.561769258	**1:08:04**	-0.224548326	-0.42516519	-0.561857588
1:08:08	-0.22497588	-0.411476658	-0.561945918	**1:08:12**	-0.225403434	-0.397788125	-0.562034248
1:08:16	-0.225830988	-0.383398918	-0.562122579	**1:08:20**	-0.226258542	-0.368776157	-0.562210909
1:08:24	-0.226686096	-0.35415338	-0.562299239	**1:08:28**	-0.22711365	-0.33181683	-0.562387569
1:08:32	-0.227541204	-0.309480281	-0.5624759	**1:08:36**	-0.227968758	-0.286768612	-0.56256423
1:08:40	-0.228396311	-0.263681815	-0.56265256	**1:08:44**	-0.228823865	-0.240595027	-0.56274089
1:08:48	-0.229251419	-0.205089486	-0.56282922	**1:08:52**	-0.229678973	-0.169583943	-0.562917551
1:08:56	-0.230106527	-0.133236644	-0.563005881	**1:09:00**	-0.230534081	-0.096608758	-0.563094211
1:09:04	-0.231130956	-0.060081803	-0.563182541	**1:09:08**	-0.23172783	-0.03315171	-0.563270872
1:09:12	-0.232324705	-0.006221616	-0.563359202	**1:09:16**	-0.232921579	0.020403253	-0.563447532
1:09:20	-0.233518454	0.046722907	-0.563535862	**1:09:24**	-0.234115328	0.073042561	-0.563624193
1:09:28	-0.234712203	0.096004668	-0.563712523	**1:09:32**	-0.235309078	0.118966775	-0.563800853
1:09:36	-0.235905952	0.132180431	-0.563889183	**1:09:40**	-0.236502827	0.1356456	-0.563977514
1:09:44	-0.237099701	0.139110769	-0.564065844	**1:09:48**	-0.237696576	0.127972464	-0.564154174
1:09:52	-0.23829345	0.11683416	-0.564242504	**1:09:56**	-0.238890325	0.113198102	-0.564330834
1:10:00	-0.2394872	0.117064291	-0.564419165	**1:10:04**	-0.239034086	0.121556345	-0.564507495
1:10:08	-0.238580971	0.123914608	-0.564595825	**1:10:12**	-0.238127857	0.12627289	-0.564684155
1:10:16	-0.237674743	0.124848783	-0.564772486	**1:10:20**	-0.237221629	0.119642321	-0.564860816
1:10:24	-0.236768515	0.11443586	-0.564949146	**1:10:28**	-0.236315401	0.112577814	-0.565037476
1:10:32	-0.235862287	0.11071975	-0.565125807	**1:10:36**	-0.235409173	0.113346581	-0.565214137
1:10:40	-0.234956059	0.12045827	-0.565302467	**1:10:44**	-0.234502945	0.12756996	-0.565390797
1:10:48	-0.234049831	0.123738433	-0.565479128	**1:10:52**	-0.233596717	0.119906906	-0.565567458
1:10:56	-0.233143603	0.116896677	-0.565655788	**1:11:00**	-0.232690489	0.114707746	-0.565744118
1:11:04	-0.232851447	0.112152775	-0.565832448	**1:11:08**	-0.233012406	0.100051587	-0.565920779
1:11:12	-0.233173364	0.087950398	-0.566009109	**1:11:16**	-0.233334323	0.078229253	-0.566097439
1:11:20	-0.233495281	0.070888152	-0.566185769	**1:11:24**	-0.23365624	0.064506452	-0.5662741
1:11:28	-0.233817198	0.061002917	-0.56636243	**1:11:32**	-0.233978157	0.0574994	-0.56645076
1:11:36	-0.234139115	0.0489894	-0.56653909	**1:11:40**	-0.234300074	0.035472915	-0.566627421
1:11:44	-0.234461032	0.021956448	-0.566715751	**1:11:48**	-0.23462199	0.010726494	-0.566804081
1:11:52	-0.234782949	-0.00050346	-0.566892411	**1:11:56**	-0.234943907	-0.014475539	-0.566980742
1:12:00	-0.235104866	-0.03118975	-0.567069072	**1:12:04**	-0.234502004	-0.04744866	-0.567157402
1:12:08	-0.233899143	-0.044168546	-0.567245732	**1:12:12**	-0.233296282	-0.040888433	-0.567334062
1:12:16	-0.23269342	-0.038191917	-0.567422393	**1:12:20**	-0.232090559	-0.036078998	-0.567510723

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:12:24	-0.231487697	-0.03396607	-0.567599053	**1:12:28**	-0.230884836	-0.037161804	-0.567687383
1:12:32	-0.230281975	-0.040357538	-0.567775714	**1:12:36**	-0.229679113	-0.040793489	-0.567864044
1:12:40	-0.229076252	-0.038469668	-0.567952374	**1:12:44**	-0.228473391	-0.036145846	-0.568040704
1:12:48	-0.227870529	-0.041392426	-0.568129035	**1:12:52**	-0.227267668	-0.046639014	-0.568217365
1:12:56	-0.226664806	-0.057830818	-0.568305695	**1:13:00**	-0.226061945	-0.074967837	-0.568394025
1:13:04	-0.22599433	-0.092423913	-0.568482356	**1:13:08**	-0.225926715	-0.094850122	-0.568570686
1:13:12	-0.225859099	-0.097276327	-0.568659016	**1:13:16**	-0.225791484	-0.102108794	-0.568747346
1:13:20	-0.225723869	-0.109347521	-0.568835676	**1:13:24**	-0.225656254	-0.116586248	-0.568924007
1:13:28	-0.225588639	-0.123824974	-0.569012337	**1:13:32**	-0.225521024	-0.138887924	-0.569100667
1:13:36	-0.225453409	-0.152539683	-0.569188997	**1:13:40**	-0.225385793	-0.161957872	-0.569277328
1:13:44	-0.225318178	-0.171376062	-0.569365658	**1:13:48**	-0.225250563	-0.183548062	-0.569453988
1:13:52	-0.225182948	-0.195720062	-0.569542318	**1:13:56**	-0.225115333	-0.207613814	-0.569630649
1:14:00	-0.225047718	-0.219229322	-0.569718979	**1:14:04**	-0.224817585	-0.230747946	-0.569807309
1:14:08	-0.224587452	-0.238767031	-0.569895639	**1:14:12**	-0.224357319	-0.246786116	-0.56998397
1:14:16	-0.224127186	-0.259406978	-0.5700723	**1:14:20**	-0.223897054	-0.276629618	-0.57016063
1:14:24	-0.223666921	-0.293852257	-0.57024896	**1:14:28**	-0.223436788	-0.305962597	-0.57033729
1:14:32	-0.223206655	-0.318072938	-0.570425621	**1:14:36**	-0.222976522	-0.326108162	-0.570513951
1:14:40	-0.22274639	-0.330068287	-0.570602281	**1:14:44**	-0.222516257	-0.334028395	-0.570690611
1:14:48	-0.222286124	-0.33552763	-0.570778942	**1:14:52**	-0.222055991	-0.337026882	-0.570867272
1:14:56	-0.221825858	-0.337477129	-0.570955602	**1:15:00**	-0.721595726	-0.836878406	-1.071043932
1:15:04	-0.721553859	-0.836391905	-1.071132263	**1:15:08**	-0.721511992	-0.846272085	-1.071220593
1:15:12	-0.221470125	-0.356152247	-0.571308923	**1:15:16**	-0.221428259	-0.366032427	-0.571397253
1:15:20	-0.221386392	-0.37591259	-0.571485584	**1:15:24**	-0.221344525	-0.38579277	-0.571573914
1:15:28	-0.221302658	-0.381196636	-0.571662244	**1:15:32**	-0.221260792	-0.37660052	-0.571750574
1:15:36	-0.221218925	-0.369357534	-0.571838904	**1:15:40**	-0.221177058	-0.359467679	-0.571927235
1:15:44	-0.221135191	-0.349577824	-0.572015565	**1:15:48**	-0.221093325	-0.329016339	-0.572103895
1:15:52	-0.221051458	-0.308454836	-0.572192225	**1:15:56**	-0.221009591	-0.299140184	-0.572280556
1:16:00	-0.220967724	-0.301072347	-0.572368886	**1:16:04**	-0.220855641	-0.302962674	-0.572457216
1:16:08	-0.220743558	-0.293956132	-0.572545546	**1:16:12**	-0.220631475	-0.284949589	-0.572633877
1:16:16	-0.220519392	-0.272185342	-0.572722207	**1:16:20**	-0.220407309	-0.255663362	-0.572810537
1:16:24	-0.220295226	-0.239141383	-0.572898867	**1:16:28**	-0.220183143	-0.22023761	-0.572987198
1:16:32	-0.22007106	-0.201333837	-0.573075528	**1:16:36**	-0.219958976	-0.193247435	-0.573163858
1:16:40	-0.219846893	-0.18876682	-0.573252188	**1:16:44**	-0.21973481	-0.184286208	-0.573340518
1:16:48	-0.219622727	-0.17433962	-0.573428849	**1:16:52**	-0.219510644	-0.164393032	-0.573517179
1:16:56	-0.219398561	-0.155394948	-0.573605509	**1:17:00**	-0.219286478	-0.147345366	-0.573693839
1:17:04	-0.219442919	-0.139455849	-0.57378217	**1:17:08**	-0.21959936	-0.12543438	-0.5738705
1:17:12	-0.219755801	-0.111412912	-0.57395883	**1:17:16**	-0.219912243	-0.091168704	-0.57404716
1:17:20	-0.220068684	-0.064701754	-0.574135491	**1:17:24**	-0.220225125	-0.038234809	-0.574223821
1:17:28	-0.220381566	-0.025370167	-0.574312151	**1:17:32**	-0.220538007	-0.012505535	-0.574400481
1:17:36	-0.220694449	-0.003364348	-0.574488812	**1:17:40**	-0.22085089	0.002053383	-0.574577142
1:17:44	-0.221007331	0.008251163	-0.574665472	**1:17:48**	-0.221163772	0.016789123	-0.574753802
1:17:52	-0.221320214	0.025327082	-0.574842132	**1:17:56**	-0.221476655	0.038372657	-0.574930463
1:18:00	-0.221633096	0.052920753	-0.575018793	**1:18:04**	-0.221879083	0.067415472	-0.575107123
1:18:08	-0.22212507	0.078806857	-0.575195453	**1:18:12**	-0.222371057	0.090198242	-0.575283784
1:18:16	-0.222617044	0.095806293	-0.575372114	**1:18:20**	-0.222863031	0.09563101	-0.575460444
1:18:24	-0.223109018	0.095455744	-0.575548774	**1:18:28**	-0.223355005	0.088464926	-0.575637105
1:18:32	-0.223600992	0.081474108	-0.575725435	**1:18:36**	-0.223846979	0.074928704	-0.575813765
1:18:40	-0.224092965	0.06882875	-0.575902095	**1:18:44**	-0.224338952	0.062728796	-0.575990426
1:18:48	-0.224584939	0.058559262	-0.576078756	**1:18:52**	-0.224830926	0.054389727	-0.576167086
1:18:56	-0.225076913	0.050220192	-0.576255416	**1:19:00**	-0.2253229	0.046050658	-0.576343746
1:19:04	-0.225604921	0.042974148	-0.576432077	**1:19:08**	-0.225886943	0.04324115	-0.576520407
1:19:12	-0.226168964	0.043508152	-0.576608737	**1:19:16**	-0.226450985	0.04735881	-0.576697067
1:19:20	-0.226733006	0.054793142	-0.576785398	**1:19:24**	-0.227015027	0.062227473	-0.576873728
1:19:28	-0.227297048	0.072711471	-0.576962058	**1:19:32**	-0.22757907	0.083195451	-0.577050388
1:19:36	-0.227861091	0.083197547	-0.577138719	**1:19:40**	-0.228143112	0.072717721	-0.577227049
1:19:44	-0.228425133	0.062237896	-0.577315379	**1:19:48**	-0.228707154	0.05808051	-0.577403709
1:19:52	-0.228989176	0.053923125	-0.57749204	**1:19:56**	-0.229271197	0.056148117	-0.57758037

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:20:00	-0.229553218	0.060500592	-0.5776687	**1:20:04**	-0.23010843	0.064690205	-0.57775703
1:20:08	-0.230663642	0.069598916	-0.57784536	**1:20:12**	-0.231218853	0.074507644	-0.577933691
1:20:16	-0.231774065	0.073602375	-0.578022021	**1:20:20**	-0.232329277	0.066883111	-0.578110351
1:20:24	-0.232884489	0.060163846	-0.578198681	**1:20:28**	-0.233439701	0.054031847	-0.578287012
1:20:32	-0.233994913	0.047899848	-0.578375342	**1:20:36**	-0.234550124	0.036803344	-0.578463672
1:20:40	-0.235105336	0.020742315	-0.578552002	**1:20:44**	-0.235660548	0.004681295	-0.578640333
1:20:48	-0.23621576	-0.003816296	-0.578728663	**1:20:52**	-0.236770972	-0.012313887	-0.578816993
1:20:56	-0.237326184	-0.022320394	-0.578905323	**1:21:00**	-0.237881395	-0.033835818	-0.578993654
1:21:04	-0.237448785	-0.044762424	-0.579081984	**1:21:08**	-0.237016175	-0.04506144	-0.579170314
1:21:12	-0.236583565	-0.045360447	-0.579258644	**1:21:16**	-0.236150955	-0.049032118	-0.579346974
1:21:20	-0.235718344	-0.056076444	-0.579435305	**1:21:24**	-0.235285734	-0.063120771	-0.579523635
1:21:28	-0.234853124	-0.06532625	-0.579611965	**1:21:32**	-0.234420514	-0.06753172	-0.579700295
1:21:36	-0.233987904	-0.066083617	-0.579788626	**1:21:40**	-0.233555294	-0.060981928	-0.579876956
1:21:44	-0.233122683	-0.055880243	-0.579965286	**1:21:48**	-0.232690073	-0.060039857	-0.580053616
1:21:52	-0.232257463	-0.064199472	-0.580141947	**1:21:56**	-0.231824853	-0.070984309	-0.580230277
1:22:00	-0.231392243	-0.080394365	-0.580318607	**1:22:04**	-0.232065572	-0.090463655	-0.580406937
1:22:08	-0.232738901	-0.106450889	-0.580495268	**1:22:12**	-0.23341223	-0.122438123	-0.580583598
1:22:16	-0.23408556	-0.13684785	-0.580671928	**1:22:20**	-0.234758889	-0.149680068	-0.580760258
1:22:24	-0.235432218	-0.162512288	-0.580848588	**1:22:28**	-0.236105548	-0.163724354	-0.580936919
1:22:32	-0.236778877	-0.164936421	-0.581025249	**1:22:36**	-0.237452206	-0.168138652	-0.581113579
1:22:40	-0.238125535	-0.173331047	-0.581201909	**1:22:44**	-0.238798865	-0.178523441	-0.58129024
1:22:48	-0.239472194	-0.179712236	-0.58137857	**1:22:52**	-0.240145523	-0.180901031	-0.5814669
1:22:56	-0.240818853	-0.178807939	-0.58155523	**1:23:00**	-0.241492182	-0.173432954	-0.581643561
1:23:04	-0.241974318	-0.167944002	-0.581731891	**1:23:08**	-0.242456454	-0.162455051	-0.581820221
1:23:12	-0.24293859	-0.156966099	-0.581908551	**1:23:16**	-0.243420726	-0.152570163	-0.581996882
1:23:20	-0.243902862	-0.149267242	-0.582085212	**1:23:24**	-0.244384998	-0.145964321	-0.582173542
1:23:28	-0.244867134	-0.1426614	-0.582261872	**1:23:32**	-0.24534927	-0.129161154	-0.582350202
1:23:36	-0.245831406	-0.113302014	-0.582438533	**1:23:40**	-0.246313542	-0.090366194	-0.582526863
1:23:44	-0.246795678	-0.067430374	-0.582615193	**1:23:48**	-0.247277814	-0.054171712	-0.582703523
1:23:52	-0.24775995	-0.040913049	-0.582791854	**1:23:56**	-0.248242086	-0.025987525	-0.582880184
1:24:00	-0.248724222	-0.009395129	-0.582968514	**1:24:04**	-0.249184373	0.007210371	-0.583056844
1:24:08	-0.249644523	0.022346251	-0.583145175	**1:24:12**	-0.250105144	0.037481834	-0.583234142
1:24:16	-0.250566779	0.045499614	-0.583324483	**1:24:20**	-0.251028414	0.046400162	-0.583414825
1:24:24	-0.251490049	0.04730071	-0.583505166	**1:24:28**	-0.251951684	0.05496881	-0.583595508
1:24:32	-0.252413319	0.062636892	-0.583685849	**1:24:36**	-0.252874954	0.068798954	-0.583776191
1:24:40	-0.253336589	0.07345496	-0.583866532	**1:24:44**	-0.253798223	0.078110984	-0.583956874
1:24:48	-0.254259858	0.085462979	-0.584047215	**1:24:52**	-0.254721493	0.092814991	-0.584137557
1:24:56	-0.255183128	0.102918774	-0.584227899	**1:25:00**	-0.255644763	0.115774363	-0.58431824
1:25:04	-0.255514487	0.128982763	-0.584408582	**1:25:08**	-0.255384211	0.140295704	-0.584498923
1:25:12	-0.255253936	0.151608645	-0.584589265	**1:25:16**	-0.25512366	0.162177601	-0.584679606
1:25:20	-0.254993384	0.172002642	-0.584769948	**1:25:24**	-0.254863108	0.181827648	-0.584860289
1:25:28	-0.254732832	0.195457071	-0.584950631	**1:25:32**	-0.254602556	0.209086494	-0.585040972
1:25:36	-0.25447228	0.220059383	-0.585131314	**1:25:40**	-0.254342004	0.228375739	-0.585221655
1:25:44	-0.254211728	0.236692095	-0.585311997	**1:25:48**	-0.254081453	0.241239528	-0.585402338
1:25:52	-0.253951177	0.24578696	-0.58549268	**1:25:56**	-0.253820901	0.253952849	-0.585583021
1:26:00	-0.253690625	0.265737194	-0.585673363	**1:26:04**	-0.253945342	0.277292051	-0.585763704
1:26:08	-0.254200059	0.284619407	-0.585854046	**1:26:12**	-0.254454776	0.291946763	-0.585944387
1:26:16	-0.254709493	0.295531877	-0.586034729	**1:26:20**	-0.25496421	0.295374786	-0.58612507
1:26:24	-0.255218927	0.295217694	-0.586215412	**1:26:28**	-0.255473645	0.288316092	-0.586305753
1:26:32	-0.255728362	0.281414489	-0.586396095	**1:26:36**	-0.255983079	0.27055452	-0.586486437
1:26:40	-0.256237796	0.25573622	-0.586576778	**1:26:44**	-0.256492513	0.24091792	-0.58666712
1:26:48	-0.25674723	0.234112708	-0.586757461	**1:26:52**	-0.257001947	0.227307532	-0.586847803
1:26:56	-0.257256664	0.214226229	-0.586938144	**1:27:00**	-0.257511381	0.194868835	-0.587028486
1:27:04	-0.257685117	0.175559711	-0.587118827	**1:27:08**	-0.257858853	0.153522498	-0.587209169
1:27:12	-0.258032589	0.131485285	-0.58729951	**1:27:16**	-0.258206325	0.111479235	-0.587389852
1:27:20	-0.258380062	0.09350433	-0.587480193	**1:27:24**	-0.258553798	0.075529424	-0.587570535
1:27:28	-0.258727534	0.071685452	-0.587660876	**1:27:32**	-0.25890127	0.067841479	-0.587751218

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:27:36	-0.259075006	0.067070178	-0.587841559	**1:27:40**	-0.259248742	0.069371549	-0.587931901
1:27:44	-0.259422478	0.071672937	-0.588022242	**1:27:48**	-0.259596214	0.062097858	-0.588112584
1:27:52	-0.25976995	0.052522779	-0.588202925	**1:27:56**	-0.259943686	0.040413317	-0.588293267
1:28:00	-0.260117422	0.025769506	-0.588383608	**1:28:04**	-0.260618538	0.01093055	-0.58847395
1:28:08	-0.261119654	-0.006189412	-0.588564291	**1:28:12**	-0.26162077	-0.023309374	-0.588654633
1:28:16	-0.262121886	-0.039959371	-0.588744974	**1:28:20**	-0.262623001	-0.0564527	-0.588835316
1:28:24	-0.263124117	-0.071769989	-0.588925658	**1:28:28**	-0.263625233	-0.083559106	-0.589015999
1:28:32	-0.264126349	-0.095348223	-0.589106341	**1:28:36**	-0.264627465	-0.105644336	-0.589196682
1:28:40	-0.265128581	-0.114447446	-0.589287024	**1:28:44**	-0.265629696	-0.123250556	-0.589377365
1:28:48	-0.266130812	-0.122114746	-0.589467707	**1:28:52**	-0.266631928	-0.120978936	-0.589558048
1:28:56	-0.267133044	-0.120177111	-0.58964839	**1:29:00**	-0.26763416	-0.119709276	-0.589738731
1:29:04	-0.267522856	-0.118876387	-0.589829073	**1:29:08**	-0.267411553	-0.114400278	-0.589919414
1:29:12	-0.26730025	-0.109924169	-0.590009756	**1:29:16**	-0.267188946	-0.105184218	-0.590100097
1:29:20	-0.267077643	-0.100180426	-0.590190439	**1:29:24**	-0.26696634	-0.095176634	-0.59028078
1:29:28	-0.266855036	-0.105802711	-0.590371122	**1:29:32**	-0.266743733	-0.116428788	-0.590461463
1:29:36	-0.266632429	-0.129542938	-0.590551805	**1:29:40**	-0.266521126	-0.145145164	-0.590642146
1:29:44	-0.266409823	-0.160747389	-0.590732488	**1:29:48**	-0.266298519	-0.168590682	-0.590822829
1:29:52	-0.266187216	-0.176433975	-0.590913171	**1:29:56**	-0.266075913	-0.180358983	-0.591003512
1:30:00	0.234035391	0.31963429	-0.091093854	**1:30:04**	0.233459912	0.319218185	-0.091184196
1:30:08	0.232884433	0.321741306	-0.091274537	**1:30:12**	-0.267691046	-0.175735574	-0.591364879
1:30:16	-0.268266525	-0.182851278	-0.59145522	**1:30:20**	-0.268842005	-0.199605808	-0.591545562
1:30:24	-0.269417484	-0.216360336	-0.591635903	**1:30:28**	-0.269992963	-0.237974283	-0.591726245
1:30:32	-0.270568442	-0.25958823	-0.591816586	**1:30:36**	-0.271143921	-0.275686113	-0.591906928
1:30:40	-0.2717194	-0.286267949	-0.591997269	**1:30:44**	-0.272294879	-0.296849776	-0.592087611
1:30:48	-0.272870358	-0.296830721	-0.592177952	**1:30:52**	-0.273445837	-0.296811666	-0.592268294
1:30:56	-0.274021316	-0.29389708	-0.592358635	**1:31:00**	-0.274596795	-0.288086945	-0.592448977
1:31:04	-0.274747945	-0.282023874	-0.592539318	**1:31:08**	-0.274899095	-0.26581985	-0.59262966
1:31:12	-0.275050244	-0.249615834	-0.592720001	**1:31:16**	-0.275201394	-0.235819802	-0.592810343
1:31:20	-0.275352544	-0.224431766	-0.592900684	**1:31:24**	-0.275503694	-0.213043725	-0.592991026
1:31:28	-0.275654843	-0.223811662	-0.593081367	**1:31:32**	-0.275805993	-0.234579603	-0.593171709
1:31:36	-0.275957143	-0.244023763	-0.59326205	**1:31:40**	-0.276108293	-0.252144155	-0.593352392
1:31:44	-0.276259442	-0.260264538	-0.593442734	**1:31:48**	-0.276410592	-0.268384921	-0.593533075
1:31:52	-0.276561742	-0.276505313	-0.593623417	**1:31:56**	-0.276712891	-0.286998429	-0.593713758
1:32:00	-0.276864041	-0.299864271	-0.5938041	**1:32:04**	-0.276600289	-0.312482795	-0.593894441
1:32:08	-0.276336537	-0.323534518	-0.593984783	**1:32:12**	-0.276072785	-0.33458624	-0.594075124
1:32:16	-0.275809033	-0.34313568	-0.594165466	**1:32:20**	-0.275545281	-0.349182837	-0.594255807
1:32:24	-0.275281529	-0.355229994	-0.594346149	**1:32:28**	-0.275017777	-0.363228266	-0.59443649
1:32:32	-0.274754025	-0.371226556	-0.594526832	**1:32:36**	-0.274490273	-0.381201542	-0.594617173
1:32:40	-0.274226521	-0.393153243	-0.594707515	**1:32:44**	-0.273962769	-0.405104943	-0.594797856
1:32:48	-0.273699017	-0.414450348	-0.594888198	**1:32:52**	-0.273435265	-0.423795735	-0.594978539
1:32:56	-0.273171513	-0.431419101	-0.595068881	**1:33:00**	-0.272907761	-0.437320427	-0.595159222
1:33:04	-0.272817237	-0.443325013	-0.595249564	**1:33:08**	-0.272726713	-0.44296065	-0.595339905
1:33:12	-0.272636189	-0.442596288	-0.595430247	**1:33:16**	-0.272545665	-0.438549267	-0.595520588
1:33:20	-0.272455141	-0.433274669	-0.59561093	**1:33:24**	-0.272364617	-0.42800009	-0.595701272
1:33:28	-0.272274093	-0.414607538	-0.595791613	**1:33:32**	-0.272183569	-0.40121497	-0.595881955
1:33:36	-0.272093045	-0.392109823	-0.595972296	**1:33:40**	-0.272002521	-0.395866907	-0.596062638
1:33:44	-0.271911997	-0.399623991	-0.596152979	**1:33:48**	-0.271821473	-0.414589216	-0.596243321
1:33:52	-0.271730949	-0.429554441	-0.596333662	**1:33:56**	-0.271640425	-0.436642478	-0.596424004
1:34:00	-0.271549901	-0.435853326	-0.596514345	**1:34:04**	-0.272078356	-0.435433137	-0.596604687
1:34:08	-0.27260681	-0.429245602	-0.596695028	**1:34:12**	-0.273135264	-0.423058067	-0.59678537
1:34:16	-0.273663719	-0.41542223	-0.596875711	**1:34:20**	-0.274192173	-0.406338071	-0.596966053
1:34:24	-0.274720627	-0.397253913	-0.597056394	**1:34:28**	-0.275249082	-0.405670295	-0.597146736
1:34:32	-0.275777536	-0.41408666	-0.597237077	**1:34:36**	-0.27630599	-0.421918531	-0.597327419
1:34:40	-0.276834445	-0.42916589	-0.59741776	**1:34:44**	-0.277362899	-0.436413249	-0.597508102
1:34:48	-0.277891353	-0.435135469	-0.597598443	**1:34:52**	-0.278419808	-0.433857671	-0.597688785
1:34:56	-0.278948262	-0.428498078	-0.597779126	**1:35:00**	-0.279476716	-0.419056689	-0.597869468
1:35:04	-0.278741127	-0.408861823	-0.59795981	**1:35:08**	-0.278005537	-0.407237076	-0.598050151

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:35:12	-0.277269948	-0.405612329	-0.598140493	**1:35:16**	-0.276534359	-0.411461175	-0.598230834
1:35:20	-0.275798769	-0.424783595	-0.598321176	**1:35:24**	-0.27506318	-0.438106016	-0.598411517
1:35:28	-0.27432759	-0.452200188	-0.598501859	**1:35:32**	-0.273592001	-0.466294342	-0.5985922
1:35:36	-0.272856411	-0.477157382	-0.598682542	**1:35:40**	-0.272120822	-0.486943347	-0.598772883
1:35:44	-0.271385233	-0.496729313	-0.598863225	**1:35:48**	-0.270649643	-0.502333396	-0.598953566
1:35:52	-0.269914054	-0.50793748	-0.599043908	**1:35:56**	-0.269178464	-0.510460666	-0.599134249
1:36:00	-0.268442875	-0.509902921	-0.599224591	**1:36:04**	-0.26921935	-0.510246493	-0.599314932
1:36:08	-0.269995824	-0.519352114	-0.599405274	**1:36:12**	-0.270772299	-0.528457735	-0.599495615
1:36:16	-0.271548774	-0.532292711	-0.599585957	**1:36:20**	-0.272325249	-0.530857042	-0.599676298
1:36:24	-0.273101724	-0.529421373	-0.59976664	**1:36:28**	-0.273878198	-0.534250959	-0.599856981
1:36:32	-0.274654673	-0.539080545	-0.599947323	**1:36:36**	-0.275431148	-0.541830772	-0.600037664
1:36:40	-0.276207623	-0.542501642	-0.600128006	**1:36:44**	-0.276984097	-0.546043855	-0.600218347
1:36:48	-0.277760572	-0.558200138	-0.600308689	**1:36:52**	-0.278537047	-0.57035642	-0.600399031
1:36:56	-0.279313522	-0.582512702	-0.600489372	**1:37:00**	-0.280089996	-0.594668984	-0.600579714
1:37:04	-0.280048711	-0.606337812	-0.600670055	**1:37:08**	-0.280007425	-0.619605286	-0.600760397
1:37:12	-0.279966139	-0.632872759	-0.600850738	**1:37:16**	-0.279924853	-0.639975135	-0.60094108
1:37:20	-0.279883568	-0.640912484	-0.601031421	**1:37:24**	-0.279842282	-0.641849832	-0.601121763
1:37:28	-0.279800996	-0.65111165	-0.601212104	**1:37:32**	-0.27975971	-0.660373467	-0.601302446
1:37:36	-0.279718425	-0.666631273	-0.601392787	**1:37:40**	-0.279677139	-0.669885068	-0.601483129
1:37:44	-0.279635853	-0.673138863	-0.60157347	**1:37:48**	-0.279594567	-0.658411333	-0.601663812
1:37:52	-0.279553282	-0.643683767	-0.601754153	**1:37:56**	-0.279511996	-0.631278155	-0.601844495
1:38:00	-0.27947071	-0.621194424	-0.601934836	**1:38:04**	-0.279843518	-0.611357564	-0.602025178
1:38:08	-0.280216325	-0.601520668	-0.602115519	**1:38:12**	-0.280589132	-0.591683772	-0.602205861
1:38:16	-0.28096194	-0.582345993	-0.602296202	**1:38:20**	-0.281334747	-0.573507296	-0.602386544
1:38:24	-0.281707555	-0.564668563	-0.602476885	**1:38:28**	-0.282080362	-0.555829866	-0.602567227
1:38:32	-0.28245317	-0.546991169	-0.602657569	**1:38:36**	-0.282825977	-0.543344455	-0.60274791
1:38:40	-0.283198784	-0.541428413	-0.602838252	**1:38:44**	-0.283571592	-0.539512372	-0.602928593
1:38:48	-0.283944399	-0.532300992	-0.603018935	**1:38:52**	-0.284317207	-0.525089577	-0.603109276
1:38:56	-0.284690014	-0.524079784	-0.603199618	**1:39:00**	-0.285062822	-0.529271542	-0.603289959
1:39:04	-0.285032829	-0.534223233	-0.603380301	**1:39:08**	-0.285002836	-0.543908542	-0.603470642
1:39:12	-0.284972844	-0.553593851	-0.603560984	**1:39:16**	-0.284942851	-0.555509448	-0.603651325
1:39:20	-0.284912859	-0.549655332	-0.603741667	**1:39:24**	-0.284882866	-0.542332253	-0.603832008
1:39:28	-0.284852873	-0.530602213	-0.60392235	**1:39:32**	-0.284822881	-0.518872173	-0.604012691
1:39:36	-0.284792888	-0.506001711	-0.604103033	**1:39:40**	-0.284762896	-0.491990896	-0.604193374
1:39:44	-0.284732903	-0.477980082	-0.604283716	**1:39:48**	-0.284702911	-0.468968681	-0.604374057
1:39:52	-0.284672918	-0.459957245	-0.604464399	**1:39:56**	-0.284642925	-0.448466335	-0.60455474
1:40:00	-0.284612933	-0.4344959	-0.604645082	**1:40:04**	-0.284934356	-0.420734956	-0.604735423
1:40:08	-0.28525578	-0.399873905	-0.604825765	**1:40:12**	-0.285577203	-0.379012854	-0.604916107
1:40:16	-0.285898627	-0.356594549	-0.605006448	**1:40:20**	-0.28622005	-0.33261899	-0.60509679
1:40:24	-0.286541474	-0.308643413	-0.605187131	**1:40:28**	-0.286862898	-0.290597766	-0.605277473
1:40:32	-0.287184321	-0.272552109	-0.605367814	**1:40:36**	-0.287505745	-0.255290257	-0.605458156
1:40:40	-0.287827168	-0.238812198	-0.605548497	**1:40:44**	-0.288148592	-0.222334143	-0.605638839
1:40:48	-0.288470015	-0.194963099	-0.60572918	**1:40:52**	-0.288791439	-0.167592055	-0.605819522
1:40:56	-0.289112862	-0.143879431	-0.605909863	**1:41:00**	-0.289434286	-0.123825226	-0.606000205
1:41:04	-0.289087633	-0.103372796	-0.606090546	**1:41:08**	-0.28874098	-0.090772115	-0.606180888
1:41:12	-0.288394327	-0.078171429	-0.606271229	**1:41:16**	-0.288047674	-0.062470555	-0.606361571
1:41:20	-0.287701021	-0.043669473	-0.606451912	**1:41:24**	-0.287354368	-0.0248684	-0.606542254
1:41:28	-0.287007716	-0.007457602	-0.606632595	**1:41:32**	-0.286661063	0.009953187	-0.606722937
1:41:36	-0.28631441	0.033043476	-0.606813278	**1:41:40**	-0.285967757	0.061813247	-0.60690362
1:41:44	-0.285621104	0.083904361	-0.606993961	**1:41:48**	-0.285274451	0.085959501	-0.607084303
1:41:52	-0.284927798	0.088014642	-0.607174645	**1:41:56**	-0.284581145	0.098130143	-0.607264986
1:42:00	-0.284234492	0.116305987	-0.607355328	**1:42:04**	-0.284578805	0.134069957	-0.607445669
1:42:08	-0.284923118	0.147209278	-0.607536011	**1:42:12**	-0.28526743	0.160348563	-0.607626352
1:42:16	-0.285611743	0.17495166	-0.607716694	**1:42:20**	-0.285956055	0.191018533	-0.607807035
1:42:24	-0.286300368	0.207085406	-0.607897377	**1:42:28**	-0.28664468	0.216157178	-0.607987718
1:42:32	-0.286988993	0.225228951	-0.60807806	**1:42:36**	-0.287333305	0.234300723	-0.608168401
1:42:40	-0.287677618	0.243372496	-0.608258743	**1:42:44**	-0.28802193	0.252444268	-0.608349084

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:42:48	-0.288366243	0.259783556	-0.608439426	**1:42:52**	-0.288710555	0.267122808	-0.608529767
1:42:56	-0.289054868	0.265950494	-0.608620109	**1:43:00**	-0.28939918	0.256266542	-0.60871045
1:43:04	-0.289402616	0.246785818	-0.608800792	**1:43:08**	-0.289406051	0.227306728	-0.608891133
1:43:12	-0.289409486	0.207827638	-0.608981475	**1:43:16**	-0.289412921	0.191058767	-0.609071816
1:43:20	-0.289416356	0.177000185	-0.609162158	**1:43:24**	-0.289419791	0.162941568	-0.609252499
1:43:28	-0.289423227	0.146543837	-0.609342841	**1:43:32**	-0.289426662	0.130146106	-0.609433183
1:43:36	-0.289430097	0.118146738	-0.609523524	**1:43:40**	-0.289433532	0.119342475	-0.609613866
1:43:44	-0.289436967	0.120538213	-0.609704207	**1:43:48**	-0.289440402	0.119557188	-0.609794549
1:43:52	-0.289443838	0.118576181	-0.60988489	**1:43:56**	-0.289447273	0.118945309	-0.609975232
1:44:00	-0.289450708	0.120664608	-0.610065573	**1:44:04**	-0.289171249	0.121809277	-0.610155915
1:44:08	-0.288891791	0.120724228	-0.610246256	**1:44:12**	-0.288612332	0.11963918	-0.610336598
1:44:16	-0.288332874	0.121251345	-0.610426939	**1:44:20**	-0.288053415	0.125560726	-0.610517281
1:44:24	-0.287773956	0.129870106	-0.610607622	**1:44:28**	-0.287494498	0.128387803	-0.610697964
1:44:32	-0.287215039	0.1269055	-0.610788305	**1:44:36**	-0.286935581	0.120003843	-0.610878647
1:44:40	-0.286656122	0.107682816	-0.610968988	**1:44:44**	-0.286376664	0.09536177	-0.61105933
1:44:48	-0.286097205	0.075646398	-0.611149671	**1:44:52**	-0.285817746	0.055931026	-0.611240013
1:44:56	-0.285538288	0.038582552	-0.611330354	**1:45:00**	-0.785258829	-0.476399024	-1.111420696
1:45:04	-0.785459669	-0.491666917	-1.111511037	**1:45:08**	-0.785660509	-0.505507877	-1.111601379
1:45:12	-0.285861348	-0.019348855	-0.611691721	**1:45:16**	-0.286062188	-0.029842706	-0.611782062
1:45:20	-0.286263028	-0.036989455	-0.611872404	**1:45:24**	-0.286463867	-0.044136205	-0.611962745
1:45:28	-0.286664707	-0.057647977	-0.612053087	**1:45:32**	-0.286865547	-0.071159748	-0.612143428
1:45:36	-0.287066386	-0.085979171	-0.61223377	**1:45:40**	-0.287267226	-0.102106262	-0.612324111
1:45:44	-0.287468066	-0.118233353	-0.612414453	**1:45:48**	-0.287668905	-0.140771965	-0.612504794
1:45:52	-0.287869745	-0.163310577	-0.612595136	**1:45:56**	-0.288070585	-0.186382232	-0.612685477
1:46:00	-0.288271424	-0.20998693	-0.612775819	**1:46:04**	-0.287785766	-0.233182418	-0.61286616
1:46:08	-0.287300108	-0.247981077	-0.612956502	**1:46:12**	-0.28681445	-0.262779731	-0.613046843
1:46:16	-0.286328792	-0.271013698	-0.613137185	**1:46:20**	-0.285843133	-0.272682976	-0.613227526
1:46:24	-0.285357475	-0.274352255	-0.613317868	**1:46:28**	-0.284871817	-0.284403834	-0.613408209
1:46:32	-0.284386159	-0.294455405	-0.613498551	**1:46:36**	-0.283900501	-0.307071471	-0.613588892
1:46:40	-0.283414843	-0.320542365	-0.613679234	**1:46:44**	-0.282929184	-0.336254108	-0.613769575
1:46:48	-0.282443526	-0.358688404	-0.613859917	**1:46:52**	-0.281957868	-0.381122701	-0.613950258
1:46:56	-0.28147221	-0.391198343	-0.6140406	**1:47:00**	-0.280986552	-0.388915313	-0.614130942
1:47:04	-0.280838207	-0.386833367	-0.614221283	**1:47:08**	-0.280689862	-0.386760361	-0.614311625
1:47:12	-0.280541517	-0.386687355	-0.614401966	**1:47:16**	-0.280393172	-0.384667355	-0.614492308
1:47:20	-0.280244827	-0.380700343	-0.614582649	**1:47:24**	-0.280096482	-0.37673335	-0.614672991
1:47:28	-0.279948137	-0.379943242	-0.614763332	**1:47:32**	-0.279799792	-0.383153135	-0.614853674
1:47:36	-0.279651447	-0.395822626	-0.614944015	**1:47:40**	-0.279503102	-0.417951713	-0.615034357
1:47:44	-0.279354757	-0.440080801	-0.615124698	**1:47:48**	-0.279206412	-0.469441722	-0.61521504
1:47:52	-0.279058067	-0.498802695	-0.615305381	**1:47:56**	-0.278909722	-0.522202048	-0.615395723
1:48:00	-0.278761377	-0.539639851	-0.615486064	**1:48:04**	-0.278274414	-0.556875809	-0.615576406
1:48:08	-0.27778745	-0.574111766	-0.615666747	**1:48:12**	-0.277300486	-0.591347724	-0.615757089
1:48:16	-0.276813523	-0.606406937	-0.61584743	**1:48:20**	-0.276326559	-0.619289405	-0.615937772
1:48:24	-0.275839595	-0.632171874	-0.616028113	**1:48:28**	-0.275352632	-0.635017321	-0.616118455
1:48:32	-0.274865668	-0.637862768	-0.616208796	**1:48:36**	-0.274378704	-0.64070818	-0.616299138
1:48:40	-0.273891741	-0.643553627	-0.61638948	**1:48:44**	-0.273404777	-0.646399074	-0.616479821
1:48:48	-0.272917814	-0.641350953	-0.616570163	**1:48:52**	-0.27243085	-0.636302833	-0.616660504
1:48:56	-0.271943886	-0.629042545	-0.616750846	**1:49:00**	-0.271456923	-0.619570054	-0.616841187
1:49:04	-0.271120208	-0.610187195	-0.616931529	**1:49:08**	-0.270783493	-0.600804265	-0.61702187
1:49:12	-0.270446778	-0.591421406	-0.617112212	**1:49:16**	-0.270110063	-0.580397444	-0.617202553
1:49:20	-0.269773348	-0.567732414	-0.617292895	**1:49:24**	-0.269436633	-0.555067385	-0.617383236
1:49:28	-0.269099918	-0.531422206	-0.617473578	**1:49:32**	-0.268763203	-0.507777027	-0.617563919
1:49:36	-0.268426488	-0.482911128	-0.617654261	**1:49:40**	-0.268089773	-0.45682451	-0.617744602
1:49:44	-0.267753059	-0.430737875	-0.617834944	**1:49:48**	-0.267416344	-0.415269469	-0.617925285
1:49:52	-0.267079629	-0.39980108	-0.618015627	**1:49:56**	-0.266742914	-0.381810814	-0.618105968
1:50:00	-0.266406199	-0.361298707	-0.61819631	**1:50:04**	-0.266101819	-0.340805874	-0.618286651
1:50:08	-0.265797438	-0.321639424	-0.618376993	**1:50:12**	-0.265493058	-0.302472984	-0.618467334
1:50:16	-0.265188678	-0.291807104	-0.618557676	**1:50:20**	-0.264884297	-0.289641786	-0.618648018

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:50:24	-0.264579917	-0.287476476	-0.618738359	**1:50:28**	-0.264275537	-0.280120107	-0.618828701
1:50:32	-0.263971156	-0.272763748	-0.618919042	**1:50:36**	-0.263666776	-0.267242926	-0.619009384
1:50:40	-0.263362396	-0.263557659	-0.619099725	**1:50:44**	-0.263058015	-0.259872384	-0.619190067
1:50:48	-0.262753635	-0.257467482	-0.619280408	**1:50:52**	-0.262449255	-0.25506258	-0.61937075
1:50:56	-0.262144874	-0.250098424	-0.619461091	**1:51:00**	-0.261840494	-0.242575005	-0.619551433
1:51:04	-0.262123548	-0.235401755	-0.619641774	**1:51:08**	-0.262406602	-0.227612603	-0.619732116
1:51:12	-0.262689656	-0.219823455	-0.619822457	**1:51:16**	-0.26297271	-0.212627342	-0.619912799
1:51:20	-0.263255764	-0.206024264	-0.62000314	**1:51:24**	-0.263538817	-0.199421185	-0.620093482
1:51:28	-0.263821871	-0.196841772	-0.620183823	**1:51:32**	-0.264104925	-0.194262359	-0.620274165
1:51:36	-0.264387979	-0.192024314	-0.620364506	**1:51:40**	-0.264671033	-0.190127641	-0.620454848
1:51:44	-0.264954087	-0.188230967	-0.620545189	**1:51:48**	-0.265237141	-0.17734279	-0.620635531
1:51:52	-0.265520195	-0.166454613	-0.620725872	**1:51:56**	-0.265803249	-0.149202149	-0.620816214
1:52:00	-0.266088959	-0.12558698	-0.620910155	**1:52:04**	-0.265683318	-0.101559708	-0.62100443
1:52:08	-0.265277677	-0.070148338	-0.621098704	**1:52:12**	-0.264872035	-0.038736976	-0.621192978
1:52:16	-0.264466394	-0.006719492	-0.621287252	**1:52:20**	-0.264060752	0.025904124	-0.621381526
1:52:24	-0.263655111	0.058527722	-0.6214758	**1:52:28**	-0.263249469	0.085174972	-0.621570074
1:52:32	-0.262843828	0.111822205	-0.621664349	**1:52:36**	-0.262438186	0.130353437	-0.621758623
1:52:40	-0.262032545	0.140768635	-0.621852897	**1:52:44**	-0.261626903	0.151183832	-0.621947171
1:52:48	-0.261221262	0.167046203	-0.622041445	**1:52:52**	-0.26081562	0.182908609	-0.622135719
1:52:56	-0.260409979	0.194469079	-0.622229993	**1:53:00**	-0.260004338	0.201727684	-0.622324268
1:53:04	-0.260353084	0.208536575	-0.622418542	**1:53:08**	-0.26070183	0.206691356	-0.622512816
1:53:12	-0.261050577	0.204846172	-0.62260709	**1:53:16**	-0.261399323	0.203905567	-0.622701364
1:53:20	-0.261748069	0.203869576	-0.622795638	**1:53:24**	-0.262096816	0.203833585	-0.622889912
1:53:28	-0.262445562	0.203211145	-0.622984186	**1:53:32**	-0.262794308	0.202588741	-0.623078461
1:53:36	-0.263143055	0.202528555	-0.623172735	**1:53:40**	-0.263491801	0.204155198	-0.623267009
1:53:44	-0.263840547	0.205781841	-0.623361283	**1:53:48**	-0.264189294	0.206591521	-0.623455557
1:53:52	-0.26453804	0.207401236	-0.623549831	**1:53:56**	-0.264886787	0.202440017	-0.623644105
1:54:00	-0.265235533	0.191707863	-0.62373838	**1:54:04**	-0.265738255	0.180883927	-0.623832654
1:54:08	-0.266240977	0.172933396	-0.623926928	**1:54:12**	-0.266743699	0.164982864	-0.624021202
1:54:16	-0.26724642	0.159987562	-0.624115476	**1:54:20**	-0.267749142	0.157947561	-0.62420975
1:54:24	-0.268251864	0.155907559	-0.624304024	**1:54:28**	-0.268754586	0.155125832	-0.624398299
1:54:32	-0.269257308	0.154344068	-0.624492573	**1:54:36**	-0.26976003	0.156031528	-0.624586847
1:54:40	-0.270262752	0.16018821	-0.624681121	**1:54:44**	-0.270765473	0.164344856	-0.624775395
1:54:48	-0.271268195	0.163972996	-0.624869669	**1:54:52**	-0.271770917	0.163601135	-0.624963943
1:54:56	-0.272273639	0.161088877	-0.625058217	**1:55:00**	-0.272776361	0.156436221	-0.625152492
1:55:04	-0.273176604	0.15184465	-0.625246766	**1:55:08**	-0.273576847	0.144823579	-0.62534104
1:55:12	-0.27397709	0.137802508	-0.625435314	**1:55:16**	-0.274377334	0.120624451	-0.625529588
1:55:20	-0.274777577	0.09328946	-0.625623862	**1:55:24**	-0.27517782	0.065954452	-0.625718136
1:55:28	-0.275578063	0.039202019	-0.625812411	**1:55:32**	-0.275978306	0.012449569	-0.625906685
1:55:36	-0.276378549	-0.011934722	-0.626000959	**1:55:40**	-0.276778793	-0.033950881	-0.626095233
1:55:44	-0.277179036	-0.055967031	-0.626189507	**1:55:48**	-0.277579279	-0.065930611	-0.626283781
1:55:52	-0.277979522	-0.075894192	-0.626378055	**1:55:56**	-0.278379765	-0.0880972	-0.62647233
1:56:00	-0.278780009	-0.102539636	-0.626566604	**1:56:04**	-0.279196631	-0.116991835	-0.626660878
1:56:08	-0.279613254	-0.127932565	-0.626755152	**1:56:12**	-0.280029877	-0.138873293	-0.626849426
1:56:16	-0.2804465	-0.147095444	-0.6269437	**1:56:20**	-0.280863123	-0.152599014	-0.627037974
1:56:24	-0.281279745	-0.158102584	-0.627132248	**1:56:28**	-0.281696368	-0.158629368	-0.627226523
1:56:32	-0.282112991	-0.159156153	-0.627320797	**1:56:36**	-0.282529614	-0.149189784	-0.627415071
1:56:40	-0.282946236	-0.128730264	-0.627509345	**1:56:44**	-0.283362859	-0.108270741	-0.627603619
1:56:48	-0.283779482	-0.101070628	-0.627697893	**1:56:52**	-0.284196105	-0.093870515	-0.627792167
1:56:56	-0.284612728	-0.085780701	-0.627886442	**1:57:00**	-0.28502935	-0.076801178	-0.627980716
1:57:04	-0.285203279	-0.067676997	-0.62807499	**1:57:08**	-0.285377207	-0.058552816	-0.628169264
1:57:12	-0.285551135	-0.049428626	-0.628263538	**1:57:16**	-0.285725063	-0.036416844	-0.628357812
1:57:20	-0.285898991	-0.019517461	-0.628452086	**1:57:24**	-0.28607292	-0.002618079	-0.628546361
1:57:28	-0.286246848	0.006869373	-0.628640635	**1:57:32**	-0.286420776	0.016356842	-0.628734909
1:57:36	-0.286594704	0.016299461	-0.628829183	**1:57:40**	-0.286768632	0.006697265	-0.628923457
1:57:44	-0.28694256	-0.002904931	-0.629017731	**1:57:48**	-0.287116489	-0.015586016	-0.629112005
1:57:52	-0.287290417	-0.028267092	-0.629206279	**1:57:56**	-0.287464345	-0.040151866	-0.629300554

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
1:58:00	-0.287638273	-0.051240328	-0.629394828	**1:58:04**	-0.287608866	-0.062207584	-0.629489102
1:58:08	-0.287579458	-0.07196494	-0.629583376	**1:58:12**	-0.287550051	-0.081722296	-0.62967765
1:58:16	-0.287520643	-0.090934454	-0.629771924	**1:58:20**	-0.287491236	-0.099601412	-0.629866198
1:58:24	-0.287461828	-0.108268371	-0.629960473	**1:58:28**	-0.287432421	-0.120156692	-0.630054747
1:58:32	-0.287403013	-0.132045013	-0.630149021	**1:58:36**	-0.287373606	-0.137034203	-0.630243295
1:58:40	-0.287344199	-0.135124264	-0.630337569	**1:58:44**	-0.287314791	-0.133214325	-0.630431843
1:58:48	-0.287285384	-0.145851264	-0.630526117	**1:58:52**	-0.287255976	-0.158488204	-0.630620392
1:58:56	-0.287226569	-0.169947356	-0.630714666	**1:59:00**	-0.287197161	-0.18022872	-0.63080894
1:59:04	-0.286801462	-0.190291744	-0.630903214	**1:59:08**	-0.286405763	-0.185362455	-0.630997488
1:59:12	-0.286010064	-0.180433168	-0.631091762	**1:59:16**	-0.285614365	-0.177634948	-0.631186036
1:59:20	-0.285218666	-0.176967796	-0.63128031	**1:59:24**	-0.284822967	-0.176300644	-0.631374585
1:59:28	-0.284427269	-0.171041845	-0.631468859	**1:59:32**	-0.28403157	-0.165783047	-0.631563133
1:59:36	-0.283635871	-0.153420573	-0.631657407	**1:59:40**	-0.283240172	-0.13395442	-0.631751681
1:59:44	-0.282844473	-0.114488269	-0.631845955	**1:59:48**	-0.282448774	-0.095701355	-0.631940229
1:59:52	-0.282053075	-0.076914441	-0.632034504	**1:59:56**	-0.281657376	-0.058874262	-0.632128778
2:00:00	0.218738323	0.418330089	-0.132223052	**2:00:04**	0.218387029	0.409416178	-0.132317326
2:00:08	0.218035735	0.413001025	-0.1324116	**2:00:12**	-0.282315559	-0.083414129	-0.632505874
2:00:16	-0.282666853	-0.079829274	-0.632600148	**2:00:20**	-0.283018147	-0.076244427	-0.632694423
2:00:24	-0.283369441	-0.072659581	-0.632788697	**2:00:28**	-0.283720736	-0.079700958	-0.632882971
2:00:32	-0.28407203	-0.086742326	-0.632977245	**2:00:36**	-0.284423324	-0.101869422	-0.633071519
2:00:40	-0.284774618	-0.119691757	-0.633165793	**2:00:44**	-0.285125912	-0.137514095	-0.633260067
2:00:48	-0.285477206	-0.15102159	-0.633354341	**2:00:52**	-0.2858285	-0.164529087	-0.633448616
2:00:56	-0.286179794	-0.173575815	-0.63354289	**2:01:00**	-0.286531088	-0.178161773	-0.633637164
2:01:04	-0.286552785	-0.182551264	-0.633731438	**2:01:08**	-0.286574481	-0.174186153	-0.633825712
2:01:12	-0.286596177	-0.165821041	-0.633919986	**2:01:16**	-0.286617874	-0.161230461	-0.63401426
2:01:20	-0.28663957	-0.160414415	-0.634108535	**2:01:24**	-0.286661266	-0.159598366	-0.634202809
2:01:28	-0.286682963	-0.16642668	-0.634297083	**2:01:32**	-0.286704659	-0.173254992	-0.634391357
2:01:36	-0.286726355	-0.181009069	-0.634485631	**2:01:40**	-0.286748052	-0.189071735	-0.634579905
2:01:44	-0.286769748	-0.197134401	-0.634674179	**2:01:48**	-0.286791445	-0.210209537	-0.634768454
2:01:52	-0.286813141	-0.223284673	-0.634862728	**2:01:56**	-0.286834837	-0.23218455	-0.634957002
2:02:00	-0.286856534	-0.239692677	-0.635051276	**2:02:04**	-0.287282737	-0.247441921	-0.63514555
2:02:08	-0.287708941	-0.252736851	-0.635239824	**2:02:12**	-0.288135145	-0.25803178	-0.635334098
2:02:16	-0.288561349	-0.272206548	-0.635428372	**2:02:20**	-0.288987553	-0.295261162	-0.635522647
2:02:24	-0.289413757	-0.318315767	-0.635616921	**2:02:28**	-0.289839961	-0.343333664	-0.635711195
2:02:32	-0.290266165	-0.368351571	-0.635805469	**2:02:36**	-0.290692369	-0.394883492	-0.635899743
2:02:40	-0.291118573	-0.422929428	-0.635994017	**2:02:44**	-0.291544777	-0.450726338	-0.636088291
2:02:48	-0.29197098	-0.477776135	-0.636182566	**2:02:52**	-0.292397184	-0.504825933	-0.63627684
2:02:56	-0.292823388	-0.533941339	-0.636371114	**2:03:00**	-0.293249592	-0.565122354	-0.636465388
2:03:04	-0.292971794	-0.595883724	-0.636559662	**2:03:08**	-0.292693995	-0.604193992	-0.636653936
2:03:12	-0.292416197	-0.61250426	-0.63674821	**2:03:16**	-0.292138399	-0.613866646	-0.636842485
2:03:20	-0.2918606	-0.60828108	-0.636936759	**2:03:24**	-0.291582802	-0.602695513	-0.637031033
2:03:28	-0.291305004	-0.589312202	-0.637125307	**2:03:32**	-0.291027205	-0.56813111	-0.637219581
2:03:36	-0.290749407	-0.540559735	-0.637313855	**2:03:40**	-0.290471609	-0.506598112	-0.637408129
2:03:44	-0.29019381	-0.472636453	-0.637502403	**2:03:48**	-0.289916012	-0.432012995	-0.637596678
2:03:52	-0.289638214	-0.391389556	-0.637690952	**2:03:56**	-0.289360415	-0.351131945	-0.637785226
2:04:00	-0.289082617	-0.31124018	-0.6378795	**2:04:04**	-0.289373687	-0.271687509	-0.637973774
2:04:08	-0.289664757	-0.248309581	-0.638068048	**2:04:12**	-0.289955827	-0.224931662	-0.638162322
2:04:16	-0.290246897	-0.210417198	-0.638256597	**2:04:20**	-0.290537967	-0.204766196	-0.638350871
2:04:24	-0.290829037	-0.199115194	-0.638445145	**2:04:28**	-0.291120107	-0.192233456	-0.638539419
2:04:32	-0.291411176	-0.18535172	-0.638633693	**2:04:36**	-0.291702246	-0.174750869	-0.638727967
2:04:40	-0.291993316	-0.160430904	-0.638822241	**2:04:44**	-0.292284386	-0.146110941	-0.638916516
2:04:48	-0.292575456	-0.140163739	-0.63901079	**2:04:52**	-0.292866526	-0.134216536	-0.639105064
2:04:56	-0.293157596	-0.126625739	-0.639199338	**2:05:00**	-0.293448666	-0.117391353	-0.639293612
2:05:04	-0.293678608	-0.108120525	-0.639387886	**2:05:08**	-0.29390855	-0.090662789	-0.63948216
2:05:12	-0.294138493	-0.073205062	-0.639576434	**2:05:16**	-0.294368435	-0.060940535	-0.639670709
2:05:20	-0.294598377	-0.05040708	-0.639764983	**2:05:24**	-0.29482832	-0.039873626	-0.639859257
2:05:28	-0.295058262	-0.025567641	-0.639953531	**2:05:32**	-0.295288204	-0.011261684	-0.640047805

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:05:36	-0.295518146	0.000372801	-0.640142079	**2:05:40**	-0.295748089	0.009335793	-0.640236353
2:05:44	-0.295978031	0.018298768	-0.640330628	**2:05:48**	-0.296207973	0.023921268	-0.640424902
2:05:52	-0.296437916	0.029543768	-0.640519176	**2:05:56**	-0.296667858	0.034274694	-0.64061345
2:06:00	-0.2968978	0.038708415	-0.640707724	**2:06:04**	-0.297012371	0.043210908	-0.640801998
2:06:08	-0.297126943	0.050726543	-0.640896272	**2:06:12**	-0.297241514	0.058242196	-0.640990547
2:06:16	-0.297356085	0.06932818	-0.641084821	**2:06:20**	-0.297470657	0.083984533	-0.641179095
2:06:24	-0.297585228	0.098640867	-0.641273369	**2:06:28**	-0.297699799	0.115470749	-0.641367643
2:06:32	-0.297814371	0.13230063	-0.641461917	**2:06:36**	-0.297928942	0.141656795	-0.641556191
2:06:40	-0.298043513	0.143539172	-0.641650465	**2:06:44**	-0.298158085	0.145421584	-0.64174474
2:06:48	-0.298272656	0.135672593	-0.641839014	**2:06:52**	-0.298387227	0.125923567	-0.641933288
2:06:56	-0.298501799	0.11123899	-0.642027562	**2:07:00**	-0.29861637	0.091618847	-0.642121836
2:07:04	-0.298460086	0.072160156	-0.64221611	**2:07:08**	-0.298303802	0.059999294	-0.642310384
2:07:12	-0.298147518	0.047838449	-0.642404659	**2:07:16**	-0.297991234	0.037371505	-0.642498933
2:07:20	-0.29783495	0.02859846	-0.642593207	**2:07:24**	-0.297678667	0.019825415	-0.642687481
2:07:28	-0.297522383	0.008337373	-0.642781755	**2:07:32**	-0.297366099	-0.003150686	-0.642876029
2:07:36	-0.297209815	-0.019788556	-0.642970303	**2:07:40**	-0.297053531	-0.041576261	-0.643064578
2:07:44	-0.296897247	-0.063363957	-0.643158852	**2:07:48**	-0.296740963	-0.086488004	-0.643253126
2:07:52	-0.296584679	-0.109612045	-0.6433474	**2:07:56**	-0.296428395	-0.134547821	-0.643441674
2:08:00	-0.296272111	-0.161295328	-0.643535948	**2:08:04**	-0.296497008	-0.18827005	-0.643630222
2:08:08	-0.296721904	-0.216694603	-0.643724496	**2:08:12**	-0.296946801	-0.245119153	-0.643818771
2:08:16	-0.297171697	-0.265989708	-0.643913045	**2:08:20**	-0.297396594	-0.284342258	-0.644007319
2:08:24	-0.29762149	-0.302694808	-0.644101593	**2:08:28**	-0.297846387	-0.312610448	-0.644195867
2:08:32	-0.298071283	-0.322526097	-0.644290141	**2:08:36**	-0.29829618	-0.332882044	-0.644384415
2:08:40	-0.298521076	-0.34367828	-0.64447869	**2:08:44**	-0.298745973	-0.354474516	-0.644572964
2:08:48	-0.298970869	-0.384332989	-0.644667238	**2:08:52**	-0.299195766	-0.414191479	-0.644761512
2:08:56	-0.299420662	-0.426735744	-0.644855786	**2:09:00**	-0.299645559	-0.433508631	-0.64495006
2:09:04	-0.299820391	-0.440251657	-0.645044334	**2:09:08**	-0.299995222	-0.467851704	-0.645138609
2:09:12	-0.300170054	-0.495451752	-0.645232883	**2:09:16**	-0.300344886	-0.515408235	-0.645327157
2:09:20	-0.300519717	-0.527721134	-0.645421431	**2:09:24**	-0.300694549	-0.540034034	-0.645515705
2:09:28	-0.30086938	-0.552346934	-0.645609979	**2:09:32**	-0.301044212	-0.564659833	-0.645704253
2:09:36	-0.301219044	-0.569306091	-0.645798527	**2:09:40**	-0.301393875	-0.566285743	-0.645892802
2:09:44	-0.301568707	-0.563265395	-0.645987076	**2:09:48**	-0.301743539	-0.548592468	-0.64608135
2:09:52	-0.30191837	-0.533919506	-0.646175624	**2:09:56**	-0.302093202	-0.52547634	-0.646269898
2:10:00	-0.302268034	-0.519109726	-0.646364172	**2:10:04**	-0.302810629	-0.512962331	-0.646458446
2:10:08	-0.303353225	-0.499166307	-0.646552721	**2:10:12**	-0.303895821	-0.485370284	-0.646646995
2:10:16	-0.304438417	-0.470475691	-0.646741269	**2:10:20**	-0.304981012	-0.454482511	-0.646835543
2:10:24	-0.305523608	-0.438489313	-0.646929817	**2:10:28**	-0.306066204	-0.424815582	-0.647024091
2:10:32	-0.3066088	-0.411141833	-0.647118365	**2:10:36**	-0.307151395	-0.395160182	-0.64721264
2:10:40	-0.307693991	-0.376870613	-0.647306914	**2:10:44**	-0.308236587	-0.358581043	-0.647401188
2:10:48	-0.308779183	-0.33296428	-0.647495462	**2:10:52**	-0.309321779	-0.307347508	-0.647589736
2:10:56	-0.309864374	-0.282193391	-0.64768401	**2:11:00**	-0.31040697	-0.257193494	-0.647778284
2:11:04	-0.31083522	-0.232125433	-0.647872558	**2:11:08**	-0.31126347	-0.20439474	-0.647966833
2:11:12	-0.311691721	-0.176664046	-0.648061107	**2:11:16**	-0.312119971	-0.164683198	-0.648155381
2:11:20	-0.312548221	-0.157952298	-0.648249655	**2:11:24**	-0.312976471	-0.151221398	-0.648343929
2:11:28	-0.313404722	-0.138176207	-0.648438203	**2:11:32**	-0.313832972	-0.125131017	-0.648532477
2:11:36	-0.314261222	-0.10790946	-0.648626752	**2:11:40**	-0.314689472	-0.086511542	-0.648721026
2:11:44	-0.315117723	-0.065113624	-0.6488153	**2:11:48**	-0.315545973	-0.039088259	-0.648909574
2:11:52	-0.315974223	-0.013062893	-0.649003848	**2:11:56**	-0.316402473	0.009497662	-0.649098122
2:12:00	-0.316830723	0.028593408	-0.649192396	**2:12:04**	-0.317123063	0.047770168	-0.649286671
2:12:08	-0.317415402	0.063276297	-0.649380945	**2:12:12**	-0.317707741	0.078782426	-0.649475219
2:12:16	-0.31800008	0.08969137	-0.649569493	**2:12:20**	-0.31829242	0.096003092	-0.649663767
2:12:24	-0.318584759	0.102314833	-0.649758041	**2:12:28**	-0.318877098	0.113211928	-0.649852315
2:12:32	-0.319169438	0.124108986	-0.649946589	**2:12:36**	-0.319461777	0.135006081	-0.650040864
2:12:40	-0.319754116	0.145903139	-0.650135138	**2:12:44**	-0.320046455	0.155288138	-0.650229412
2:12:48	-0.320338795	0.160136884	-0.650323686	**2:12:52**	-0.320631134	0.164985595	-0.65041796
2:12:56	-0.320923473	0.169121053	-0.650512234	**2:13:00**	-0.321215812	0.172543258	-0.650606508
2:13:04	-0.321666197	0.175871255	-0.650700783	**2:13:08**	-0.322116582	0.179199251	-0.650795057

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:13:12	-0.322566967	0.182527248	-0.650889331	**2:13:16**	-0.323017352	0.192262511	-0.650983605
2:13:20	-0.323467737	0.20840504	-0.651077879	**2:13:24**	-0.323918121	0.224547604	-0.651172153
2:13:28	-0.324368506	0.239348081	-0.651266427	**2:13:32**	-0.324818891	0.254148523	-0.651360702
2:13:36	-0.325269276	0.261359741	-0.651454976	**2:13:40**	-0.325719661	0.260981701	-0.65154925
2:13:44	-0.326170046	0.260603661	-0.651643524	**2:13:48**	-0.32662043	0.247395491	-0.651737798
2:13:52	-0.327070815	0.234187321	-0.651832072	**2:13:56**	-0.3275212	0.218024063	-0.651926346
2:14:00	-0.327971585	0.198905684	-0.65202062	**2:14:04**	-0.328265772	0.179880411	-0.652114895
2:14:08	-0.328559958	0.162534684	-0.652209169	**2:14:12**	-0.328854145	0.145188922	-0.652303443
2:14:16	-0.329148332	0.136956558	-0.652397717	**2:14:20**	-0.329442519	0.137837594	-0.652491991
2:14:24	-0.329736706	0.138718595	-0.652586265	**2:14:28**	-0.330030893	0.127613323	-0.652680539
2:14:32	-0.330325079	0.116508052	-0.652774814	**2:14:36**	-0.330619266	0.110655555	-0.652869088
2:14:40	-0.330913453	0.110055796	-0.652963362	**2:14:44**	-0.33120764	0.109456037	-0.653057636
2:14:48	-0.331501827	0.110319628	-0.65315191	**2:14:52**	-0.331796014	0.111183254	-0.653246184
2:14:56	-0.3320902	0.110469801	-0.653340458	**2:15:00**	-0.832384387	-0.39182066	-1.153434732
2:15:04	-0.832635109	-0.394085248	-1.153529007	**2:15:08**	-0.832885831	-0.404769559	-1.153623281
2:15:12	-0.333136552	0.084546148	-0.653717555	**2:15:16**	-0.333387274	0.073861838	-0.653811829
2:15:20	-0.333637996	0.063177545	-0.653906103	**2:15:24**	-0.333888717	0.052493234	-0.654000377
2:15:28	-0.334139439	0.039453573	-0.654094651	**2:15:32**	-0.334390161	0.026413911	-0.654188926
2:15:36	-0.334640883	0.013656371	-0.6542832	**2:15:40**	-0.334891604	0.00118097	-0.654377474
2:15:44	-0.335142326	-0.011294431	-0.654471748	**2:15:48**	-0.335393048	-0.038824974	-0.654566022
2:15:52	-0.335643769	-0.066355499	-0.654660296	**2:15:56**	-0.335894491	-0.092454473	-0.65475457
2:16:00	-0.336145213	-0.11807626	-0.654848845	**2:16:04**	-0.336379505	-0.143688258	-0.654943119
2:16:08	-0.336613798	-0.167235634	-0.655037393	**2:16:12**	-0.33684809	-0.190783011	-0.655131667
2:16:16	-0.337082382	-0.210263721	-0.655225941	**2:16:20**	-0.337316675	-0.225677764	-0.655320215
2:16:24	-0.337550967	-0.241091806	-0.655414489	**2:16:28**	-0.33778526	-0.241816296	-0.655508763
2:16:32	-0.338019552	-0.242540782	-0.655603038	**2:16:36**	-0.338253844	-0.247886159	-0.655697312
2:16:40	-0.338488137	-0.257852429	-0.655791586	**2:16:44**	-0.338722429	-0.267818699	-0.65588586
2:16:48	-0.338956722	-0.283694112	-0.655980134	**2:16:52**	-0.339191014	-0.299569513	-0.656074408
2:16:56	-0.339425306	-0.312928419	-0.656168682	**2:17:00**	-0.339659599	-0.323770813	-0.656262957
2:17:04	-0.339571074	-0.33442078	-0.656357231	**2:17:08**	-0.339482549	-0.354260695	-0.656451505
2:17:12	-0.339394024	-0.374100609	-0.656545779	**2:17:16**	-0.339305499	-0.386068433	-0.656640053
2:17:20	-0.339216974	-0.39016415	-0.656734327	**2:17:24**	-0.339128449	-0.394259865	-0.656828601
2:17:28	-0.339039924	-0.40697656	-0.656922876	**2:17:32**	-0.3389514	-0.419693255	-0.65701715
2:17:36	-0.338862875	-0.437414197	-0.657111424	**2:17:40**	-0.33877435	-0.460139347	-0.657205698
2:17:44	-0.338685825	-0.482864516	-0.657299972	**2:17:48**	-0.3385973	-0.502386496	-0.657394246
2:17:52	-0.338508775	-0.521908475	-0.65748852	**2:17:56**	-0.33842025	-0.539569779	-0.657582794
2:18:00	-0.338331725	-0.555370445	-0.657677069	**2:18:04**	-0.338939595	-0.571586221	-0.657771343
2:18:08	-0.339547466	-0.581111028	-0.657865617	**2:18:12**	-0.340155336	-0.590635799	-0.657959891
2:18:16	-0.340763206	-0.605348432	-0.658054165	**2:18:20**	-0.341371076	-0.625248891	-0.658148439
2:18:24	-0.341978947	-0.64514935	-0.658242713	**2:18:28**	-0.342586817	-0.632673675	-0.658336988
2:18:32	-0.343194687	-0.620197999	-0.658431262	**2:18:36**	-0.343802557	-0.621739953	-0.658525536
2:18:40	-0.344410428	-0.637299536	-0.65861981	**2:18:44**	-0.345018298	-0.652859155	-0.658714084
2:18:48	-0.345626168	-0.658306963	-0.658808358	**2:18:52**	-0.346234038	-0.66375477	-0.658902632
2:18:56	-0.346841909	-0.667513795	-0.658996907	**2:19:00**	-0.347449779	-0.670709891	-0.659091181
2:19:04	-0.347812077	-0.673759641	-0.659185455	**2:19:08**	-0.348174375	-0.664980978	-0.659279729
2:19:12	-0.348536673	-0.656202278	-0.659374003	**2:19:16**	-0.348898971	-0.642875992	-0.659468277
2:19:20	-0.34926127	-0.62500205	-0.659562551	**2:19:24**	-0.349623568	-0.607128107	-0.659656825
2:19:28	-0.349985866	-0.581624403	-0.6597511	**2:19:32**	-0.350348164	-0.556120733	-0.659845374
2:19:36	-0.350710462	-0.536595206	-0.659939648	**2:19:40**	-0.35107276	-0.523047856	-0.660033922
2:19:44	-0.351435058	-0.509500507	-0.660128196	**2:19:48**	-0.351797357	-0.493733405	-0.66022247
2:19:52	-0.352159655	-0.477966303	-0.660316744	**2:19:56**	-0.352521953	-0.45852283	-0.660411019
2:20:00	-0.352884251	-0.435402989	-0.660505293	**2:20:04**	-0.352755179	-0.411990267	-0.660599567
2:20:08	-0.352626107	-0.385362223	-0.660693841	**2:20:12**	-0.352497035	-0.358734197	-0.660788115
2:20:16	-0.352367963	-0.338395044	-0.660882389	**2:20:20**	-0.352238892	-0.324344773	-0.660976663
2:20:24	-0.35210982	-0.310294511	-0.661070938	**2:20:28**	-0.351980748	-0.30815796	-0.661165212
2:20:32	-0.351851676	-0.30602141	-0.661259486	**2:20:36**	-0.351722604	-0.304944151	-0.66135376
2:20:40	-0.351593532	-0.3049262	-0.661448034	**2:20:44**	-0.35146446	-0.30490825	-0.661542308

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:20:48	-0.351335388	-0.297624804	-0.661636582	**2:20:52**	-0.351206316	-0.290341365	-0.661730856
2:20:56	-0.351077245	-0.283057923	-0.661825131	**2:21:00**	-0.350948173	-0.275774481	-0.661919405
2:21:04	-0.350957221	-0.268573369	-0.662013679	**2:21:08**	-0.350966269	-0.25650421	-0.662107953
2:21:12	-0.350975317	-0.244435048	-0.662202227	**2:21:16**	-0.350984365	-0.234362093	-0.662296501
2:21:20	-0.350993413	-0.226285343	-0.662390775	**2:21:24**	-0.351002461	-0.218208592	-0.66248505
2:21:28	-0.351011509	-0.219871524	-0.662579324	**2:21:32**	-0.351020557	-0.221534455	-0.662673598
2:21:36	-0.351029605	-0.223197388	-0.662767872	**2:21:40**	-0.351038653	-0.224860319	-0.662862146
2:21:44	-0.351047701	-0.226523251	-0.66295642	**2:21:48**	-0.351056749	-0.233202829	-0.663050694
2:21:52	-0.351065797	-0.23988241	-0.663144969	**2:21:56**	-0.351074845	-0.245531325	-0.663239243
2:22:00	-0.351083893	-0.250149577	-0.663333517	**2:22:04**	-0.350231973	-0.254254619	-0.663427791
2:22:08	-0.349380052	-0.254418908	-0.663522065	**2:22:12**	-0.348528132	-0.254583197	-0.663616339
2:22:16	-0.347676212	-0.255123275	-0.663710613	**2:22:20**	-0.346824292	-0.256039136	-0.663804887
2:22:24	-0.345972372	-0.256954996	-0.663899162	**2:22:28**	-0.345120452	-0.254901504	-0.663993436
2:22:32	-0.344268532	-0.252848012	-0.66408771	**2:22:36**	-0.343416611	-0.25079452	-0.664181984
2:22:40	-0.342564691	-0.248741028	-0.664276258	**2:22:44**	-0.341712771	-0.246687536	-0.664370532
2:22:48	-0.340860851	-0.237462848	-0.664464806	**2:22:52**	-0.340008931	-0.228238161	-0.664559081
2:22:56	-0.339157011	-0.22671545	-0.664653355	**2:23:00**	-0.33830509	-0.232894714	-0.664747629
2:23:04	-0.338552198	-0.239729093	-0.664841903	**2:23:08**	-0.338799306	-0.237490202	-0.664936177
2:23:12	-0.339046414	-0.235251311	-0.665030451	**2:23:16**	-0.339293522	-0.234305981	-0.665124725
2:23:20	-0.33954063	-0.234654213	-0.665219	**2:23:24**	-0.339787738	-0.235002445	-0.665313274
2:23:28	-0.340034846	-0.234119798	-0.665407548	**2:23:32**	-0.340281953	-0.233237153	-0.665501822
2:23:36	-0.340529061	-0.234715077	-0.665596096	**2:23:40**	-0.340776169	-0.238553571	-0.66569037
2:23:44	-0.341023277	-0.242392065	-0.665784644	**2:23:48**	-0.341270385	-0.257057769	-0.665878918
2:23:52	-0.341517493	-0.271723474	-0.665973193	**2:23:56**	-0.341764601	-0.281828761	-0.666067467
2:24:00	-0.342011709	-0.287373624	-0.666161741	**2:24:04**	-0.342493516	-0.293058395	-0.666256015
2:24:08	-0.342975323	-0.28964755	-0.666350289	**2:24:12**	-0.343457129	-0.286236705	-0.666444563
2:24:16	-0.343938936	-0.287887966	-0.666538837	**2:24:20**	-0.344420743	-0.294601322	-0.666633112
2:24:24	-0.34490255	-0.301314688	-0.666727386	**2:24:28**	-0.345384357	-0.310815318	-0.66682166
2:24:32	-0.345866164	-0.320315947	-0.666915934	**2:24:36**	-0.346347971	-0.329328794	-0.667010208
2:24:40	-0.346829778	-0.337853848	-0.667104482	**2:24:44**	-0.347311585	-0.346378911	-0.667198756
2:24:48	-0.347793392	-0.34231977	-0.667293031	**2:24:52**	-0.348275199	-0.338260629	-0.667387305
2:24:56	-0.348757006	-0.333244601	-0.667481579	**2:25:00**	-0.349238813	-0.327271668	-0.667575853
2:25:04	-0.349188684	-0.320981658	-0.667670127	**2:25:08**	-0.349138556	-0.309266689	-0.667764401
2:25:12	-0.349088428	-0.297551729	-0.667858675	**2:25:16**	-0.3490383	-0.283135965	-0.667952949
2:25:20	-0.348988172	-0.266019404	-0.668047224	**2:25:24**	-0.348938044	-0.248902841	-0.668141498
2:25:28	-0.348887915	-0.251844214	-0.668235772	**2:25:32**	-0.348837787	-0.254785582	-0.668330046
2:25:36	-0.348787659	-0.251416715	-0.66842432	**2:25:40**	-0.348737531	-0.241737609	-0.668518594
2:25:44	-0.348687403	-0.232058502	-0.668612868	**2:25:48**	-0.348637275	-0.216539176	-0.668707143
2:25:52	-0.348587146	-0.201019848	-0.668801417	**2:25:56**	-0.348537018	-0.186565661	-0.668895691
2:26:00	-0.34848689	-0.173176608	-0.668989965	**2:26:04**	-0.348538568	-0.159848243	-0.669084239
2:26:08	-0.348590245	-0.168719878	-0.669178513	**2:26:12**	-0.348641922	-0.177591513	-0.669272787
2:26:16	-0.3486936	-0.18887358	-0.669367062	**2:26:20**	-0.348745277	-0.202566077	-0.669461336
2:26:24	-0.348796955	-0.216258575	-0.66955561	**2:26:28**	-0.348848632	-0.209627353	-0.669649884
2:26:32	-0.34890031	-0.202996131	-0.669744158	**2:26:36**	-0.348951987	-0.194337754	-0.669838432
2:26:40	-0.349003665	-0.183652223	-0.669932706	**2:26:44**	-0.349055342	-0.172966693	-0.67002698
2:26:48	-0.349107019	-0.167118711	-0.670121255	**2:26:52**	-0.349158697	-0.161270726	-0.670215529
2:26:56	-0.349210374	-0.160877327	-0.670309803	**2:27:00**	-0.349262052	-0.162302118	-0.670404077
2:27:04	-0.34939939	-0.163777975	-0.670498351	**2:27:08**	-0.349536728	-0.163375899	-0.670592625
2:27:12	-0.349674067	-0.162973823	-0.670686899	**2:27:16**	-0.349811405	-0.164429139	-0.670781174
2:27:20	-0.349948743	-0.166503591	-0.670875448	**2:27:24**	-0.350086082	-0.168578043	-0.670969722
2:27:28	-0.35022342	-0.156426215	-0.671063996	**2:27:32**	-0.350360758	-0.144274387	-0.67115827
2:27:36	-0.350498097	-0.141914036	-0.671252544	**2:27:40**	-0.350635435	-0.149345155	-0.671346818
2:27:44	-0.350772774	-0.156776273	-0.671441093	**2:27:48**	-0.350910112	-0.168257162	-0.671535367
2:27:52	-0.35104745	-0.179738046	-0.671629641	**2:27:56**	-0.351184789	-0.199949318	-0.671723915
2:28:00	-0.351322127	-0.228890974	-0.671818189	**2:28:04**	-0.351140334	-0.254798508	-0.671912463
2:28:08	-0.350958541	-0.272174355	-0.672006737	**2:28:12**	-0.350776748	-0.289550198	-0.672101011
2:28:16	-0.350594955	-0.298373749	-0.672195286	**2:28:20**	-0.350413162	-0.298645008	-0.67228956

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:28:24	-0.35023137	-0.298916258	-0.672383834	**2:28:28**	-0.350049577	-0.303713927	-0.672478108
2:28:32	-0.349867784	-0.308511597	-0.672572382	**2:28:36**	-0.349685991	-0.305965072	-0.672666656
2:28:40	-0.349504198	-0.296074343	-0.67276093	**2:28:44**	-0.349322405	-0.286183615	-0.672855205
2:28:48	-0.349140612	-0.276292891	-0.672949479	**2:28:52**	-0.348958819	-0.266402163	-0.673043753
2:28:56	-0.348777026	-0.254131636	-0.673138027	**2:29:00**	-0.348595233	-0.241067843	-0.673232301
2:29:04	-0.348673847	-0.228159275	-0.673326575	**2:29:08**	-0.348752461	-0.218951885	-0.673420849
2:29:12	-0.348831075	-0.209744497	-0.673515124	**2:29:16**	-0.348909689	-0.198426141	-0.673609398
2:29:20	-0.348988303	-0.184996817	-0.673703672	**2:29:24**	-0.349066917	-0.171567494	-0.673797946
2:29:28	-0.349145531	-0.167381468	-0.67389222	**2:29:32**	-0.349224145	-0.163195435	-0.673986494
2:29:36	-0.349302759	-0.160071931	-0.674080768	**2:29:40**	-0.349381372	-0.158010943	-0.674175042
2:29:44	-0.349459986	-0.155949955	-0.674269317	**2:29:48**	-0.3495386	-0.157592206	-0.674363591
2:29:52	-0.349617214	-0.159234457	-0.674457865	**2:29:56**	-0.349695828	-0.160876708	-0.674552139
2:30:00	0.150225558	0.337481042	-0.174646413	**2:30:04**	0.14995496	0.335724353	-0.174740687
2:30:08	0.149684363	0.336499844	-0.174834961	**2:30:12**	-0.350586235	-0.162724665	-0.674929236
2:30:16	-0.350856833	-0.158211746	-0.67502351	**2:30:20**	-0.35112743	-0.149961392	-0.675117784
2:30:24	-0.351398028	-0.141711042	-0.675212058	**2:30:28**	-0.351668626	-0.141426799	-0.675306332
2:30:32	-0.351939223	-0.141142554	-0.675400606	**2:30:36**	-0.352209821	-0.144552316	-0.67549488
2:30:40	-0.352480419	-0.151656073	-0.675589155	**2:30:44**	-0.352751016	-0.159895107	-0.675683429
2:30:48	-0.353021614	-0.171539959	-0.675777703	**2:30:52**	-0.353292212	-0.183184805	-0.675871977
2:30:56	-0.353562809	-0.193133723	-0.675966251	**2:31:00**	-0.353833407	-0.201386706	-0.676060525
2:31:04	-0.35391699	-0.209528213	-0.676154799	**2:31:08**	-0.354000573	-0.224269787	-0.676249073
2:31:12	-0.354084156	-0.239011364	-0.676343348	**2:31:16**	-0.354167738	-0.255411343	-0.676437622
2:31:20	-0.354251321	-0.273469733	-0.676531896	**2:31:24**	-0.354334904	-0.291528119	-0.67662617
2:31:28	-0.354418487	-0.305699183	-0.676720444	**2:31:32**	-0.35450207	-0.319870247	-0.676814718
2:31:36	-0.354585653	-0.332758335	-0.676908992	**2:31:40**	-0.354669236	-0.344363448	-0.677003267
2:31:44	-0.354752819	-0.355968552	-0.677097541	**2:31:48**	-0.354836402	-0.358565434	-0.677191815
2:31:52	-0.354901706	-0.36115141	-0.677261323	**2:31:56**	-0.354935696	-0.363718721	-0.677288403
2:32:00	-0.354969687	-0.36628605	-0.677315484	**2:32:04**	-0.355232833	-0.368989957	-0.677342564
2:32:08	-0.35549598	-0.371693865	-0.677369645	**2:32:12**	-0.355759127	-0.374397772	-0.677396725
2:32:16	-0.356022273	-0.373492602	-0.677423806	**2:32:20**	-0.35628542	-0.368978338	-0.677450886
2:32:24	-0.356548567	-0.364464074	-0.677477966	**2:32:28**	-0.356811713	-0.3527561	-0.677505047
2:32:32	-0.35707486	-0.341048135	-0.677532127	**2:32:36**	-0.357338007	-0.333579956	-0.677559208
2:32:40	-0.357601153	-0.330351581	-0.677586288	**2:32:44**	-0.3578643	-0.327123197	-0.677613368
2:32:48	-0.358127447	-0.317038073	-0.677640449	**2:32:52**	-0.358390593	-0.306952949	-0.677667529
2:32:56	-0.35865374	-0.301631883	-0.67769461	**2:33:00**	-0.358916887	-0.301074893	-0.67772169
2:33:04	-0.35886279	-0.297935183	-0.677748771	**2:33:08**	-0.358808694	-0.287614625	-0.677775851
2:33:12	-0.358754597	-0.277294063	-0.677802931	**2:33:16**	-0.358700501	-0.268543873	-0.677830012
2:33:20	-0.358646405	-0.261364053	-0.677857092	**2:33:24**	-0.358592308	-0.254184232	-0.677884173
2:33:28	-0.358538212	-0.258959509	-0.677911253	**2:33:32**	-0.358484116	-0.263734787	-0.677938333
2:33:36	-0.358430019	-0.265194052	-0.677965414	**2:33:40**	-0.358375923	-0.263337314	-0.677992494
2:33:44	-0.358321827	-0.261480575	-0.678019575	**2:33:48**	-0.35826773	-0.26490379	-0.678046655
2:33:52	-0.358213634	-0.268327005	-0.678073736	**2:33:56**	-0.358159538	-0.26531235	-0.678100816
2:34:00	-0.358105441	-0.255859824	-0.678127896	**2:34:04**	-0.357855553	-0.24629059	-0.678154977
2:34:08	-0.357605665	-0.247759541	-0.678182057	**2:34:12**	-0.357355777	-0.249228491	-0.678209138
2:34:16	-0.357105889	-0.24462978	-0.678236218	**2:34:20**	-0.356856	-0.233963409	-0.678263298
2:34:24	-0.356606112	-0.223297037	-0.678290379	**2:34:28**	-0.356356224	-0.204630623	-0.678317459
2:34:32	-0.356106336	-0.18596421	-0.67834454	**2:34:36**	-0.355856448	-0.170230784	-0.67837162
2:34:40	-0.355606559	-0.157430351	-0.6783987	**2:34:44**	-0.355356671	-0.144629917	-0.678425781
2:34:48	-0.355106783	-0.14294305	-0.678452861	**2:34:52**	-0.354856895	-0.141256183	-0.678479942
2:34:56	-0.354607007	-0.141139005	-0.678507022	**2:35:00**	-0.354357119	-0.142591521	-0.678534103
2:35:04	-0.354368523	-0.144043837	-0.678561183	**2:35:08**	-0.354379927	-0.145028297	-0.678588263
2:35:12	-0.354391331	-0.146012762	-0.678615344	**2:35:16**	-0.354402735	-0.146997222	-0.678642424
2:35:20	-0.354414139	-0.139544031	-0.678669505	**2:35:24**	-0.354425543	-0.132090844	-0.678696585
2:35:28	-0.354436946	-0.13046702	-0.678723665	**2:35:32**	-0.35444835	-0.128843187	-0.678750746
2:35:36	-0.354459754	-0.130433601	-0.678777826	**2:35:40**	-0.354471158	-0.13309544	-0.678804907
2:35:44	-0.354482562	-0.136731477	-0.678831987	**2:35:48**	-0.354493966	-0.143290164	-0.678859068
2:35:52	-0.35450537	-0.149848841	-0.678886148	**2:35:56**	-0.354516774	-0.159387161	-0.678913228

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:36:00	-0.354528178	-0.169918697	-0.678940309	**2:36:04**	-0.354280824	-0.177187124	-0.678967389
2:36:08	-0.35403347	-0.175128958	-0.67899447	**2:36:12**	-0.353786116	-0.173070791	-0.67902155
2:36:16	-0.353538762	-0.175254424	-0.67904863	**2:36:20**	-0.353291408	-0.178851991	-0.679075711
2:36:24	-0.353044054	-0.181586235	-0.679102791	**2:36:28**	-0.3527967	-0.181730514	-0.679129872
2:36:32	-0.352549346	-0.181874791	-0.679156952	**2:36:36**	-0.352301992	-0.178931687	-0.679184033
2:36:40	-0.352054638	-0.174959454	-0.679211113	**2:36:44**	-0.351807284	-0.168804796	-0.679238193
2:36:48	-0.351559931	-0.156102851	-0.679265274	**2:36:52**	-0.351312577	-0.143400905	-0.679292354
2:36:56	-0.351065223	-0.132949667	-0.679319435	**2:37:00**	-0.350817869	-0.123248668	-0.679346515
2:37:04	-0.351412	-0.116557073	-0.679373595	**2:37:08**	-0.352006131	-0.11738891	-0.679400676
2:37:12	-0.352600262	-0.118220746	-0.679427756	**2:37:16**	-0.353194393	-0.109855982	-0.679454837
2:37:20	-0.353788525	-0.098425688	-0.679481917	**2:37:24**	-0.354382656	-0.09274829	-0.679508998
2:37:28	-0.354976787	-0.104329547	-0.679536078	**2:37:32**	-0.355570918	-0.115910805	-0.679563158
2:37:36	-0.356165049	-0.128602277	-0.679590239	**2:37:40**	-0.356759181	-0.141663823	-0.679617319
2:37:44	-0.357353312	-0.161006759	-0.6796444	**2:37:48**	-0.357947443	-0.199193858	-0.67967148
2:37:52	-0.358541574	-0.23738096	-0.67969856	**2:37:56**	-0.359135705	-0.264520373	-0.679725641
2:38:00	-0.359729837	-0.29165978	-0.679752721	**2:38:04**	-0.35967242	-0.317949584	-0.679779802
2:38:08	-0.359615004	-0.342855686	-0.679806882	**2:38:12**	-0.359557587	-0.367761788	-0.679833962
2:38:16	-0.359500171	-0.371487907	-0.679861043	**2:38:20**	-0.359442754	-0.368154048	-0.679888123
2:38:24	-0.359385337	-0.36482019	-0.679915204	**2:38:28**	-0.359327921	-0.361486322	-0.679942284
2:38:32	-0.359270504	-0.358152463	-0.679969365	**2:38:36**	-0.359213088	-0.359590035	-0.679996445
2:38:40	-0.359155671	-0.362618089	-0.680023525	**2:38:44**	-0.359098255	-0.36696734	-0.680050606
2:38:48	-0.359040838	-0.375280144	-0.680077686	**2:38:52**	-0.358983422	-0.383592949	-0.680104767
2:38:56	-0.358926005	-0.384686587	-0.680131847	**2:39:00**	-0.358868589	-0.383373801	-0.680158927
2:39:04	-0.35903629	-0.384716459	-0.680186008	**2:39:08**	-0.359203991	-0.393622848	-0.680213088
2:39:12	-0.359371693	-0.402529237	-0.680240169	**2:39:16**	-0.359539394	-0.406784223	-0.680267249
2:39:20	-0.359707095	-0.409488724	-0.68029433	**2:39:24**	-0.359874797	-0.407643062	-0.68032141
2:39:28	-0.360042498	-0.401247274	-0.68034849	**2:39:32**	-0.3602102	-0.394851468	-0.680375571
2:39:36	-0.360377901	-0.385138761	-0.680402651	**2:39:40**	-0.360545602	-0.374320415	-0.680429732
2:39:44	-0.360713304	-0.364015673	-0.680456812	**2:39:48**	-0.360881005	-0.354224508	-0.680483892
2:39:52	-0.361048706	-0.344433344	-0.680510973	**2:39:56**	-0.361216408	-0.326991855	-0.680538053
2:40:00	-0.361384109	-0.307000252	-0.680565134	**2:40:04**	-0.361759867	-0.298491098	-0.680592214
2:40:08	-0.362135624	-0.301340358	-0.680619295	**2:40:12**	-0.362511382	-0.304189627	-0.680646375
2:40:16	-0.362887139	-0.312286456	-0.680673455	**2:40:20**	-0.363262897	-0.322132486	-0.680700536
2:40:24	-0.363638655	-0.323098056	-0.680727616	**2:40:28**	-0.364014412	-0.315183177	-0.680754697
2:40:32	-0.36439017	-0.307268297	-0.680781777	**2:40:36**	-0.364765927	-0.290785448	-0.680808857
2:40:40	-0.365141685	-0.271446612	-0.680835938	**2:40:44**	-0.365517442	-0.251610121	-0.680863018
2:40:48	-0.3658932	-0.230280671	-0.680890099	**2:40:52**	-0.366268958	-0.208951221	-0.680917179
2:40:56	-0.366644715	-0.19337734	-0.68094426	**2:41:00**	-0.367020473	-0.179721981	-0.68097134
2:41:04	-0.366953276	-0.166518673	-0.68099842	**2:41:08**	-0.36688608	-0.155463627	-0.681025501
2:41:12	-0.366818883	-0.144408582	-0.681052581	**2:41:16**	-0.366751687	-0.135632251	-0.681079662
2:41:20	-0.366684491	-0.127615481	-0.681106742	**2:41:24**	-0.366617294	-0.121049669	-0.681133822
2:41:28	-0.366550098	-0.118836689	-0.681160903	**2:41:32**	-0.366482901	-0.116623709	-0.681187983
2:41:36	-0.366415705	-0.102097615	-0.681215064	**2:41:40**	-0.366348509	-0.083467145	-0.681242144
2:41:44	-0.366281312	-0.070609139	-0.681269224	**2:41:48**	-0.366214116	-0.075068528	-0.681296305
2:41:52	-0.366146919	-0.079527917	-0.681323385	**2:41:56**	-0.366079723	-0.086531779	-0.681350466
2:42:00	-0.366012526	-0.094383809	-0.681377546	**2:42:04**	-0.366271355	-0.10406254	-0.681404627
2:42:08	-0.366530183	-0.118638369	-0.681431707	**2:42:12**	-0.366789011	-0.133214206	-0.681458787
2:42:16	-0.367047839	-0.143336318	-0.681485868	**2:42:20**	-0.367306667	-0.151973842	-0.681512948
2:42:24	-0.367565495	-0.160063582	-0.681540029	**2:42:28**	-0.367824324	-0.166509963	-0.681567109
2:42:32	-0.368083152	-0.172956344	-0.681594189	**2:42:36**	-0.36834198	-0.181383677	-0.68162127
2:42:40	-0.368600808	-0.190471329	-0.68164835	**2:42:44**	-0.368859636	-0.20060328	-0.681675431
2:42:48	-0.369118464	-0.213868131	-0.681702511	**2:42:52**	-0.369377293	-0.227132981	-0.681729592
2:42:56	-0.369636121	-0.235717673	-0.681756672	**2:43:00**	-0.369894949	-0.242742312	-0.681783752
2:43:04	-0.370157061	-0.249938778	-0.681810833	**2:43:08**	-0.370419173	-0.257644845	-0.681837913
2:43:12	-0.370681286	-0.265350915	-0.681864994	**2:43:16**	-0.370943398	-0.273810809	-0.681892074
2:43:20	-0.37120551	-0.28252198	-0.681919154	**2:43:24**	-0.371467622	-0.290792307	-0.681946235
2:43:28	-0.371729734	-0.297740091	-0.681973315	**2:43:32**	-0.371991847	-0.304687884	-0.682000396

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:43:36	-0.372253959	-0.313292165	-0.682027476	**2:43:40**	-0.372516071	-0.322448599	-0.682054557
2:43:44	-0.372778183	-0.330847911	-0.682081637	**2:43:48**	-0.373040295	-0.336975837	-0.682108717
2:43:52	-0.373302408	-0.343103754	-0.682135798	**2:43:56**	-0.37356452	-0.334160888	-0.682162878
2:44:00	-0.373826632	-0.325218012	-0.682189959	**2:44:04**	-0.373523716	-0.314213842	-0.682217039
2:44:08	-0.373220799	-0.298036146	-0.682244119	**2:44:12**	-0.372917883	-0.281858454	-0.6822712
2:44:16	-0.372614967	-0.269948102	-0.68229828	**2:44:20**	-0.37231205	-0.2594602	-0.682325361
2:44:24	-0.372009134	-0.250999529	-0.682352441	**2:44:28**	-0.371706218	-0.248620548	-0.682379522
2:44:32	-0.371403301	-0.246241566	-0.682406602	**2:44:36**	-0.371100385	-0.240399987	-0.682433682
2:44:40	-0.370797469	-0.233404207	-0.682460763	**2:44:44**	-0.370494552	-0.226936751	-0.682487843
2:44:48	-0.370191636	-0.222054269	-0.682514924	**2:44:52**	-0.369888719	-0.217171786	-0.682542004
2:44:56	-0.369585803	-0.206251255	-0.682569084	**2:45:00**	-0.869282887	-0.693318041	-1.182596165
2:45:04	-0.869386895	-0.682491782	-1.182623245	**2:45:08**	-0.869490903	-0.677258698	-1.182650326
2:45:12	-0.369594911	-0.172025615	-0.682677406	**2:45:16**	-0.369698918	-0.165831769	-0.682704486
2:45:20	-0.369802926	-0.159317673	-0.682731567	**2:45:24**	-0.369906934	-0.153829498	-0.682758647
2:45:28	-0.370010942	-0.151419075	-0.682785728	**2:45:32**	-0.37011495	-0.149008652	-0.682812808
2:45:36	-0.370218958	-0.145526032	-0.682839889	**2:45:40**	-0.370322966	-0.140971223	-0.682866969
2:45:44	-0.370426974	-0.136416415	-0.682894049	**2:45:48**	-0.370530982	-0.137403473	-0.68292113
2:45:52	-0.37063499	-0.138390524	-0.68294821	**2:45:56**	-0.370738998	-0.135177509	-0.682975291
2:46:00	-0.370843006	-0.127764422	-0.683002371	**2:46:04**	-0.371401247	-0.120622096	-0.683029451
2:46:08	-0.371959489	-0.11201118	-0.683056532	**2:46:12**	-0.37251773	-0.103400265	-0.683083612
2:46:16	-0.373075972	-0.099955768	-0.683110693	**2:46:20**	-0.373634213	-0.101677683	-0.683137773
2:46:24	-0.374192455	-0.103399597	-0.683164854	**2:46:28**	-0.374750696	-0.120362356	-0.683191934
2:46:32	-0.375308938	-0.137325115	-0.683219014	**2:46:36**	-0.37586718	-0.155200025	-0.683246095
2:46:40	-0.376425421	-0.173987081	-0.683273175	**2:46:44**	-0.376983663	-0.19277414	-0.683300256
2:46:48	-0.377541904	-0.214180509	-0.683327336	**2:46:52**	-0.378100146	-0.235586878	-0.683354416
2:46:56	-0.378658387	-0.250826861	-0.683381497	**2:47:00**	-0.379216629	-0.259900457	-0.683408577
2:47:04	-0.379297599	-0.26868956	-0.683435658	**2:47:08**	-0.379378569	-0.267618564	-0.683462738
2:47:12	-0.379459538	-0.266547569	-0.683489819	**2:47:16**	-0.379540508	-0.267192763	-0.683516899
2:47:20	-0.379621478	-0.269554156	-0.683543979	**2:47:24**	-0.379702448	-0.271915546	-0.68357106
2:47:28	-0.379783418	-0.278033472	-0.68359814	**2:47:32**	-0.379864388	-0.284151398	-0.683625221
2:47:36	-0.379945358	-0.284557799	-0.683652301	**2:47:40**	-0.380026328	-0.279252675	-0.683679381
2:47:44	-0.380107297	-0.273947552	-0.683706462	**2:47:48**	-0.380188267	-0.268642428	-0.683733542
2:47:52	-0.380269237	-0.263337302	-0.683760623	**2:47:56**	-0.380350207	-0.253402104	-0.683787703
2:48:00	-0.380431177	-0.238836828	-0.683814784	**2:48:04**	-0.38043548	-0.224225854	-0.683841864
2:48:08	-0.380439783	-0.22250115	-0.683868944	**2:48:12**	-0.380444086	-0.220776446	-0.683896025
2:48:16	-0.380448388	-0.217370097	-0.683923105	**2:48:20**	-0.380452691	-0.212282101	-0.683950186
2:48:24	-0.380456994	-0.207194105	-0.683977266	**2:48:28**	-0.380461297	-0.20210611	-0.684004346
2:48:32	-0.3804656	-0.197018115	-0.684031427	**2:48:36**	-0.380469903	-0.189994981	-0.684058507
2:48:40	-0.380474206	-0.181036709	-0.684085588	**2:48:44**	-0.380478508	-0.172078438	-0.684112668
2:48:48	-0.380482811	-0.177951331	-0.684139748	**2:48:52**	-0.380487114	-0.183824229	-0.684166829
2:48:56	-0.380491417	-0.185083446	-0.684193909	**2:49:00**	-0.38049572	-0.181728988	-0.68422099
2:49:04	-0.380588886	-0.178427501	-0.68424807	**2:49:08**	-0.380682053	-0.164935292	-0.684275151
2:49:12	-0.380775219	-0.151443088	-0.684302231	**2:49:16**	-0.380868386	-0.147010238	-0.684329311
2:49:20	-0.380961552	-0.145597183	-0.684356392	**2:49:24**	-0.381054719	-0.144184128	-0.684383472
2:49:28	-0.381147885	-0.143943605	-0.684410553	**2:49:32**	-0.381241052	-0.143703082	-0.684437633
2:49:36	-0.381334218	-0.144050225	-0.684464713	**2:49:40**	-0.381427385	-0.144985051	-0.684491794
2:49:44	-0.381520551	-0.145919868	-0.684518874	**2:49:48**	-0.381613718	-0.144104531	-0.684545955
2:49:52	-0.381706884	-0.142289185	-0.684573035	**2:49:56**	-0.381800051	-0.133504471	-0.684600116
2:50:00	-0.381893217	-0.117750372	-0.684627196	**2:50:04**	-0.382147239	-0.102092165	-0.684654276
2:50:08	-0.382401261	-0.090752325	-0.684681357	**2:50:12**	-0.382655283	-0.079412486	-0.684708437
2:50:16	-0.382909304	-0.067146404	-0.684735518	**2:50:20**	-0.383163326	-0.053954079	-0.684762598
2:50:24	-0.383417348	-0.040761755	-0.684789678	**2:50:28**	-0.38367137	-0.036793006	-0.684816759
2:50:32	-0.383925392	-0.032824257	-0.684843839	**2:50:36**	-0.384179413	-0.02562521	-0.68487092
2:50:40	-0.384433435	-0.015195847	-0.684898	**2:50:44**	-0.384687457	-0.004766485	-0.684925081
2:50:48	-0.384941479	0.013016558	-0.684952161	**2:50:52**	-0.385195501	0.03079962	-0.684979241
2:50:56	-0.385449522	0.051149183	-0.685006322	**2:51:00**	-0.385703544	0.074065284	-0.685033402
2:51:04	-0.385690555	0.097140528	-0.685060483	**2:51:08**	-0.385677566	0.109607332	-0.685087563

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:51:12	-0.385664576	0.122074135	-0.685114643	**2:51:16**	-0.385651587	0.128357294	-0.685141724
2:51:20	-0.385638598	0.12845681	-0.685168804	**2:51:24**	-0.385625609	0.128556325	-0.685195885
2:51:28	-0.385612619	0.132114024	-0.685222965	**2:51:32**	-0.38559963	0.135671687	-0.685250046
2:51:36	-0.385586641	0.136722182	-0.685277126	**2:51:40**	-0.385573652	0.135265509	-0.685304206
2:51:44	-0.385560662	0.133808836	-0.685331287	**2:51:48**	-0.385547673	0.128973637	-0.685358367
2:51:52	-0.385534684	0.124138402	-0.685385448	**2:51:56**	-0.385521695	0.111978638	-0.685412528
2:52:00	-0.385508706	0.09249431	-0.685439608	**2:52:04**	-0.384839204	0.073401318	-0.685466689
2:52:08	-0.384169703	0.038928446	-0.685493769	**2:52:12**	-0.383500201	0.004455575	-0.68552085
2:52:16	-0.3828307	-0.022605685	-0.68554793	**2:52:20**	-0.382161198	-0.04719639	-0.68557501
2:52:24	-0.381491697	-0.071787112	-0.685602091	**2:52:28**	-0.380822195	-0.099609599	-0.685629171
2:52:32	-0.380152694	-0.127432085	-0.685656252	**2:52:36**	-0.379483192	-0.147888491	-0.685683332
2:52:40	-0.378813691	-0.160978816	-0.685710413	**2:52:44**	-0.378144189	-0.174069141	-0.685737493
2:52:48	-0.377474688	-0.189653484	-0.685764573	**2:52:52**	-0.376805186	-0.205237828	-0.685791654
2:52:56	-0.376135685	-0.219104653	-0.685818734	**2:53:00**	-0.375466183	-0.232398973	-0.685845815
2:53:04	-0.375563416	-0.246150332	-0.685872895	**2:53:08**	-0.375660648	-0.263417377	-0.685899975
2:53:12	-0.37575788	-0.280684424	-0.685927056	**2:53:16**	-0.375855112	-0.288846267	-0.685954136
2:53:20	-0.375952344	-0.287902905	-0.685981217	**2:53:24**	-0.376049576	-0.286959543	-0.686008297
2:53:28	-0.376146808	-0.284351921	-0.686035378	**2:53:32**	-0.37624404	-0.276751525	-0.686062458
2:53:36	-0.376341272	-0.272272792	-0.686089538	**2:53:40**	-0.376438504	-0.270915716	-0.686116619
2:53:44	-0.376535736	-0.26955864	-0.686143699	**2:53:48**	-0.376632968	-0.260790726	-0.68617078
2:53:52	-0.3767302	-0.252022812	-0.68619786	**2:53:56**	-0.376827432	-0.243987325	-0.68622494
2:54:00	-0.376924664	-0.236684266	-0.686252021	**2:54:04**	-0.376661016	-0.229166092	-0.686279101
2:54:08	-0.376397368	-0.22969257	-0.686306182	**2:54:12**	-0.376133721	-0.230219047	-0.686333262
2:54:16	-0.375870073	-0.234746314	-0.686360343	**2:54:20**	-0.375606425	-0.243274373	-0.686387423
2:54:24	-0.375342777	-0.251802431	-0.686414503	**2:54:28**	-0.37507913	-0.268946538	-0.686441584
2:54:32	-0.374815482	-0.286090648	-0.686468664	**2:54:36**	-0.374551834	-0.305924057	-0.686495745
2:54:40	-0.374288186	-0.32665391	-0.686522825	**2:54:44**	-0.374024539	-0.347383754	-0.686549905
2:54:48	-0.373760891	-0.361880958	-0.686576986	**2:54:52**	-0.373497243	-0.376378171	-0.686604066
2:54:56	-0.373233595	-0.38708969	-0.686631147	**2:55:00**	-0.372969947	-0.394015516	-0.686658227
2:55:04	-0.373145328	-0.40120304	-0.686685307	**2:55:08**	-0.373320709	-0.412076615	-0.686712388
2:55:12	-0.37349609	-0.422950191	-0.686739468	**2:55:16**	-0.37367147	-0.439623835	-0.686766549
2:55:20	-0.373846851	-0.46209753	-0.686793629	**2:55:24**	-0.374022232	-0.484571243	-0.68682071
2:55:28	-0.374197612	-0.508202504	-0.68684779	**2:55:32**	-0.374372993	-0.531833747	-0.68687487
2:55:36	-0.374548374	-0.548754498	-0.686901951	**2:55:40**	-0.374723755	-0.56343846	-0.686929031
2:55:44	-0.374899135	-0.575414939	-0.686956112	**2:55:48**	-0.375074516	-0.579269148	-0.686983192
2:55:52	-0.375249897	-0.583123392	-0.687010272	**2:55:56**	-0.375425278	-0.590233551	-0.687037353
2:56:00	-0.375600658	-0.59842899	-0.687064433	**2:56:04**	-0.375564315	-0.604812461	-0.687091514
2:56:08	-0.375527971	-0.606138499	-0.687118594	**2:56:12**	-0.375491628	-0.607464536	-0.687145675
2:56:16	-0.375455284	-0.611055005	-0.687172755	**2:56:20**	-0.375418941	-0.615400296	-0.687199835
2:56:24	-0.375382597	-0.622305054	-0.687226916	**2:56:28**	-0.375346254	-0.63688832	-0.687253996
2:56:32	-0.37530991	-0.651471587	-0.687281077	**2:56:36**	-0.375273567	-0.655442647	-0.687308157
2:56:40	-0.375237223	-0.655876292	-0.687335237	**2:56:44**	-0.37520088	-0.654761815	-0.687362318
2:56:48	-0.375164536	-0.649002791	-0.687389398	**2:56:52**	-0.375128193	-0.643243804	-0.687416479
2:56:56	-0.375091849	-0.631257436	-0.687443559	**2:57:00**	-0.375055506	-0.617195262	-0.68747064
2:57:04	-0.375278769	-0.599483915	-0.68749772	**2:57:08**	-0.375502033	-0.57036088	-0.6875248
2:57:12	-0.375725297	-0.541237844	-0.687551881	**2:57:16**	-0.375948561	-0.510924253	-0.687578961
2:57:20	-0.376171824	-0.480213781	-0.687606042	**2:57:24**	-0.376395088	-0.456258746	-0.687633122
2:57:28	-0.376618352	-0.439059129	-0.687660202	**2:57:32**	-0.376841616	-0.421859513	-0.687687283
2:57:36	-0.377064879	-0.392918441	-0.687714363	**2:57:40**	-0.377288143	-0.360063566	-0.687741444
2:57:44	-0.377511407	-0.330287126	-0.687768524	**2:57:48**	-0.377734671	-0.309746014	-0.687795605
2:57:52	-0.377957934	-0.289204906	-0.687822685	**2:57:56**	-0.378181198	-0.274247905	-0.687849765
2:58:00	-0.378404462	-0.259290903	-0.687876846	**2:58:04**	-0.379096306	-0.243940888	-0.687903926
2:58:08	-0.37978815	-0.226573887	-0.687931007	**2:58:12**	-0.380479994	-0.209206887	-0.687958087
2:58:16	-0.381171838	-0.192221573	-0.687985167	**2:58:20**	-0.381863683	-0.175363487	-0.688012248
2:58:24	-0.382555527	-0.160640393	-0.688039328	**2:58:28**	-0.383247371	-0.152322274	-0.688066409
2:58:32	-0.383939215	-0.144004156	-0.688093489	**2:58:36**	-0.384631059	-0.130181378	-0.688120569
2:58:40	-0.385322904	-0.11452371	-0.68814765	**2:58:44**	-0.386014748	-0.095529396	-0.68817473

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
2:58:48	-0.386706592	-0.066525116	-0.688201811	**2:58:52**	-0.387398436	-0.037520836	-0.688228891
2:58:56	-0.38809028	-0.020028173	-0.688255972	**2:59:00**	-0.388782124	-0.006372685	-0.688283052
2:59:04	-0.388816566	0.005015099	-0.688310132	**2:59:08**	-0.388851009	0.008424257	-0.688337213
2:59:12	-0.388885451	0.011833416	-0.688364293	**2:59:16**	-0.388919893	0.013284372	-0.688391374
2:59:20	-0.388954335	0.014082563	-0.688418454	**2:59:24**	-0.388988777	0.017947795	-0.688445534
2:59:28	-0.389023219	0.031014095	-0.688472615	**2:59:32**	-0.389057661	0.044080394	-0.688499695
2:59:36	-0.389092103	0.053830361	-0.688526776	**2:59:40**	-0.389136319	0.06246904	-0.688567099
2:59:44	-0.389186316	0.07084347	-0.688615255	**2:59:48**	-0.389236312	0.078435436	-0.68866341
2:59:52	-0.389286309	0.086027401	-0.688711566	**2:59:56**	-0.389336306	0.108689093	-0.688759721
3:00:00	0.110613698	0.636374003	-0.188807877	**3:00:04**	0.10984584	0.658977365	-0.188856032
3:00:08	0.109077982	0.667619662	-0.188904188	**3:00:12**	-0.391689876	0.176261958	-0.688952343
3:00:16	-0.392457733	0.182497919	-0.689000499	**3:00:20**	-0.393225591	0.187931767	-0.689048654
3:00:24	-0.393993449	0.1905109	-0.68909681	**3:00:28**	-0.394761307	0.184525811	-0.689144965
3:00:32	-0.395529165	0.178540722	-0.689193121	**3:00:36**	-0.396297022	0.16438181	-0.689241277
3:00:40	-0.39706488	0.147498254	-0.689289432	**3:00:44**	-0.397832738	0.131453725	-0.689337588
3:00:48	-0.398600596	0.117926241	-0.689385743	**3:00:52**	-0.399368454	0.104398757	-0.689433899
3:00:56	-0.400136311	0.091270162	-0.689482054	**3:01:00**	-0.400904169	0.078274588	-0.68953021
3:01:04	-0.400834458	0.069220828	-0.689578365	**3:01:08**	-0.400764747	0.07049479	-0.689626521
3:01:12	-0.400695036	0.071768787	-0.689674676	**3:01:16**	-0.400625325	0.07355583	-0.689722832
3:01:20	-0.400555614	0.075513875	-0.689770987	**3:01:24**	-0.400485904	0.075897079	-0.689819143
3:01:28	-0.400416193	0.07155569	-0.689867298	**3:01:32**	-0.400346482	0.0672143	-0.689915454
3:01:36	-0.400276771	0.055240005	-0.689963609	**3:01:40**	-0.40020706	0.040721395	-0.690011765
3:01:44	-0.400137349	0.025409947	-0.69005992	**3:01:48**	-0.400067638	0.007719983	-0.690108076
3:01:52	-0.399997927	-0.009969982	-0.690156231	**3:01:56**	-0.399928216	-0.022497435	-0.690204387
3:02:00	-0.399858505	-0.033304039	-0.690252542	**3:02:04**	-0.401225519	-0.046442855	-0.690300698
3:02:08	-0.402592534	-0.064009061	-0.690348853	**3:02:12**	-0.403959548	-0.081575268	-0.690397009
3:02:16	-0.405326562	-0.105593472	-0.690445164	**3:02:20**	-0.406693577	-0.131762351	-0.69049332
3:02:24	-0.408060591	-0.155724561	-0.690541475	**3:02:28**	-0.409427605	-0.173066791	-0.690589631
3:02:32	-0.41079462	-0.190409019	-0.690637786	**3:02:36**	-0.412161634	-0.207751244	-0.690685942
3:02:40	-0.413528648	-0.225093474	-0.690734097	**3:02:44**	-0.414895663	-0.241114479	-0.690782253
3:02:48	-0.416262677	-0.25317182	-0.690830408	**3:02:52**	-0.417629691	-0.265229161	-0.690878564
3:02:56	-0.418996706	-0.27026174	-0.690926719	**3:03:00**	-0.42036372	-0.272952731	-0.690974875
3:03:04	-0.420413716	-0.276562507	-0.69102303	**3:03:08**	-0.420463713	-0.285283806	-0.691071186
3:03:12	-0.42051371	-0.294005104	-0.691119341	**3:03:16**	-0.420563706	-0.285280522	-0.691167497
3:03:20	-0.420613703	-0.270740647	-0.691215652	**3:03:24**	-0.420663699	-0.25620077	-0.691263808
3:03:28	-0.420713696	-0.246613369	-0.691311963	**3:03:32**	-0.420763693	-0.241978445	-0.691360119
3:03:36	-0.420813689	-0.24308665	-0.691408274	**3:03:40**	-0.420863686	-0.24610923	-0.69145643
3:03:44	-0.420913682	-0.248984011	-0.691504585	**3:03:48**	-0.420963679	-0.251415388	-0.691552741
3:03:52	-0.421013676	-0.253846767	-0.691600896	**3:03:56**	-0.421063672	-0.244015686	-0.691649052
3:04:00	-0.421113669	-0.230097118	-0.691697207	**3:04:04**	-0.421370615	-0.214126618	-0.691745363
3:04:08	-0.421627561	-0.191630235	-0.691793518	**3:04:12**	-0.421884507	-0.16913385	-0.691841674
3:04:16	-0.422141453	-0.156723299	-0.691889829	**3:04:20**	-0.422398399	-0.147674682	-0.691937985
3:04:24	-0.422655345	-0.140764678	-0.69198614	**3:04:28**	-0.422912291	-0.140270502	-0.692034296
3:04:32	-0.423169237	-0.139776327	-0.692082451	**3:04:36**	-0.423426183	-0.154451058	-0.692130607
3:04:40	-0.423683129	-0.174182094	-0.692178762	**3:04:44**	-0.423940075	-0.194732514	-0.692226918
3:04:48	-0.424197022	-0.217741098	-0.692275073	**3:04:52**	-0.424453968	-0.240749683	-0.692323229
3:04:56	-0.424710914	-0.263353981	-0.692371384	**3:05:00**	-0.42496786	-0.285823516	-0.69241954
3:05:04	-0.425067095	-0.304388448	-0.692467695	**3:05:08**	-0.425166329	-0.311521589	-0.692515851
3:05:12	-0.425265564	-0.31865473	-0.692564007	**3:05:16**	-0.425364799	-0.319562272	-0.692612162
3:05:20	-0.425464034	-0.318394615	-0.692660318	**3:05:24**	-0.425563268	-0.316394204	-0.692708473
3:05:28	-0.425662503	-0.311895537	-0.692756629	**3:05:32**	-0.425761738	-0.307396867	-0.692804784
3:05:36	-0.425860973	-0.297702633	-0.69285294	**3:05:40**	-0.425960208	-0.282812831	-0.692901095
3:05:44	-0.426059442	-0.26792303	-0.692949251	**3:05:48**	-0.426158677	-0.259716446	-0.692997406
3:05:52	-0.426257912	-0.251509862	-0.693045562	**3:05:56**	-0.426357147	-0.252782442	-0.693093717
3:06:00	-0.426456382	-0.263534185	-0.693141873	**3:06:04**	-0.426787944	-0.274424416	-0.693190028
3:06:08	-0.427119506	-0.314435293	-0.693238184	**3:06:12**	-0.427451068	-0.35444617	-0.693286339
3:06:16	-0.427782631	-0.393189252	-0.693334495	**3:06:20**	-0.428114193	-0.43066452	-0.69338265

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:06:24	-0.428445755	-0.468139806	-0.693430806	**3:06:28**	-0.428777317	-0.483309022	-0.693478961
3:06:32	-0.42910888	-0.498478237	-0.693527117	**3:06:36**	-0.429440442	-0.51628766	-0.693575272
3:06:40	-0.429772004	-0.536737255	-0.693623428	**3:06:44**	-0.430103566	-0.55718685	-0.693671583
3:06:48	-0.430435129	-0.563628107	-0.693719739	**3:06:52**	-0.430766691	-0.570069364	-0.693767894
3:06:56	-0.431098253	-0.578935219	-0.69381605	**3:07:00**	-0.431429815	-0.590225671	-0.693864205
3:07:04	-0.431564285	-0.601398675	-0.693912361	**3:07:08**	-0.431698754	-0.599562445	-0.693960516
3:07:12	-0.431833224	-0.59772618	-0.694008672	**3:07:16**	-0.431967693	-0.597483301	-0.694056827
3:07:20	-0.432102163	-0.598833775	-0.694104983	**3:07:24**	-0.432236632	-0.600184248	-0.694153138
3:07:28	-0.432371102	-0.600156252	-0.694201294	**3:07:32**	-0.432505571	-0.60012822	-0.694249449
3:07:36	-0.43264004	-0.596429041	-0.694297605	**3:07:40**	-0.43277451	-0.589058645	-0.69434576
3:07:44	-0.432908979	-0.581688248	-0.694393916	**3:07:48**	-0.433043449	-0.576215016	-0.694442071
3:07:52	-0.433177918	-0.570741818	-0.694490227	**3:07:56**	-0.433312388	-0.564357469	-0.694538382
3:08:00	-0.433446857	-0.557062004	-0.694586538	**3:08:04**	-0.433604003	-0.549780038	-0.694634693
3:08:08	-0.433761149	-0.53593032	-0.694682849	**3:08:12**	-0.433918296	-0.522080602	-0.694731004
3:08:16	-0.434075442	-0.507530208	-0.69477916	**3:08:20**	-0.434232588	-0.492746262	-0.694827315
3:08:24	-0.434389734	-0.477962298	-0.694875471	**3:08:28**	-0.43454688	-0.455464563	-0.694923626
3:08:32	-0.434704026	-0.432966828	-0.694971782	**3:08:36**	-0.434861172	-0.410093974	-0.695019937
3:08:40	-0.435018318	-0.38684599	-0.695068093	**3:08:44**	-0.435175465	-0.363598016	-0.695116248
3:08:48	-0.435332611	-0.327931289	-0.695164404	**3:08:52**	-0.435489757	-0.292264561	-0.695212559
3:08:56	-0.435646903	-0.255756076	-0.695260715	**3:09:00**	-0.435804049	-0.218967004	-0.69530887
3:09:04	-0.435721238	-0.182034899	-0.695357026	**3:09:08**	-0.435638427	-0.154699656	-0.695405181
3:09:12	-0.435555616	-0.127364412	-0.695453337	**3:09:16**	-0.435472805	-0.100334393	-0.695501492
3:09:20	-0.435389994	-0.073609589	-0.695549648	**3:09:24**	-0.435307183	-0.046884785	-0.695597803
3:09:28	-0.435224372	-0.023517527	-0.695645959	**3:09:32**	-0.435141561	-0.00015027	-0.695694114
3:09:36	-0.43505875	0.013468536	-0.69574227	**3:09:40**	-0.434975939	0.017338855	-0.695790425
3:09:44	-0.434893128	0.021209173	-0.695838581	**3:09:48**	-0.434810317	0.010476019	-0.695886737
3:09:52	-0.434727506	-0.000257136	-0.695934892	**3:09:56**	-0.434644695	-0.003488043	-0.695983048
3:10:00	-0.434561884	0.000783296	-0.696031203	**3:10:04**	-0.435087192	0.004692127	-0.696079359
3:10:08	-0.4356125	0.006467169	-0.696127514	**3:10:12**	-0.436137807	0.008242229	-0.69617567
3:10:16	-0.436663115	0.006234899	-0.696223825	**3:10:20**	-0.437188423	0.000445216	-0.696271981
3:10:24	-0.437713731	-0.005344468	-0.696320136	**3:10:28**	-0.438239038	-0.007785736	-0.696368292
3:10:32	-0.438764346	-0.010227022	-0.696416447	**3:10:36**	-0.439289654	-0.008183413	-0.696464603
3:10:40	-0.439814962	-0.001654946	-0.696512758	**3:10:44**	-0.440340269	0.004873522	-0.696560914
3:10:48	-0.440865577	0.000458773	-0.696609069	**3:10:52**	-0.441390885	-0.003955976	-0.696657225
3:10:56	-0.441916193	-0.007549427	-0.69670538	**3:11:00**	-0.4424415	-0.010321581	-0.696753536
3:11:04	-0.442527183	-0.012831681	-0.696801691	**3:11:08**	-0.442612866	-0.024887999	-0.696849847
3:11:12	-0.442698549	-0.036944317	-0.696898002	**3:11:16**	-0.442784232	-0.046620591	-0.696946158
3:11:20	-0.442869915	-0.053916821	-0.696994313	**3:11:24**	-0.442955598	-0.060253651	-0.697042469
3:11:28	-0.443041281	-0.063712315	-0.697090624	**3:11:32**	-0.443126964	-0.067170962	-0.69713878
3:11:36	-0.443212647	-0.075636092	-0.697186935	**3:11:40**	-0.44329833	-0.089107706	-0.697235091
3:11:44	-0.443384013	-0.102579302	-0.697283246	**3:11:48**	-0.443469696	-0.113764386	-0.697331402
3:11:52	-0.443555379	-0.12494947	-0.697379557	**3:11:56**	-0.443641062	-0.138876677	-0.697427713
3:12:00	-0.443726745	-0.155546018	-0.697475868	**3:12:04**	-0.444198465	-0.172445469	-0.697524024
3:12:08	-0.444670184	-0.169805897	-0.697572179	**3:12:12**	-0.445141904	-0.167166324	-0.697620335
3:12:16	-0.445613623	-0.165110349	-0.69766849	**3:12:20**	-0.446085342	-0.163637972	-0.697716646
3:12:24	-0.446557062	-0.162165584	-0.697764801	**3:12:28**	-0.447028781	-0.166001859	-0.697812957
3:12:32	-0.447500501	-0.169838134	-0.697861112	**3:12:36**	-0.44797222	-0.170914626	-0.697909268
3:12:40	-0.44844394	-0.169231345	-0.697957423	**3:12:44**	-0.448915659	-0.167548065	-0.698005579
3:12:48	-0.449387379	-0.173435186	-0.698053734	**3:12:52**	-0.449859098	-0.179322315	-0.69810189
3:12:56	-0.450330817	-0.19115466	-0.698150045	**3:13:00**	-0.450802537	-0.20893222	-0.698198201
3:13:04	-0.450803747	-0.226429322	-0.698246356	**3:13:08**	-0.450804957	-0.228896557	-0.698294512
3:13:12	-0.450806167	-0.231363787	-0.698342667	**3:13:16**	-0.450807377	-0.236237279	-0.698390823
3:13:20	-0.450808588	-0.243517032	-0.698438978	**3:13:24**	-0.450809798	-0.250796785	-0.698487134
3:13:28	-0.450811008	-0.258076537	-0.698535289	**3:13:32**	-0.450812218	-0.273180512	-0.698583445
3:13:36	-0.450813428	-0.286873297	-0.6986316	**3:13:40**	-0.450814638	-0.296332512	-0.698679756
3:13:44	-0.450815848	-0.305791727	-0.698727911	**3:13:48**	-0.450817058	-0.318004753	-0.698776067
3:13:52	-0.450818269	-0.330217779	-0.698824222	**3:13:56**	-0.450819479	-0.342152557	-0.698872378

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:14:00	-0.450820689	-0.35380909	-0.698920533	**3:14:04**	-0.450912764	-0.365519778	-0.698968689
3:14:08	-0.451004839	-0.373730926	-0.699016844	**3:14:12**	-0.451096914	-0.381942073	-0.699065
3:14:16	-0.451188989	-0.394754999	-0.699113155	**3:14:20**	-0.451281063	-0.412169701	-0.699161311
3:14:24	-0.451373138	-0.429584404	-0.699209467	**3:14:28**	-0.451465213	-0.441886807	-0.699257622
3:14:32	-0.451557288	-0.45418921	-0.699305778	**3:14:36**	-0.451649363	-0.462416497	-0.699353933
3:14:40	-0.451741438	-0.466568686	-0.699402089	**3:14:44**	-0.451833513	-0.470720857	-0.699450244
3:14:48	-0.451925588	-0.472412155	-0.6994984	**3:14:52**	-0.452017663	-0.47410347	-0.699546555
3:14:56	-0.452109738	-0.47474578	-0.699594711	**3:15:00**	-0.952201813	-0.974339119	-1.199642866
3:15:04	-0.952272137	-0.973919494	-1.199691022	**3:15:08**	-0.952342461	-0.983866549	-1.199739177
3:15:12	-0.452412786	-0.493813587	-0.699787333	**3:15:16**	-0.45248311	-0.503760643	-0.699835488
3:15:20	-0.452553434	-0.51370768	-0.699883644	**3:15:24**	-0.452623758	-0.523654735	-0.699931799
3:15:28	-0.452694083	-0.519125477	-0.699979955	**3:15:32**	-0.452764407	-0.514596236	-0.70002811
3:15:36	-0.452834731	-0.507420126	-0.700076266	**3:15:40**	-0.452905056	-0.497597146	-0.700124421
3:15:44	-0.45297538	-0.487774166	-0.700172577	**3:15:48**	-0.453045704	-0.467279556	-0.700220732
3:15:52	-0.453116028	-0.446784929	-0.700268888	**3:15:56**	-0.453186353	-0.437537152	-0.700317043
3:16:00	-0.453256677	-0.439536191	-0.700365199	**3:16:04**	-0.453434079	-0.441599075	-0.700413354
3:16:08	-0.45361148	-0.43276509	-0.70046151	**3:16:12**	-0.453788882	-0.423931105	-0.700509665
3:16:16	-0.453966283	-0.411339415	-0.700557821	**3:16:20**	-0.454143685	-0.394989993	-0.700605976
3:16:24	-0.454321086	-0.378640571	-0.700654132	**3:16:28**	-0.454498488	-0.359909355	-0.700702287
3:16:32	-0.454675889	-0.341178139	-0.700750443	**3:16:36**	-0.454853291	-0.333264295	-0.700798598
3:16:40	-0.455030692	-0.328956236	-0.700846754	**3:16:44**	-0.455208094	-0.324648183	-0.700894909
3:16:48	-0.455385495	-0.314874151	-0.700943065	**3:16:52**	-0.455562897	-0.305100121	-0.70099122
3:16:56	-0.455740299	-0.296274594	-0.701039376	**3:17:00**	-0.4559177	-0.28839757	-0.701087531
3:17:04	-0.455878707	-0.280391557	-0.701135687	**3:17:08**	-0.455839713	-0.266253592	-0.701183842
3:17:12	-0.45580072	-0.252115628	-0.701231998	**3:17:16**	-0.455761726	-0.231754925	-0.701280153
3:17:20	-0.455722732	-0.205171479	-0.701328309	**3:17:24**	-0.455683739	-0.178588039	-0.701376464
3:17:28	-0.455644745	-0.165606901	-0.70142462	**3:17:32**	-0.455605752	-0.152625773	-0.701472775
3:17:36	-0.455566758	-0.143368091	-0.701520931	**3:17:40**	-0.455527765	-0.137833864	-0.701569086
3:17:44	-0.455488771	-0.131519588	-0.701617242	**3:17:48**	-0.455449778	-0.122865133	-0.701665397
3:17:52	-0.455410784	-0.114210678	-0.701713553	**3:17:56**	-0.455371791	-0.101048608	-0.701761708
3:18:00	-0.455332797	-0.086384017	-0.701809864	**3:18:04**	-0.456145227	-0.072226945	-0.701858019
3:18:08	-0.456957656	-0.061173208	-0.701906175	**3:18:12**	-0.457770086	-0.05011947	-0.70195433
3:18:16	-0.458582516	-0.044849067	-0.702002486	**3:18:20**	-0.459394945	-0.045361998	-0.702050641
3:18:24	-0.460207375	-0.045874912	-0.702098797	**3:18:28**	-0.461019805	-0.053203377	-0.702146952
3:18:32	-0.461832234	-0.060531843	-0.702195108	**3:18:36**	-0.462644664	-0.067414895	-0.702243263
3:18:40	-0.463457094	-0.073852496	-0.702291419	**3:18:44**	-0.464269523	-0.080290098	-0.702339574
3:18:48	-0.465081953	-0.08479728	-0.70238773	**3:18:52**	-0.465894383	-0.089304463	-0.702435885
3:18:56	-0.466706812	-0.093811645	-0.702484041	**3:19:00**	-0.467519242	-0.098318827	-0.702532197
3:19:04	-0.467721019	-0.101347505	-0.702580352	**3:19:08**	-0.467922795	-0.10103267	-0.702628508
3:19:12	-0.468124572	-0.100717835	-0.702676663	**3:19:16**	-0.468326349	-0.096819345	-0.702724819
3:19:20	-0.468528126	-0.08933718	-0.702772974	**3:19:24**	-0.468729902	-0.081855017	-0.70282113
3:19:28	-0.468931679	-0.071323186	-0.702869285	**3:19:32**	-0.469133456	-0.060791373	-0.702917441
3:19:36	-0.469335232	-0.060741446	-0.702965596	**3:19:40**	-0.469537009	-0.071173439	-0.703013752
3:19:44	-0.469738786	-0.081605432	-0.703061907	**3:19:48**	-0.469940563	-0.085714985	-0.703110063
3:19:52	-0.470142339	-0.089824538	-0.703158218	**3:19:56**	-0.470344116	-0.087551713	-0.703206374
3:20:00	-0.470545893	-0.083151405	-0.703254529	**3:20:04**	-0.47155195	-0.079230534	-0.703302685
3:20:08	-0.472558008	-0.074590566	-0.70335084	**3:20:12**	-0.473564066	-0.069950581	-0.703398996
3:20:16	-0.474570123	-0.071124591	-0.703447151	**3:20:20**	-0.475576181	-0.078112598	-0.703495307
3:20:24	-0.476582239	-0.085100605	-0.703543462	**3:20:28**	-0.477588297	-0.091501346	-0.703591618
3:20:32	-0.478594354	-0.097902087	-0.703639773	**3:20:36**	-0.479600412	-0.109267334	-0.703687929
3:20:40	-0.48060647	-0.125597105	-0.703736084	**3:20:44**	-0.481612528	-0.141926867	-0.70378424
3:20:48	-0.482618585	-0.150693201	-0.703832395	**3:20:52**	-0.483624643	-0.159459534	-0.703880551
3:20:56	-0.484630701	-0.169734783	-0.703928706	**3:21:00**	-0.485636758	-0.181518949	-0.703976862
3:21:04	-0.485648358	-0.192710342	-0.704025017	**3:21:08**	-0.485659958	-0.193274144	-0.704073173
3:21:12	-0.485671558	-0.193837938	-0.704121328	**3:21:16**	-0.485683158	-0.197774396	-0.704169484
3:21:20	-0.485694758	-0.205083509	-0.704217639	**3:21:24**	-0.485706357	-0.212392622	-0.704265795
3:21:28	-0.485717957	-0.214862888	-0.70431395	**3:21:32**	-0.485729557	-0.217333145	-0.704362106

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:21:36	-0.485741157	-0.216149829	-0.704410261	**3:21:40**	-0.485752757	-0.211312926	-0.704458417
3:21:44	-0.485764357	-0.206476028	-0.704506572	**3:21:48**	-0.485775956	-0.210900429	-0.704554728
3:21:52	-0.485787556	-0.21532483	-0.704602883	**3:21:56**	-0.485799156	-0.222374454	-0.704651039
3:22:00	-0.485810756	-0.232049297	-0.704699194	**3:22:04**	-0.485734644	-0.241671857	-0.70474735
3:22:08	-0.485658532	-0.25721236	-0.704795505	**3:22:12**	-0.48558242	-0.272752864	-0.704843661
3:22:16	-0.485506308	-0.286715861	-0.704891816	**3:22:20**	-0.485430196	-0.299101349	-0.704939972
3:22:24	-0.485354085	-0.311486838	-0.704988127	**3:22:28**	-0.485277973	-0.312252174	-0.705036283
3:22:32	-0.485201861	-0.313017511	-0.705084438	**3:22:36**	-0.485125749	-0.315773011	-0.705132594
3:22:40	-0.485049637	-0.320518676	-0.705180749	**3:22:44**	-0.484973525	-0.32526434	-0.705228905
3:22:48	-0.484897413	-0.326006405	-0.70527706	**3:22:52**	-0.484821301	-0.326748469	-0.705325216
3:22:56	-0.484745189	-0.324208647	-0.705373371	**3:23:00**	-0.484669077	-0.318386932	-0.705421527
3:23:04	-0.484659446	-0.312604845	-0.705469682	**3:23:08**	-0.484649815	-0.306822758	-0.705517838
3:23:12	-0.484640184	-0.301040672	-0.705565993	**3:23:16**	-0.484630552	-0.296351601	-0.705614149
3:23:20	-0.484620921	-0.292755545	-0.705662304	**3:23:24**	-0.48461129	-0.289159489	-0.70571046
3:23:28	-0.484601658	-0.285563434	-0.705758615	**3:23:32**	-0.484592027	-0.271770053	-0.705806771
3:23:36	-0.484582396	-0.255617778	-0.705854927	**3:23:40**	-0.484572764	-0.232388823	-0.705903082
3:23:44	-0.484563133	-0.209159868	-0.705951238	**3:23:48**	-0.484553502	-0.195608071	-0.705999393
3:23:52	-0.48454387	-0.182056274	-0.706047549	**3:23:56**	-0.484534239	-0.166837614	-0.706095704
3:24:00	-0.484524608	-0.149952084	-0.70614386	**3:24:04**	-0.484685567	-0.13316824	-0.706192015
3:24:08	-0.484846525	-0.117854016	-0.706240171	**3:24:12**	-0.485007484	-0.10253981	-0.706288326
3:24:16	-0.485168443	-0.094342801	-0.706336482	**3:24:20**	-0.485329401	-0.093263025	-0.706384637
3:24:24	-0.48549036	-0.092183248	-0.706432793	**3:24:28**	-0.485651319	-0.08433592	-0.706480948
3:24:32	-0.485812277	-0.076488609	-0.706529104	**3:24:36**	-0.485973236	-0.070147319	-0.706577259
3:24:40	-0.486134195	-0.065312084	-0.706625415	**3:24:44**	-0.486295154	-0.060476832	-0.70667357
3:24:48	-0.486456112	-0.052945609	-0.706721726	**3:24:52**	-0.486617071	-0.045414368	-0.706769881
3:24:56	-0.48677803	-0.035131356	-0.706818037	**3:25:00**	-0.486938988	-0.022096539	-0.706866192
3:25:04	-0.486985371	-0.008993443	-0.706914348	**3:25:08**	-0.487031754	0.002214195	-0.706962503
3:25:12	-0.487078137	0.013421833	-0.707010659	**3:25:16**	-0.487124519	0.023885485	-0.707058814
3:25:20	-0.487170902	0.033605223	-0.70710697	**3:25:24**	-0.487217285	0.043324925	-0.707155125
3:25:28	-0.487263668	0.056849044	-0.707203281	**3:25:32**	-0.487310051	0.070373164	-0.707251436
3:25:36	-0.487356433	0.08124075	-0.707299592	**3:25:40**	-0.487401973	0.089452305	-0.707346605
3:25:44	-0.487425113	0.097677212	-0.707363268	**3:25:48**	-0.487448252	0.102133196	-0.70737993
3:25:52	-0.487471391	0.10658918	-0.707396593	**3:25:56**	-0.48749453	0.114663621	-0.707413255
3:26:00	-0.487517669	0.126356518	-0.707429917	**3:26:04**	-0.487550326	0.138043742	-0.70744658
3:26:08	-0.487582983	0.145503464	-0.707463242	**3:26:12**	-0.48761564	0.152963186	-0.707479904
3:26:16	-0.487648297	0.156680667	-0.707496567	**3:26:20**	-0.487680954	0.156655942	-0.707513229
3:26:24	-0.487713611	0.156631217	-0.707529891	**3:26:28**	-0.487746268	0.149861981	-0.707546554
3:26:32	-0.487778925	0.143092745	-0.707563216	**3:26:36**	-0.487811582	0.132365143	-0.707579878
3:26:40	-0.487844239	0.117679209	-0.707596541	**3:26:44**	-0.487876896	0.102993275	-0.707613203
3:26:48	-0.487909553	0.096320431	-0.707629865	**3:26:52**	-0.48794221	0.089647621	-0.707646528
3:26:56	-0.487974867	0.076698685	-0.70766319	**3:27:00**	-0.488007525	0.057473657	-0.707679852
3:27:04	-0.488055509	0.038239492	-0.707696515	**3:27:08**	-0.488103493	0.016277238	-0.707713177
3:27:12	-0.488151477	-0.005685016	-0.70772984	**3:27:16**	-0.488199461	-0.025616108	-0.707746502
3:27:20	-0.488247445	-0.043516054	-0.707763164	**3:27:24**	-0.488295429	-0.061416	-0.707779827
3:27:28	-0.488343413	-0.065185015	-0.707796489	**3:27:32**	-0.488391397	-0.068954028	-0.707813151
3:27:36	-0.488439381	-0.069650371	-0.707829814	**3:27:40**	-0.488487366	-0.067274041	-0.707846476
3:27:44	-0.48853535	-0.064897694	-0.707863138	**3:27:48**	-0.488583334	-0.074397814	-0.707879801
3:27:52	-0.488631318	-0.083897935	-0.707896463	**3:27:56**	-0.488679302	-0.095932438	-0.707913125
3:28:00	-0.488727286	-0.11050129	-0.707929788	**3:28:04**	-0.488839348	-0.125108337	-0.70794645
3:28:08	-0.488951409	-0.141996389	-0.707963112	**3:28:12**	-0.489063471	-0.158884442	-0.707979775
3:28:16	-0.489175532	-0.175302529	-0.707996437	**3:28:20**	-0.489287594	-0.19156395	-0.708013099
3:28:24	-0.489399655	-0.20664933	-0.708029762	**3:28:28**	-0.489511717	-0.218206537	-0.708046424
3:28:32	-0.489623778	-0.229763744	-0.708063087	**3:28:36**	-0.48973584	-0.239827949	-0.708079749
3:28:40	-0.489847901	-0.24839915	-0.708096411	**3:28:44**	-0.489959963	-0.25697035	-0.708113074
3:28:48	-0.490072024	-0.255602631	-0.708129736	**3:28:52**	-0.490184086	-0.254234912	-0.708146398
3:28:56	-0.490296147	-0.253201178	-0.708163061	**3:29:00**	-0.490408209	-0.252501433	-0.708179723
3:29:04	-0.490448062	-0.251758646	-0.708196385	**3:29:08**	-0.490487915	-0.247372639	-0.708213048

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:29:12	-0.490527768	-0.242986632	-0.70822971	**3:29:16**	-0.490567621	-0.238336783	-0.708246372
3:29:20	-0.490607474	-0.233423093	-0.708263035	**3:29:24**	-0.490647327	-0.228509403	-0.708279697
3:29:28	-0.49068718	-0.239225582	-0.708296359	**3:29:32**	-0.490727033	-0.249941761	-0.708313022
3:29:36	-0.490766886	-0.263146013	-0.708329684	**3:29:40**	-0.490806739	-0.278838341	-0.708346346
3:29:44	-0.490846592	-0.294530668	-0.708363009	**3:29:48**	-0.490886445	-0.302464063	-0.708379671
3:29:52	-0.490926298	-0.310397458	-0.708396334	**3:29:56**	-0.490966151	-0.314412568	-0.708412996
3:30:00	0.008993996	0.185490603	-0.208429658	**3:30:04**	0.008778435	0.18528904	-0.208446321
3:30:08	0.008562874	0.188026702	-0.208462983	**3:30:12**	-0.491652687	-0.309235637	-0.708479645
3:30:16	-0.491868248	-0.316136799	-0.708496308	**3:30:20**	-0.49208381	-0.332676788	-0.70851297
3:30:24	-0.492299371	-0.349216774	-0.708529632	**3:30:28**	-0.492514932	-0.37061618	-0.708546295
3:30:32	-0.492730493	-0.392015585	-0.708562957	**3:30:36**	-0.492946054	-0.407898926	-0.708579619
3:30:40	-0.493161615	-0.41826622	-0.708596282	**3:30:44**	-0.493377176	-0.428633506	-0.708612944
3:30:48	-0.493592737	-0.42839991	-0.708629606	**3:30:52**	-0.493808298	-0.428166313	-0.708646269
3:30:56	-0.494023859	-0.425037186	-0.708662931	**3:31:00**	-0.49423942	-0.41901251	-0.708679593
3:31:04	-0.494192994	-0.412831666	-0.708696256	**3:31:08**	-0.494146567	-0.396509869	-0.708712918
3:31:12	-0.49410014	-0.380188082	-0.708729581	**3:31:16**	-0.494053714	-0.366274277	-0.708746243
3:31:20	-0.494007287	-0.354768469	-0.708762905	**3:31:24**	-0.49396086	-0.343262656	-0.708779568
3:31:28	-0.493914433	-0.35391282	-0.70879623	**3:31:32**	-0.493868007	-0.364562989	-0.708812892
3:31:36	-0.49382158	-0.373889376	-0.708829555	**3:31:40**	-0.493775153	-0.381891996	-0.708846217
3:31:44	-0.493728726	-0.389894607	-0.708862879	**3:31:48**	-0.4936823	-0.397897218	-0.708879542
3:31:52	-0.493635873	-0.405899837	-0.708896204	**3:31:56**	-0.493589446	-0.416275181	-0.708912866
3:32:00	-0.493543019	-0.42902325	-0.708929529	**3:32:04**	-0.493795807	-0.441949677	-0.708946191
3:32:08	-0.494048595	-0.453309301	-0.708962853	**3:32:12**	-0.494301383	-0.464668925	-0.708979516
3:32:16	-0.494554171	-0.473526266	-0.708996178	**3:32:20**	-0.494806959	-0.479881324	-0.709012841
3:32:24	-0.495059747	-0.486236383	-0.709029503	**3:32:28**	-0.495312534	-0.494542556	-0.709046165
3:32:32	-0.495565322	-0.502848748	-0.709062828	**3:32:36**	-0.49581811	-0.513131635	-0.70907949
3:32:40	-0.496070898	-0.525391237	-0.709096152	**3:32:44**	-0.496323686	-0.537650839	-0.709112815
3:32:48	-0.496576474	-0.547304145	-0.709129477	**3:32:52**	-0.496829262	-0.556957434	-0.709146139
3:32:56	-0.49708205	-0.564888701	-0.709162802	**3:33:00**	-0.497334837	-0.571097929	-0.709179464
3:33:04	-0.497405408	-0.57719854	-0.709196126	**3:33:08**	-0.497475978	-0.576930203	-0.709212789
3:33:12	-0.497546549	-0.576661867	-0.709229451	**3:33:16**	-0.497617119	-0.572710872	-0.709246113
3:33:20	-0.49768769	-0.5675323	-0.709262776	**3:33:24**	-0.49775826	-0.562353746	-0.709279438
3:33:28	-0.49782883	-0.549057221	-0.7092961	**3:33:32**	-0.497899401	-0.535760678	-0.709312763
3:33:36	-0.497969971	-0.526751557	-0.709329425	**3:33:40**	-0.498040542	-0.530604667	-0.709346088
3:33:44	-0.498111112	-0.534457777	-0.70936275	**3:33:48**	-0.498181683	-0.549519028	-0.709379412
3:33:52	-0.498252253	-0.564580279	-0.709396075	**3:33:56**	-0.498322823	-0.571764342	-0.709412737
3:34:00	-0.498393394	-0.571071215	-0.709429399	**3:34:04**	-0.498500916	-0.570400115	-0.709446062
3:34:08	-0.498608437	-0.563961669	-0.709462724	**3:34:12**	-0.498715959	-0.557523223	-0.709479386
3:34:16	-0.498823481	-0.549636473	-0.709496049	**3:34:20**	-0.498931002	-0.540301403	-0.709512711
3:34:24	-0.499038524	-0.530966333	-0.709529373	**3:34:28**	-0.499146046	-0.539131805	-0.709546036
3:34:32	-0.499253567	-0.547297258	-0.709562698	**3:34:36**	-0.499361089	-0.554878218	-0.70957936
3:34:40	-0.499468611	-0.561874665	-0.709596023	**3:34:44**	-0.499576132	-0.568871112	-0.709612685
3:34:48	-0.499683654	-0.567342421	-0.709629347	**3:34:52**	-0.499791175	-0.565813712	-0.70964601
3:34:56	-0.499898697	-0.560203207	-0.709662672	**3:35:00**	-0.500006219	-0.550510907	-0.709679335
3:35:04	-0.500004061	-0.540753228	-0.709695997	**3:35:08**	-0.500001904	-0.539565669	-0.709712659
3:35:12	-0.499999746	-0.538378109	-0.709729322	**3:35:16**	-0.499997589	-0.544664143	-0.709745984
3:35:20	-0.499995431	-0.55842375	-0.709762646	**3:35:24**	-0.499993274	-0.572183358	-0.709779309
3:35:28	-0.499991116	-0.586714718	-0.709795971	**3:35:32**	-0.499988958	-0.601246059	-0.709812633
3:35:36	-0.499986801	-0.612546286	-0.709829296	**3:35:40**	-0.499984643	-0.622769439	-0.709845958
3:35:44	-0.499982486	-0.632992592	-0.70986262	**3:35:48**	-0.499980328	-0.639033862	-0.709879283
3:35:52	-0.499978171	-0.645075133	-0.709895945	**3:35:56**	-0.499976013	-0.648035507	-0.709912607
3:36:00	-0.499973856	-0.647914949	-0.70992927	**3:36:04**	-0.500003653	-0.647813439	-0.709945932
3:36:08	-0.500033451	-0.656473977	-0.709962594	**3:36:12**	-0.500063248	-0.665134515	-0.709979257
3:36:16	-0.500093046	-0.668524408	-0.709995919	**3:36:20**	-0.500122844	-0.666643657	-0.710012582
3:36:24	-0.500152641	-0.664762905	-0.710029244	**3:36:28**	-0.500182439	-0.669147408	-0.710045906
3:36:32	-0.500212236	-0.673531912	-0.710062569	**3:36:36**	-0.500242034	-0.675837057	-0.710079231
3:36:40	-0.500271832	-0.676062843	-0.710095893	**3:36:44**	-0.500301629	-0.679159974	-0.710112556

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:36:48	-0.500331427	-0.690871174	-0.710129218	**3:36:52**	-0.500361224	-0.702582374	-0.71014588
3:36:56	-0.500391022	-0.714293573	-0.710162543	**3:37:00**	-0.50042082	-0.726004773	-0.710179205
3:37:04	-0.500469707	-0.737727352	-0.710195867	**3:37:08**	-0.500518595	-0.751048575	-0.71021253
3:37:12	-0.500567482	-0.7643698	-0.710229192	**3:37:16**	-0.50061637	-0.771525927	-0.710245854
3:37:20	-0.500665257	-0.772517026	-0.710262517	**3:37:24**	-0.500714145	-0.773508126	-0.710279179
3:37:28	-0.500763032	-0.782823694	-0.710295841	**3:37:32**	-0.50081192	-0.792139262	-0.710312504
3:37:36	-0.500860808	-0.798450819	-0.710329166	**3:37:40**	-0.500909695	-0.801758366	-0.710345829
3:37:44	-0.500958583	-0.805065911	-0.710362491	**3:37:48**	-0.50100747	-0.790392132	-0.710379153
3:37:52	-0.501056358	-0.775718317	-0.710395816	**3:37:56**	-0.501105245	-0.763366456	-0.710412478
3:38:00	-0.501154133	-0.753336476	-0.71042914	**3:38:04**	-0.500997381	-0.743183954	-0.710445803
3:38:08	-0.500840629	-0.733031395	-0.710462465	**3:38:12**	-0.500683877	-0.722878838	-0.710479127
3:38:16	-0.500527125	-0.713225397	-0.71049579	**3:38:20**	-0.500370373	-0.704071037	-0.710512452
3:38:24	-0.500213621	-0.694916642	-0.710529114	**3:38:28**	-0.50005687	-0.685762283	-0.710545777
3:38:32	-0.499900118	-0.676607924	-0.710562439	**3:38:36**	-0.499743366	-0.672645547	-0.710579101
3:38:40	-0.499586614	-0.670413844	-0.710595764	**3:38:44**	-0.499429862	-0.66818214	-0.710612426
3:38:48	-0.49927311	-0.660655099	-0.710629088	**3:38:52**	-0.499116358	-0.653128022	-0.710645751
3:38:56	-0.498959606	-0.651802567	-0.710662413	**3:39:00**	-0.498802854	-0.656678663	-0.710679076
3:39:04	-0.498811086	-0.661653139	-0.710695738	**3:39:08**	-0.498819319	-0.671361233	-0.7107124
3:39:12	-0.498827551	-0.681069327	-0.710729063	**3:39:16**	-0.498835783	-0.683007708	-0.710745725
3:39:20	-0.498844015	-0.677176378	-0.710762387	**3:39:24**	-0.498852247	-0.669876084	-0.71077905
3:39:28	-0.498860479	-0.658168829	-0.710795712	**3:39:32**	-0.498868712	-0.646461575	-0.710812374
3:39:36	-0.498876944	-0.633613898	-0.710829037	**3:39:40**	-0.498885176	-0.619625868	-0.710845699
3:39:44	-0.498893408	-0.605637839	-0.710862361	**3:39:48**	-0.49890164	-0.596649223	-0.710879024
3:39:52	-0.498909872	-0.587660572	-0.710895686	**3:39:56**	-0.498918105	-0.576192448	-0.710912348
3:40:00	-0.498926337	-0.562244798	-0.710929011	**3:40:04**	-0.498722429	-0.548170713	-0.710945673
3:40:08	-0.498518522	-0.526996519	-0.710962335	**3:40:12**	-0.498314614	-0.505822327	-0.710978998
3:40:16	-0.498110706	-0.48309088	-0.71099566	**3:40:20**	-0.497906799	-0.458802179	-0.711012323
3:40:24	-0.497702891	-0.434513461	-0.711028985	**3:40:28**	-0.497498983	-0.416154671	-0.711045647
3:40:32	-0.497295076	-0.397795873	-0.71106231	**3:40:36**	-0.497091168	-0.380220879	-0.711078972
3:40:40	-0.49688726	-0.363429678	-0.711095634	**3:40:44**	-0.496683353	-0.346638481	-0.711112297
3:40:48	-0.496479445	-0.318954295	-0.711128959	**3:40:52**	-0.496275537	-0.29127011	-0.711145621
3:40:56	-0.49607163	-0.267244344	-0.711162284	**3:41:00**	-0.495867722	-0.246876998	-0.711178946
3:41:04	-0.495877309	-0.226636916	-0.711195608	**3:41:08**	-0.495886897	-0.214248584	-0.711212271
3:41:12	-0.495896484	-0.201860249	-0.711228933	**3:41:16**	-0.495906072	-0.186371723	-0.711245595
3:41:20	-0.495915659	-0.167782991	-0.711262258	**3:41:24**	-0.495925246	-0.149194268	-0.71127892
3:41:28	-0.495934834	-0.131995818	-0.711295582	**3:41:32**	-0.495944421	-0.114797378	-0.711312245
3:41:36	-0.495954008	-0.091919439	-0.711328907	**3:41:40**	-0.495963596	-0.063362017	-0.71134557
3:41:44	-0.495973183	-0.041483252	-0.711362232	**3:41:48**	-0.49598277	-0.039640462	-0.711378894
3:41:52	-0.495992358	-0.03779767	-0.711395557	**3:41:56**	-0.496001945	-0.027894518	-0.711412219
3:42:00	-0.496011532	-0.009931024	-0.711428881	**3:42:04**	-0.495977885	0.008058243	-0.711445544
3:42:08	-0.495944238	0.02142286	-0.711462206	**3:42:12**	-0.49591059	0.034787441	-0.711478868
3:42:16	-0.495876943	0.049615834	-0.711495531	**3:42:20**	-0.495843295	0.065908003	-0.711512193
3:42:24	-0.495809648	0.082200172	-0.711528855	**3:42:28**	-0.495776001	0.09149724	-0.711545518
3:42:32	-0.495742353	0.100794308	-0.71156218	**3:42:36**	-0.495708706	0.110091377	-0.711578842
3:42:40	-0.495675058	0.119388445	-0.711595505	**3:42:44**	-0.495641411	0.128685514	-0.711612167
3:42:48	-0.495607764	0.136250098	-0.711628829	**3:42:52**	-0.495574116	0.143814646	-0.711645492
3:42:56	-0.495540469	0.142867628	-0.711662154	**3:43:00**	-0.495506821	0.133408972	-0.711678817
3:43:04	-0.495496081	0.123936698	-0.711695479	**3:43:08**	-0.495485341	0.104466058	-0.711712141
3:43:12	-0.4954746	0.084995418	-0.711728804	**3:43:16**	-0.49546386	0.068234997	-0.711745466
3:43:20	-0.49545312	0.054184864	-0.711762128	**3:43:24**	-0.495442379	0.040134698	-0.711778791
3:43:28	-0.495431639	0.023745416	-0.711795453	**3:43:32**	-0.495420899	0.007356135	-0.711812115
3:43:36	-0.495410158	-0.004634784	-0.711828778	**3:43:40**	-0.495399418	-0.003430596	-0.71184544
3:43:44	-0.495388678	-0.002226409	-0.711862102	**3:43:48**	-0.495377937	-0.003198984	-0.711878765
3:43:52	-0.495367197	-0.004171542	-0.711895427	**3:43:56**	-0.495356457	-0.003793964	-0.711912089
3:44:00	-0.495345716	-0.002066215	-0.711928752	**3:44:04**	-0.495273171	-0.001044883	-0.711945414
3:44:08	-0.495200625	-0.00225327	-0.711962076	**3:44:12**	-0.49512808	-0.003461656	-0.711978739
3:44:16	-0.495055534	-0.001972828	-0.711995401	**3:44:20**	-0.494982988	0.002213215	-0.712012064

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:44:24	-0.494910443	0.006399258	-0.712028726	**3:44:28**	-0.494837897	0.004793617	-0.712045388
3:44:32	-0.494765352	0.003187976	-0.712062051	**3:44:36**	-0.494692806	-0.003837018	-0.712078713
3:44:40	-0.494620261	-0.016281383	-0.712095375	**3:44:44**	-0.494547715	-0.028725767	-0.712112038
3:44:48	-0.494475169	-0.048564476	-0.7121287	**3:44:52**	-0.494402624	-0.068403186	-0.712145362
3:44:56	-0.494330078	-0.085874997	-0.712162025	**3:45:00**	-0.994257533	-0.600979911	-1.212178687
3:45:04	-0.994291513	-0.616148341	-1.212195349	**3:45:08**	-0.994325494	-0.62988984	-1.212212012
3:45:12	-0.494359474	-0.143631356	-0.712228674	**3:45:16**	-0.494393455	-0.154025744	-0.712245336
3:45:20	-0.494427436	-0.161073032	-0.712261999	**3:45:24**	-0.494461416	-0.16812032	-0.712278661
3:45:28	-0.494495397	-0.181532629	-0.712295323	**3:45:32**	-0.494529377	-0.194944938	-0.712311986
3:45:36	-0.494563358	-0.209664899	-0.712328648	**3:45:40**	-0.494597338	-0.225692527	-0.712345311
3:45:44	-0.494631319	-0.241720157	-0.712361973	**3:45:48**	-0.4946653	-0.264159306	-0.712378635
3:45:52	-0.49469928	-0.286598456	-0.712395298	**3:45:56**	-0.494733261	-0.30957065	-0.71241196
3:46:00	-0.494767241	-0.333075885	-0.712428622	**3:46:04**	-0.494665831	-0.356500417	-0.712445285
3:46:08	-0.49456442	-0.37152812	-0.712461947	**3:46:12**	-0.494463009	-0.386555818	-0.712478609
3:46:16	-0.494361598	-0.395018829	-0.712495272	**3:46:20**	-0.494260187	-0.396917151	-0.712511934
3:46:24	-0.494158776	-0.398815473	-0.712528596	**3:46:28**	-0.494057365	-0.409096097	-0.712545259
3:46:32	-0.493955954	-0.419376712	-0.712561921	**3:46:36**	-0.493854543	-0.432221821	-0.712578583
3:46:40	-0.493753132	-0.445921759	-0.712595246	**3:46:44**	-0.493651722	-0.461862546	-0.712611908
3:46:48	-0.493550311	-0.484525886	-0.71262857	**3:46:52**	-0.4934489	-0.507189226	-0.712645233
3:46:56	-0.493347489	-0.517493913	-0.712661895	**3:47:00**	-0.493246078	-0.515439926	-0.712678558
3:47:04	-0.493210041	-0.513424926	-0.71269522	**3:47:08**	-0.493174004	-0.513418864	-0.712711882
3:47:12	-0.493137967	-0.513412803	-0.712728545	**3:47:16**	-0.49310193	-0.511459748	-0.712745207
3:47:20	-0.493065893	-0.507559682	-0.712761869	**3:47:24**	-0.493029856	-0.503659633	-0.712778532
3:47:28	-0.492993819	-0.506936471	-0.712795194	**3:47:32**	-0.492957782	-0.510213309	-0.712811856
3:47:36	-0.492921745	-0.522949744	-0.712828519	**3:47:40**	-0.492885708	-0.545145777	-0.712845181
3:47:44	-0.492849671	-0.56734181	-0.712861843	**3:47:48**	-0.492813634	-0.596769675	-0.712878506
3:47:52	-0.492777597	-0.626197594	-0.712895168	**3:47:56**	-0.49274156	-0.649663892	-0.71291183
3:48:00	-0.492705523	-0.66716864	-0.712928493	**3:48:04**	-0.492879118	-0.684798346	-0.712945155
3:48:08	-0.493052714	-0.702428053	-0.712961817	**3:48:12**	-0.49322631	-0.72005776	-0.71297848
3:48:16	-0.493399905	-0.735510722	-0.712995142	**3:48:20**	-0.493573501	-0.748786939	-0.713011805
3:48:24	-0.493747097	-0.762063157	-0.713028467	**3:48:28**	-0.493920692	-0.765302353	-0.713045129
3:48:32	-0.494094288	-0.76854155	-0.713061792	**3:48:36**	-0.494267884	-0.771780711	-0.713078454
3:48:40	-0.49444148	-0.775019907	-0.713095116	**3:48:44**	-0.494615075	-0.778259104	-0.713111779
3:48:48	-0.494788671	-0.773604732	-0.713128441	**3:48:52**	-0.494962267	-0.76895036	-0.713145103
3:48:56	-0.495135862	-0.762083822	-0.713161766	**3:49:00**	-0.495309458	-0.75300508	-0.713178428
3:49:04	-0.495284262	-0.743807913	-0.71319509	**3:49:08**	-0.495259067	-0.734610675	-0.713211753
3:49:12	-0.495233871	-0.725413508	-0.713228415	**3:49:16**	-0.495208676	-0.714575238	-0.713245077
3:49:20	-0.49518348	-0.7020959	-0.71326174	**3:49:24**	-0.495158284	-0.689616562	-0.713278402
3:49:28	-0.495133089	-0.666157075	-0.713295064	**3:49:32**	-0.495107893	-0.642697587	-0.713311727
3:49:36	-0.495082698	-0.618017381	-0.713328389	**3:49:40**	-0.495057502	-0.592116455	-0.713345052
3:49:44	-0.495032306	-0.566215511	-0.713361714	**3:49:48**	-0.495007111	-0.550932797	-0.713378376
3:49:52	-0.494981915	-0.5356501	-0.713395039	**3:49:56**	-0.49495672	-0.517845526	-0.713411701
3:50:00	-0.494931524	-0.497519111	-0.713428363	**3:50:04**	-0.49506422	-0.477286812	-0.713445026
3:50:08	-0.495196917	-0.458380897	-0.713461688	**3:50:12**	-0.495329613	-0.439474992	-0.71347835
3:50:16	-0.49546231	-0.429069647	-0.713495013	**3:50:20**	-0.495595006	-0.427164863	-0.713511675
3:50:24	-0.495727702	-0.425260088	-0.713528337	**3:50:28**	-0.495860399	-0.418164254	-0.713545
3:50:32	-0.495993095	-0.411068429	-0.713561662	**3:50:36**	-0.496125791	-0.405808141	-0.713578324
3:50:40	-0.496258488	-0.402383409	-0.713594987	**3:50:44**	-0.496391184	-0.398958669	-0.713611649
3:50:48	-0.496523881	-0.396814301	-0.713628311	**3:50:52**	-0.496656577	-0.394669934	-0.713644974
3:50:56	-0.496789273	-0.389966313	-0.713661636	**3:51:00**	-0.49692197	-0.382703428	-0.713678299
3:51:04	-0.496968599	-0.375389249	-0.713694961	**3:51:08**	-0.497015228	-0.367459168	-0.713711623
3:51:12	-0.497061857	-0.359529091	-0.713728286	**3:51:16**	-0.497108485	-0.352192049	-0.713744948
3:51:20	-0.497155114	-0.345448041	-0.71376161	**3:51:24**	-0.497201743	-0.338704034	-0.713778273
3:51:28	-0.497248372	-0.335983691	-0.713794935	**3:51:32**	-0.497295001	-0.333263348	-0.713811597
3:51:36	-0.49734163	-0.330884375	-0.71382826	**3:51:40**	-0.497388259	-0.328846772	-0.713844922
3:51:44	-0.497434888	-0.326809169	-0.713861584	**3:51:48**	-0.497481517	-0.315780062	-0.713878247
3:51:52	-0.497528146	-0.304750956	-0.713894909	**3:51:56**	-0.497574775	-0.287357562	-0.713911571

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:52:00	-0.497621404	-0.263599881	-0.713928234	**3:52:04**	-0.497816434	-0.23993066	-0.713944896
3:52:08	-0.498011464	-0.20887734	-0.713961558	**3:52:12**	-0.498206494	-0.17782403	-0.713978221
3:52:16	-0.498401524	-0.146164597	-0.713994883	**3:52:20**	-0.498596554	-0.113899032	-0.714011546
3:52:24	-0.498791584	-0.081633485	-0.714028208	**3:52:28**	-0.498986614	-0.055344286	-0.71404487
3:52:32	-0.499181645	-0.029055104	-0.714061533	**3:52:36**	-0.499376675	-0.010881922	-0.714078195
3:52:40	-0.499571705	-0.000824776	-0.714094857	**3:52:44**	-0.499766735	0.009232371	-0.71411152
3:52:48	-0.499961765	0.02473669	-0.714128182	**3:52:52**	-0.500156795	0.040241045	-0.714144844
3:52:56	-0.500351825	0.051443464	-0.714161507	**3:53:00**	-0.500546855	0.058344018	-0.714178169
3:53:04	-0.500515336	0.06537958	-0.714194831	**3:53:08**	-0.500483816	0.063761031	-0.714211494
3:53:12	-0.500452296	0.062142518	-0.714228156	**3:53:16**	-0.500420776	0.061428583	-0.714244818
3:53:20	-0.500389257	0.061619264	-0.714261481	**3:53:24**	-0.500357737	0.061809943	-0.714278143
3:53:28	-0.500326217	0.061414175	-0.714294805	**3:53:32**	-0.500294697	0.061018442	-0.714311468
3:53:36	-0.500263178	0.061184925	-0.71432813	**3:53:40**	-0.500231658	0.063038239	-0.714344793
3:53:44	-0.500200138	0.064891553	-0.714361455	**3:53:48**	-0.500168618	0.065927904	-0.714378117
3:53:52	-0.500137098	0.06696429	-0.71439478	**3:53:56**	-0.500105579	0.062229741	-0.714411442
3:54:00	-0.500074059	0.051724258	-0.714428104	**3:54:04**	-0.499918594	0.041292657	-0.714444767
3:54:08	-0.49976313	0.03373446	-0.714461429	**3:54:12**	-0.499607665	0.026176264	-0.714478091
3:54:16	-0.499452201	0.021573296	-0.714494754	**3:54:20**	-0.499296736	0.019925629	-0.714511416
3:54:24	-0.499141272	0.018277962	-0.714528078	**3:54:28**	-0.498985808	0.017888569	-0.714544741
3:54:32	-0.498830343	0.017499141	-0.714561403	**3:54:36**	-0.498674879	0.019578935	-0.714578065
3:54:40	-0.498519414	0.024127952	-0.714594728	**3:54:44**	-0.49836395	0.028676933	-0.71461139
3:54:48	-0.498208485	0.028697407	-0.714628052	**3:54:52**	-0.498053021	0.028717881	-0.714644715
3:54:56	-0.497897556	0.026597957	-0.714661377	**3:55:00**	-0.497742092	0.022337636	-0.71467804
3:55:04	-0.497766586	0.017970044	-0.714694702	**3:55:08**	-0.49779108	0.01117295	-0.714711364
3:55:12	-0.497815575	0.004375858	-0.714728027	**3:55:16**	-0.497840069	-0.012578222	-0.714744689
3:55:20	-0.497864563	-0.039689234	-0.714761351	**3:55:24**	-0.497889058	-0.066800264	-0.714778014
3:55:28	-0.497913552	-0.093328719	-0.714794676	**3:55:32**	-0.497938046	-0.119857191	-0.714811338
3:55:36	-0.497962541	-0.144017505	-0.714828001	**3:55:40**	-0.497987035	-0.165809685	-0.714844663
3:55:44	-0.498011529	-0.187601857	-0.714861325	**3:55:48**	-0.498036023	-0.197341459	-0.714877988
3:55:52	-0.498060518	-0.207081062	-0.71489465	**3:55:56**	-0.498085012	-0.219060092	-0.714911312
3:56:00	-0.498109506	-0.23327855	-0.714927975	**3:56:04**	-0.49821575	-0.247545736	-0.714944637
3:56:08	-0.498321993	-0.258301454	-0.714961299	**3:56:12**	-0.498428236	-0.26905717	-0.714977962
3:56:16	-0.49853448	-0.277094308	-0.714994624	**3:56:20**	-0.498640723	-0.282412866	-0.715011287
3:56:24	-0.498746966	-0.287731423	-0.715027949	**3:56:28**	-0.498853209	-0.288073195	-0.715044611
3:56:32	-0.498959453	-0.288414967	-0.715061274	**3:56:36**	-0.499065696	-0.278263586	-0.715077936
3:56:40	-0.499171939	-0.257619053	-0.715094598	**3:56:44**	-0.499278182	-0.236974518	-0.715111261
3:56:48	-0.499384426	-0.229589392	-0.715127923	**3:56:52**	-0.499490669	-0.222204267	-0.715144585
3:56:56	-0.499596912	-0.213929441	-0.715161248	**3:57:00**	-0.499703156	-0.204764905	-0.71517791
3:57:04	-0.499708677	-0.19554034	-0.715194572	**3:57:08**	-0.499714199	-0.186315774	-0.715211235
3:57:12	-0.499719721	-0.1770912	-0.715227897	**3:57:16**	-0.499725243	-0.163979034	-0.715244559
3:57:20	-0.499730765	-0.146979267	-0.715261222	**3:57:24**	-0.499736286	-0.129979499	-0.715277884
3:57:28	-0.499741808	-0.120391664	-0.715294547	**3:57:32**	-0.49974733	-0.11080381	-0.715311209
3:57:36	-0.499752852	-0.110760807	-0.715327871	**3:57:40**	-0.499758374	-0.120262618	-0.715344534
3:57:44	-0.499763895	-0.12976443	-0.715361196	**3:57:48**	-0.499769417	-0.14234513	-0.715377858
3:57:52	-0.499774939	-0.154925822	-0.715394521	**3:57:56**	-0.499780461	-0.166710212	-0.715411183
3:58:00	-0.499785983	-0.177698289	-0.715427845	**3:58:04**	-0.499755398	-0.188664844	-0.715444508
3:58:08	-0.499724813	-0.198421498	-0.71546117	**3:58:12**	-0.499694229	-0.208178152	-0.715477832
3:58:16	-0.499663644	-0.217389608	-0.715494495	**3:58:20**	-0.499633059	-0.226055865	-0.715511157
3:58:24	-0.499602475	-0.234722122	-0.715527819	**3:58:28**	-0.49957189	-0.246609741	-0.715544482
3:58:32	-0.499541305	-0.25849736	-0.715561144	**3:58:36**	-0.49951072	-0.263485848	-0.715577806
3:58:40	-0.499480136	-0.261575208	-0.715594469	**3:58:44**	-0.499449551	-0.259664567	-0.715611131
3:58:48	-0.499418966	-0.272300805	-0.715627794	**3:58:52**	-0.499388382	-0.284937043	-0.715644456
3:58:56	-0.499357797	-0.296395492	-0.715661118	**3:59:00**	-0.499327212	-0.306676155	-0.715677781
3:59:04	-0.499408172	-0.317023308	-0.715694443	**3:59:08**	-0.499489133	-0.312378148	-0.715711105
3:59:12	-0.499570093	-0.30773299	-0.715727768	**3:59:16**	-0.499651053	-0.305218899	-0.71574443
3:59:20	-0.499732013	-0.304835876	-0.715761092	**3:59:24**	-0.499812973	-0.304452853	-0.715777755
3:59:28	-0.499893933	-0.299478184	-0.715794417	**3:59:32**	-0.499974893	-0.294503515	-0.715811079

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
3:59:36	-0.500055854	-0.282425169	-0.715827742	**3:59:40**	-0.500136814	-0.263243146	-0.715844404
3:59:44	-0.500217774	-0.244061124	-0.715861066	**3:59:48**	-0.500298734	-0.225558339	-0.715877729
3:59:52	-0.500379694	-0.207055554	-0.715894391	**3:59:56**	-0.500460654	-0.189299505	-0.715911053
4:00:00	-0.000541614	0.287620717	-0.215927716	**4:00:04**	-0.000564921	0.278902315	-0.215944378
4:00:08	-0.000588227	0.282682671	-0.215961041	**4:00:12**	-0.500611533	-0.213536975	-0.715977703
4:00:16	-0.50063484	-0.209756611	-0.715994365	**4:00:20**	-0.500658146	-0.205976256	-0.716011028
4:00:24	-0.500681452	-0.202195902	-0.71602769	**4:00:28**	-0.500704758	-0.20904177	-0.716044352
4:00:32	-0.500728065	-0.21588763	-0.716061015	**4:00:36**	-0.500751371	-0.230819217	-0.716077677
4:00:40	-0.500774677	-0.248446044	-0.716094339	**4:00:44**	-0.500797984	-0.266072873	-0.716111002
4:00:48	-0.50082129	-0.27938486	-0.716127664	**4:00:52**	-0.500844596	-0.292696848	-0.716144326
4:00:56	-0.500867902	-0.301548068	-0.716160989	**4:01:00**	-0.500891209	-0.305938518	-0.716177651
4:01:04	-0.500940096	-0.310344217	-0.716194313	**4:01:08**	-0.500988984	-0.301995314	-0.716210976
4:01:12	-0.501037871	-0.293646411	-0.716227638	**4:01:16**	-0.501086759	-0.289072039	-0.7162443
4:01:20	-0.501135646	-0.288272201	-0.716260963	**4:01:24**	-0.501184534	-0.287472361	-0.716277625
4:01:28	-0.501233422	-0.294316882	-0.716294288	**4:01:32**	-0.501282309	-0.301161403	-0.71631095
4:01:36	-0.501331197	-0.308931688	-0.716327612	**4:01:40**	-0.501380084	-0.317010562	-0.716344275
4:01:44	-0.501428972	-0.325089436	-0.716360937	**4:01:48**	-0.501477859	-0.338180781	-0.716377599
4:01:52	-0.501526747	-0.351272126	-0.716394262	**4:01:56**	-0.501575634	-0.36018821	-0.716410924
4:02:00	-0.501624522	-0.367712546	-0.716427586	**4:02:04**	-0.501460407	-0.37510991	-0.716444249
4:02:08	-0.501296292	-0.380052959	-0.716460911	**4:02:12**	-0.501132177	-0.384996009	-0.716477573
4:02:16	-0.500968062	-0.398818897	-0.716494236	**4:02:20**	-0.500803947	-0.421521631	-0.716510898
4:02:24	-0.500639832	-0.444224355	-0.71652756	**4:02:28**	-0.500475717	-0.468890373	-0.716544223
4:02:32	-0.500311602	-0.4935564	-0.716560885	**4:02:36**	-0.500147486	-0.519736441	-0.716577547
4:02:40	-0.499983371	-0.547430497	-0.71659421	**4:02:44**	-0.499819256	-0.574875526	-0.716610872
4:02:48	-0.499655141	-0.601573444	-0.716627535	**4:02:52**	-0.499491026	-0.628271362	-0.716644197
4:02:56	-0.499326911	-0.657034888	-0.716660859	**4:03:00**	-0.499162796	-0.687864023	-0.716677522
4:03:04	-0.499191808	-0.718808277	-0.716694184	**4:03:08**	-0.499220819	-0.72730143	-0.716710846
4:03:12	-0.499249831	-0.735794583	-0.716727509	**4:03:16**	-0.499278843	-0.737339854	-0.716744171
4:03:20	-0.499307854	-0.731937172	-0.716760833	**4:03:24**	-0.499336866	-0.72653449	-0.716777496
4:03:28	-0.499365877	-0.713334063	-0.716794158	**4:03:32**	-0.499394889	-0.692335856	-0.71681082
4:03:36	-0.4994239	-0.664947365	-0.716827483	**4:03:40**	-0.499452912	-0.631168627	-0.716844145
4:03:44	-0.499481924	-0.597389853	-0.716860807	**4:03:48**	-0.499510935	-0.55694928	-0.71687747
4:03:52	-0.499539947	-0.516508725	-0.716894132	**4:03:56**	-0.499568958	-0.476433999	-0.716910794
4:04:00	-0.49959797	-0.436725118	-0.716927457	**4:04:04**	-0.499614469	-0.397008779	-0.716944119
4:04:08	-0.499630968	-0.373467184	-0.716960782	**4:04:12**	-0.499647466	-0.349925598	-0.716977444
4:04:16	-0.499663965	-0.335247466	-0.716994106	**4:04:20**	-0.499680464	-0.329432796	-0.717010769
4:04:24	-0.499696963	-0.323618127	-0.717027431	**4:04:28**	-0.499713461	-0.316572721	-0.717044093
4:04:32	-0.49972996	-0.309527317	-0.717060756	**4:04:36**	-0.499746459	-0.298762799	-0.717077418
4:04:40	-0.499762958	-0.284279167	-0.71709408	**4:04:44**	-0.499779456	-0.269795536	-0.717110743
4:04:48	-0.499795955	-0.263684667	-0.717127405	**4:04:52**	-0.499812454	-0.257573795	-0.717144067
4:04:56	-0.499828953	-0.249819331	-0.71716073	**4:05:00**	-0.499845451	-0.240421277	-0.717177392
4:05:04	-0.499861815	-0.231023138	-0.717194054	**4:05:08**	-0.499878178	-0.213438091	-0.717210717
4:05:12	-0.499894541	-0.195853053	-0.717227379	**4:05:16**	-0.499910904	-0.183461215	-0.717244041
4:05:20	-0.499927268	-0.172800449	-0.717260704	**4:05:24**	-0.499943631	-0.162139684	-0.717277366
4:05:28	-0.499959994	-0.147706388	-0.717294029	**4:05:32**	-0.499976357	-0.133273119	-0.717310691
4:05:36	-0.499992721	-0.121511323	-0.717327353	**4:05:40**	-0.500009084	-0.11242102	-0.717344016
4:05:44	-0.500025447	-0.103330734	-0.717360678	**4:05:48**	-0.50004181	-0.097580923	-0.71737734
4:05:52	-0.500058174	-0.091831112	-0.717394003	**4:05:56**	-0.500074537	-0.086972875	-0.717410665
4:06:00	-0.5000909	-0.082411842	-0.717427327	**4:06:04**	-0.500083317	-0.077836535	-0.71744399
4:06:08	-0.500075735	-0.070248086	-0.717460652	**4:06:12**	-0.500068152	-0.062659619	-0.717477314
4:06:16	-0.500060569	-0.05150082	-0.717493977	**4:06:20**	-0.500052986	-0.036771654	-0.717510639
4:06:24	-0.500045403	-0.022042505	-0.717527301	**4:06:28**	-0.500037821	-0.005139809	-0.717543964
4:06:32	-0.500030238	0.011762887	-0.717560626	**4:06:36**	-0.500022655	0.021191865	-0.717577288
4:06:40	-0.500015072	0.023147056	-0.717593951	**4:06:44**	-0.50000749	0.025102283	-0.717610613
4:06:48	-0.499999907	0.015426106	-0.717627276	**4:06:52**	-0.499992324	0.005749894	-0.717643938
4:06:56	-0.499984741	-0.008861869	-0.7176606	**4:07:00**	-0.499977159	-0.028409198	-0.717677263
4:07:04	-0.500000298	-0.04797484	-0.717693925	**4:07:08**	-0.500023437	-0.060242653	-0.717710587

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:07:12	-0.500046576	-0.072510449	-0.71772725	**4:07:16**	-0.500069715	-0.083084345	-0.717743912
4:07:20	-0.500092854	-0.091964341	-0.717760574	**4:07:24**	-0.500115993	-0.100844337	-0.717777237
4:07:28	-0.500139133	-0.11243933	-0.717793899	**4:07:32**	-0.500162272	-0.124034341	-0.717810561
4:07:36	-0.500185411	-0.140779162	-0.717827224	**4:07:40**	-0.50020855	-0.162673818	-0.717843886
4:07:44	-0.500231689	-0.184568466	-0.717860548	**4:07:48**	-0.500254828	-0.207799464	-0.717877211
4:07:52	-0.500277967	-0.231030457	-0.717893873	**4:07:56**	-0.500301107	-0.256073183	-0.717910535
4:08:00	-0.500324246	-0.282927642	-0.717927198	**4:08:04**	-0.500259519	-0.309729724	-0.71794386
4:08:08	-0.500194793	-0.337981638	-0.717960523	**4:08:12**	-0.500130067	-0.366233549	-0.717977185
4:08:16	-0.500065341	-0.386931463	-0.717993847	**4:08:20**	-0.500000615	-0.405111374	-0.71801051
4:08:24	-0.499935889	-0.423291285	-0.718027172	**4:08:28**	-0.499871162	-0.433034285	-0.718043834
4:08:32	-0.499806436	-0.442777294	-0.718060497	**4:08:36**	-0.49974171	-0.452960602	-0.718077159
4:08:40	-0.499676984	-0.463584198	-0.718093821	**4:08:44**	-0.499612258	-0.474207795	-0.718110484
4:08:48	-0.499547531	-0.503893628	-0.718127146	**4:08:52**	-0.499482805	-0.533579478	-0.718143808
4:08:56	-0.499418079	-0.545951104	-0.718160471	**4:09:00**	-0.499353353	-0.552551351	-0.718177133
4:09:04	-0.499372427	-0.559201532	-0.718193795	**4:09:08**	-0.4993915	-0.586708735	-0.718210458
4:09:12	-0.499410574	-0.614215938	-0.71822712	**4:09:16**	-0.499429647	-0.634079575	-0.718243782
4:09:20	-0.499448721	-0.64629963	-0.718260445	**4:09:24**	-0.499467795	-0.658519684	-0.718277107
4:09:28	-0.499486868	-0.670739739	-0.71829377	**4:09:32**	-0.499505942	-0.682959794	-0.718310432
4:09:36	-0.499525015	-0.687513207	-0.718327094	**4:09:40**	-0.499544089	-0.684400014	-0.718343757
4:09:44	-0.499563163	-0.68128682	-0.718360419	**4:09:48**	-0.499582236	-0.666521049	-0.718377081
4:09:52	-0.49960131	-0.651755242	-0.718393744	**4:09:56**	-0.499620383	-0.643219231	-0.718410406
4:10:00	-0.499639457	-0.636759772	-0.718427068	**4:10:04**	-0.499592705	-0.630261076	-0.718443731
4:10:08	-0.499545953	-0.616113751	-0.718460393	**4:10:12**	-0.499499201	-0.601966426	-0.718477055
4:10:16	-0.499452449	-0.586720532	-0.718493718	**4:10:20**	-0.499405697	-0.570376052	-0.71851038
4:10:24	-0.499358945	-0.554031553	-0.718527042	**4:10:28**	-0.499312193	-0.54000652	-0.718543705
4:10:32	-0.499265441	-0.525981471	-0.718560367	**4:10:36**	-0.499218689	-0.509648519	-0.718577029
4:10:40	-0.499171937	-0.491007648	-0.718593692	**4:10:44**	-0.499125185	-0.472366777	-0.718610354
4:10:48	-0.499078433	-0.446398713	-0.718627017	**4:10:52**	-0.499011567	-0.42041865	-0.718616425
4:10:56	-0.498937298	-0.39489683	-0.718595805	**4:11:00**	-0.49886303	-0.36952923	-0.718575185
4:11:04	-0.498890273	-0.344222135	-0.718554565	**4:11:08**	-0.498917517	-0.316252408	-0.718533945
4:11:12	-0.49894476	-0.28828268	-0.718513324	**4:11:16**	-0.498972004	-0.276062798	-0.718492704
4:11:20	-0.498999247	-0.269092864	-0.718472084	**4:11:24**	-0.499026491	-0.26212293	-0.718451464
4:11:28	-0.499053734	-0.248838706	-0.718430844	**4:11:32**	-0.499080978	-0.235554481	-0.718410223
4:11:36	-0.499108221	-0.218093891	-0.718389603	**4:11:40**	-0.499135465	-0.196456939	-0.718368983
4:11:44	-0.499162708	-0.174819987	-0.718348363	**4:11:48**	-0.499189952	-0.148555588	-0.718327743
4:11:52	-0.499217195	-0.122291188	-0.718307123	**4:11:56**	-0.499244438	-0.099491599	-0.718286502
4:12:00	-0.499271682	-0.080156819	-0.718265882	**4:12:04**	-0.499370294	-0.060864581	-0.718245262
4:12:08	-0.499468905	-0.045242974	-0.718224642	**4:12:12**	-0.499567517	-0.029621367	-0.718204022
4:12:16	-0.499666129	-0.018596946	-0.718183401	**4:12:20**	-0.499764741	-0.012169745	-0.718162781
4:12:24	-0.499863353	-0.005742526	-0.718142161	**4:12:28**	-0.499961964	0.005270046	-0.718121541
4:12:32	-0.500060576	0.016282583	-0.718100921	**4:12:36**	-0.500159188	0.027295155	-0.7180803
4:12:40	-0.5002578	0.038307692	-0.71805968	**4:12:44**	-0.500356411	0.047808168	-0.71803906
4:12:48	-0.500455023	0.052772392	-0.71801844	**4:12:52**	-0.500553635	0.057736581	-0.71799782
4:12:56	-0.500652247	0.061987517	-0.717977199	**4:13:00**	-0.500750858	0.0655252	-0.717956579
4:13:04	-0.50069905	0.069152547	-0.717935959	**4:13:08**	-0.500647241	0.072779893	-0.717915339
4:13:12	-0.500595432	0.076407239	-0.717894719	**4:13:16**	-0.500543624	0.086441852	-0.717874098
4:13:20	-0.500491815	0.102883731	-0.717853478	**4:13:24**	-0.500440006	0.119325645	-0.717832858
4:13:28	-0.500388198	0.134425472	-0.717812238	**4:13:32**	-0.500336389	0.149525263	-0.717791618
4:13:36	-0.50028458	0.157035831	-0.717770997	**4:13:40**	-0.500232772	0.156957141	-0.717750377
4:13:44	-0.500180963	0.15687845	-0.717729757	**4:13:48**	-0.500129155	0.14396963	-0.717709137
4:13:52	-0.500077346	0.13106081	-0.717688517	**4:13:56**	-0.500025537	0.115196902	-0.717667897
4:14:00	-0.499973729	0.096377872	-0.717647276	**4:14:04**	-0.499979614	0.077524451	-0.717626656
4:14:08	-0.4999855	0.060350576	-0.717606036	**4:14:12**	-0.499991386	0.043176666	-0.717585416
4:14:16	-0.499997272	0.035116154	-0.717564796	**4:14:20**	-0.500003158	0.036169041	-0.717544175
4:14:24	-0.500009044	0.037221893	-0.717523555	**4:14:28**	-0.50001493	0.026288474	-0.717502935
4:14:32	-0.500020815	0.015355055	-0.717482315	**4:14:36**	-0.500026701	0.009674409	-0.717461695
4:14:40	-0.500032587	0.009246502	-0.717441074	**4:14:44**	-0.500038473	0.008818595	-0.717420454

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:14:48	-0.500044359	0.009854037	-0.717399834	**4:14:52**	-0.500050245	0.010889515	-0.717379214
4:14:56	-0.500056131	0.010347914	-0.717358594	**4:15:00**	-1.000062016	-0.491770695	-1.217337973
4:15:04	-1.000040022	-0.493872721	-1.217317353	**4:15:08**	-1.000018027	-0.50439447	-1.217296733
4:15:12	-0.499996032	-0.014916201	-0.717276113	**4:15:16**	-0.499974038	-0.02543795	-0.717255493
4:15:20	-0.499952043	-0.035959681	-0.717234872	**4:15:24**	-0.499930048	-0.046481429	-0.717214252
4:15:28	-0.499908053	-0.059358529	-0.717193632	**4:15:32**	-0.499886059	-0.072235628	-0.717173012
4:15:36	-0.499864064	-0.084830607	-0.717152392	**4:15:40**	-0.499842069	-0.097143446	-0.717131772
4:15:44	-0.499820075	-0.109456285	-0.717111151	**4:15:48**	-0.49979808	-0.136824265	-0.717090531
4:15:52	-0.499776085	-0.164192228	-0.717069911	**4:15:56**	-0.499754091	-0.19012864	-0.717049291
4:16:00	-0.499732096	-0.215587865	-0.717028671	**4:16:04**	-0.499888407	-0.24115338	-0.71700805
4:16:08	-0.500044717	-0.264654272	-0.71698743	**4:16:12**	-0.500201028	-0.288155166	-0.71696681
4:16:16	-0.500357339	-0.307589391	-0.71694619	**4:16:20**	-0.50051365	-0.322956951	-0.71692557
4:16:24	-0.500669961	-0.338324509	-0.716904949	**4:16:28**	-0.500826271	-0.339002516	-0.716884329
4:16:32	-0.500982582	-0.339680518	-0.716863709	**4:16:36**	-0.501138893	-0.344979411	-0.716843089
4:16:40	-0.501295204	-0.354899198	-0.716822469	**4:16:44**	-0.501451514	-0.364818984	-0.716801848
4:16:48	-0.501607825	-0.380647914	-0.716781228	**4:16:52**	-0.501764136	-0.396476831	-0.716760608
4:16:56	-0.501920447	-0.409789253	-0.716739988	**4:17:00**	-0.502076758	-0.420585164	-0.716719368
4:17:04	-0.502036694	-0.431264017	-0.716698747	**4:17:08**	-0.50199663	-0.451132819	-0.716678127
4:17:12	-0.501956566	-0.471001621	-0.716657507	**4:17:16**	-0.501916503	-0.482998332	-0.716636887
4:17:20	-0.501876439	-0.487122935	-0.716616267	**4:17:24**	-0.501836375	-0.491247537	-0.716595647
4:17:28	-0.501796311	-0.503993119	-0.716575026	**4:17:32**	-0.501756248	-0.516738701	-0.716554406
4:17:36	-0.501716184	-0.53448853	-0.716533786	**4:17:40**	-0.50167612	-0.557242567	-0.716513166
4:17:44	-0.501636056	-0.579996623	-0.716492546	**4:17:48**	-0.501595992	-0.59954749	-0.716471925
4:17:52	-0.501555929	-0.619098356	-0.716451305	**4:17:56**	-0.501515865	-0.636788547	-0.716430685
4:18:00	-0.501475801	-0.652618099	-0.716410065	**4:18:04**	-0.501443665	-0.668452378	-0.716389445
4:18:08	-0.501411529	-0.677595687	-0.716368824	**4:18:12**	-0.501379393	-0.68673896	-0.716348204
4:18:16	-0.501347257	-0.701070096	-0.716327584	**4:18:20**	-0.501315121	-0.720589057	-0.716306964
4:18:24	-0.501282985	-0.740108018	-0.716286344	**4:18:28**	-0.501250849	-0.727250845	-0.716265723
4:18:32	-0.501218713	-0.714393672	-0.716245103	**4:18:36**	-0.501186577	-0.715554128	-0.716224483
4:18:40	-0.501154441	-0.730732213	-0.716203863	**4:18:44**	-0.501122306	-0.745910334	-0.716183243
4:18:48	-0.50109017	-0.750976644	-0.716162622	**4:18:52**	-0.501058034	-0.756042954	-0.716142002
4:18:56	-0.501025898	-0.75942048	-0.716121382	**4:19:00**	-0.500993762	-0.762235079	-0.716100762
4:19:04	-0.500997967	-0.765071376	-0.716080142	**4:19:08**	-0.501002173	-0.756079259	-0.716059522
4:19:12	-0.501006378	-0.747087105	-0.716038901	**4:19:16**	-0.501010583	-0.733547366	-0.716018281
4:19:20	-0.501014789	-0.715459971	-0.715997661	**4:19:24**	-0.501018994	-0.697372574	-0.715977041
4:19:28	-0.5010232	-0.671655416	-0.715956421	**4:19:32**	-0.501027405	-0.645938293	-0.7159358
4:19:36	-0.501031611	-0.626199313	-0.71591518	**4:19:40**	-0.501035816	-0.612438509	-0.71589456
4:19:44	-0.501040021	-0.598677706	-0.71587394	**4:19:48**	-0.501044227	-0.582697151	-0.71585332
4:19:52	-0.501048432	-0.566716595	-0.715832699	**4:19:56**	-0.501052638	-0.547059669	-0.715812079
4:20:00	-0.501056843	-0.523726375	-0.715791459	**4:20:04**	-0.500629469	-0.500135839	-0.715770839
4:20:08	-0.500202095	-0.473329981	-0.715750219	**4:20:12**	-0.499774721	-0.446524142	-0.715729598
4:20:16	-0.499347347	-0.426007176	-0.715708978	**4:20:20**	-0.498919973	-0.411779092	-0.715688358
4:20:24	-0.498492599	-0.397551017	-0.715667738	**4:20:28**	-0.498065225	-0.395236652	-0.715647118
4:20:32	-0.49763785	-0.392922289	-0.715626497	**4:20:36**	-0.497210476	-0.391667216	-0.715605877
4:20:40	-0.496783102	-0.391471452	-0.715585257	**4:20:44**	-0.496355728	-0.391275689	-0.715564637
4:20:48	-0.495928354	-0.383814429	-0.715544017	**4:20:52**	-0.49550098	-0.376353177	-0.715523396
4:20:56	-0.495073606	-0.368891922	-0.715502776	**4:21:00**	-0.494646232	-0.361430666	-0.715482156
4:21:04	-0.494641854	-0.354221552	-0.715461536	**4:21:08**	-0.494637477	-0.34214439	-0.715440916
4:21:12	-0.4946331	-0.330067226	-0.715420296	**4:21:16**	-0.494628722	-0.319986268	-0.715399675
4:21:20	-0.494624345	-0.311901515	-0.715379055	**4:21:24**	-0.494619968	-0.303816761	-0.715358435
4:21:28	-0.49461559	-0.305471691	-0.715337815	**4:21:32**	-0.494611213	-0.307126619	-0.715317195
4:21:36	-0.494606835	-0.308781549	-0.715296574	**4:21:40**	-0.494602458	-0.310436477	-0.715275954
4:21:44	-0.494598081	-0.312091407	-0.715255334	**4:21:48**	-0.494593703	-0.318762983	-0.715234714
4:21:52	-0.494589326	-0.325434561	-0.715214094	**4:21:56**	-0.494584949	-0.331075474	-0.715193473
4:22:00	-0.494580571	-0.335685723	-0.715172853	**4:22:04**	-0.494526246	-0.340266199	-0.715152233
4:22:08	-0.494471922	-0.340905922	-0.715131613	**4:22:12**	-0.494417597	-0.341545645	-0.715110993
4:22:16	-0.494363272	-0.342561158	-0.715090372	**4:22:20**	-0.494308947	-0.343952453	-0.715069752

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:22:24	-0.494254623	-0.345343747	-0.715049132	**4:22:28**	-0.494200298	-0.343765689	-0.715028512
4:22:32	-0.494145973	-0.342187632	-0.715007892	**4:22:36**	-0.494091648	-0.340609574	-0.714987271
4:22:40	-0.494037324	-0.339031516	-0.714966651	**4:22:44**	-0.493982999	-0.337453458	-0.714946031
4:22:48	-0.493928674	-0.328704205	-0.714925411	**4:22:52**	-0.493874349	-0.319954952	-0.714904791
4:22:56	-0.493820024	-0.318907675	-0.714884171	**4:23:00**	-0.4937657	-0.325562373	-0.71486355
4:23:04	-0.493767646	-0.332250616	-0.71484293	**4:23:08**	-0.493769593	-0.329865588	-0.71482231
4:23:12	-0.49377154	-0.32748056	-0.71480169	**4:23:16**	-0.493773487	-0.326389094	-0.71478107
4:23:20	-0.493775434	-0.326591189	-0.714760449	**4:23:24**	-0.49377738	-0.326793284	-0.714739829
4:23:28	-0.493779327	-0.3257645	-0.714719209	**4:23:32**	-0.493781274	-0.324735718	-0.714698589
4:23:36	-0.493783221	-0.326067506	-0.714677969	**4:23:40**	-0.493785168	-0.329759863	-0.714657348
4:23:44	-0.493787114	-0.33345222	-0.714636728	**4:23:48**	-0.493789061	-0.347971788	-0.714616108
4:23:52	-0.493791008	-0.362491356	-0.714595488	**4:23:56**	-0.493792955	-0.372450507	-0.714574868
4:24:00	-0.493794902	-0.377849232	-0.714554247	**4:24:04**	-0.493133289	-0.382852429	-0.714533627
4:24:08	-0.492471677	-0.37876001	-0.714513007	**4:24:12**	-0.491810065	-0.37466759	-0.714492387
4:24:16	-0.491148452	-0.375637276	-0.714471767	**4:24:20**	-0.49048684	-0.381669058	-0.714451146
4:24:24	-0.489825228	-0.38770085	-0.714430526	**4:24:28**	-0.489163615	-0.396519905	-0.714409906
4:24:32	-0.488502003	-0.40533896	-0.714389286	**4:24:36**	-0.48784039	-0.413670232	-0.714368666
4:24:40	-0.487178778	-0.421513711	-0.714348046	**4:24:44**	-0.486517166	-0.4293572	-0.714327425
4:24:48	-0.485855553	-0.424616484	-0.714306805	**4:24:52**	-0.485193941	-0.419875768	-0.714286185
4:24:56	-0.484532329	-0.414178166	-0.714265565	**4:25:00**	-0.483870716	-0.407523659	-0.714244945
4:25:04	-0.483895249	-0.401278153	-0.714224324	**4:25:08**	-0.483919782	-0.389607689	-0.714203704
4:25:12	-0.483944316	-0.377937233	-0.714183084	**4:25:16**	-0.483968849	-0.363565974	-0.714162464
4:25:20	-0.483993382	-0.346493916	-0.714141844	**4:25:24**	-0.484017915	-0.329421859	-0.714121223
4:25:28	-0.484042448	-0.332407736	-0.714100603	**4:25:32**	-0.484066981	-0.335393608	-0.714079983
4:25:36	-0.484091514	-0.332069245	-0.714059363	**4:25:40**	-0.484116048	-0.322434645	-0.714038743
4:25:44	-0.484140581	-0.312800042	-0.714018122	**4:25:48**	-0.484165114	-0.29732522	-0.713997502
4:25:52	-0.484189647	-0.281850397	-0.713976882	**4:25:56**	-0.48421418	-0.267440714	-0.713956262
4:26:00	-0.484238713	-0.254096166	-0.713935642	**4:26:04**	-0.483819836	-0.24048731	-0.713915021
4:26:08	-0.483400959	-0.249078454	-0.713894401	**4:26:12**	-0.482982082	-0.257669599	-0.713873781
4:26:16	-0.482563205	-0.268671176	-0.713853161	**4:26:20**	-0.482144328	-0.282083183	-0.713832541
4:26:24	-0.48172545	-0.295495191	-0.71381192	**4:26:28**	-0.481306573	-0.288583479	-0.7137913
4:26:32	-0.480887696	-0.281671766	-0.71377068	**4:26:36**	-0.480468819	-0.272732899	-0.71375006
4:26:40	-0.480049942	-0.261766878	-0.71372944	**4:26:44**	-0.479631065	-0.250800857	-0.71370882
4:26:48	-0.479212188	-0.244672385	-0.713688199	**4:26:52**	-0.478793311	-0.23854391	-0.713667579
4:26:56	-0.478374434	-0.237870021	-0.713646959	**4:27:00**	-0.477955556	-0.239014321	-0.713626339
4:27:04	-0.477938982	-0.240398434	-0.713605719	**4:27:08**	-0.477922408	-0.239904613	-0.713585098
4:27:12	-0.477905834	-0.239410792	-0.713564478	**4:27:16**	-0.47788926	-0.240774364	-0.713543858
4:27:20	-0.477872687	-0.242757071	-0.713523238	**4:27:24**	-0.477856113	-0.244739778	-0.713502618
4:27:28	-0.477839539	-0.232496205	-0.713481997	**4:27:32**	-0.477822965	-0.220252632	-0.713461377
4:27:36	-0.477806391	-0.217800537	-0.713440757	**4:27:40**	-0.477789817	-0.225139911	-0.713420137
4:27:44	-0.477773243	-0.232479284	-0.713399517	**4:27:48**	-0.477756669	-0.243868428	-0.713378896
4:27:52	-0.477740095	-0.255257567	-0.713358276	**4:27:56**	-0.477723521	-0.275377095	-0.713337656
4:28:00	-0.477706947	-0.304227006	-0.713317036	**4:28:04**	-0.477449268	-0.330089306	-0.713296416
4:28:08	-0.47719159	-0.347419919	-0.713275795	**4:28:12**	-0.476933911	-0.364750527	-0.713255175
4:28:16	-0.476676233	-0.373528844	-0.713234555	**4:28:20**	-0.476418554	-0.373754868	-0.713213935
4:28:24	-0.476160876	-0.373980884	-0.713193315	**4:28:28**	-0.475903197	-0.37873332	-0.713172695
4:28:32	-0.475645519	-0.383485755	-0.713152074	**4:28:36**	-0.47538784	-0.380893996	-0.713131454
4:28:40	-0.475130162	-0.370958033	-0.713110834	**4:28:44**	-0.474872483	-0.361022071	-0.713090214
4:28:48	-0.474614805	-0.351086113	-0.713069594	**4:28:52**	-0.474357126	-0.34115015	-0.713048973
4:28:56	-0.474099448	-0.328834388	-0.713028353	**4:29:00**	-0.473841769	-0.315725361	-0.713007733
4:29:04	-0.473816612	-0.302754937	-0.712987113	**4:29:08**	-0.473791456	-0.293485691	-0.712966493
4:29:12	-0.473766299	-0.284216447	-0.712945872	**4:29:16**	-0.473741142	-0.272836235	-0.712925252
4:29:20	-0.473715985	-0.259345055	-0.712904632	**4:29:24**	-0.473690828	-0.245853876	-0.712884012
4:29:28	-0.473665672	-0.241605994	-0.712863392	**4:29:32**	-0.473640515	-0.237358104	-0.712842771
4:29:36	-0.473615358	-0.234172745	-0.712822151	**4:29:40**	-0.473590201	-0.232049901	-0.712801531
4:29:44	-0.473565044	-0.229927057	-0.712780911	**4:29:48**	-0.473539888	-0.231507451	-0.712760291
4:29:52	-0.473514731	-0.233087846	-0.71273967	**4:29:56**	-0.473489574	-0.234668241	-0.71271905

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:30:00	0.026535583	0.263751365	-0.21269843	**4:30:04**	0.026228133	0.261972709	-0.21267781
4:30:08	0.025920684	0.262726234	-0.21265719	**4:30:12**	-0.474386766	-0.236520242	-0.71263657
4:30:16	-0.474694215	-0.23202929	-0.712615949	**4:30:20**	-0.475001664	-0.223800903	-0.712595329
4:30:24	-0.475309114	-0.21557252	-0.712574709	**4:30:28**	-0.475616563	-0.215310243	-0.712554089
4:30:32	-0.475924013	-0.215047965	-0.712533469	**4:30:36**	-0.476231462	-0.218479694	-0.712512848
4:30:40	-0.476538912	-0.225605418	-0.712492228	**4:30:44**	-0.476846361	-0.233866419	-0.712471608
4:30:48	-0.477153811	-0.245533237	-0.712450988	**4:30:52**	-0.47746126	-0.25720005	-0.712430368
4:30:56	-0.47776871	-0.267170934	-0.712409747	**4:31:00**	-0.478076159	-0.275445884	-0.712389127
4:31:04	-0.478053713	-0.283524189	-0.712368507	**4:31:08**	-0.478031266	-0.298202561	-0.712347887
4:31:12	-0.47800882	-0.312880935	-0.712327267	**4:31:16**	-0.477986373	-0.329217712	-0.712306646
4:31:20	-0.477963927	-0.347212899	-0.712286026	**4:31:24**	-0.47794148	-0.365208083	-0.712265406
4:31:28	-0.477919034	-0.379315944	-0.712244786	**4:31:32**	-0.477896588	-0.393423806	-0.712224166
4:31:36	-0.477874141	-0.406248692	-0.712203545	**4:31:40**	-0.477851695	-0.417790603	-0.712182925
4:31:44	-0.477829248	-0.429332504	-0.712162305	**4:31:48**	-0.477806802	-0.431866183	-0.712141685
4:31:52	-0.477784355	-0.434399853	-0.712121065	**4:31:56**	-0.477761909	-0.436933523	-0.712100444
4:32:00	-0.477739463	-0.43946721	-0.712079824	**4:32:04**	-0.479244561	-0.442911426	-0.712059204
4:32:08	-0.480749659	-0.446355642	-0.712038584	**4:32:12**	-0.482254758	-0.449799857	-0.712017964
4:32:16	-0.483759856	-0.449634996	-0.711997344	**4:32:20**	-0.485264955	-0.445861039	-0.711976723
4:32:24	-0.486770053	-0.442087083	-0.711956103	**4:32:28**	-0.488275152	-0.431119418	-0.711935483
4:32:32	-0.48978025	-0.420151761	-0.711914863	**4:32:36**	-0.491285348	-0.41342389	-0.711894243
4:32:40	-0.492790447	-0.410935823	-0.711873622	**4:32:44**	-0.494295545	-0.408447747	-0.711853002
4:32:48	-0.495800644	-0.399102932	-0.711832382	**4:32:52**	-0.497305742	-0.389758116	-0.711811762
4:32:56	-0.498810841	-0.385177358	-0.711791142	**4:33:00**	-0.500315939	-0.385360676	-0.711770521
4:33:04	-0.500301624	-0.382244679	-0.711749901	**4:33:08**	-0.500287308	-0.371947834	-0.711729281
4:33:12	-0.500272993	-0.361650984	-0.711708661	**4:33:16**	-0.500258678	-0.352924508	-0.711688041
4:33:20	-0.500244362	-0.3457684	-0.71166742	**4:33:24**	-0.500230047	-0.338612292	-0.7116468
4:33:28	-0.500215732	-0.343411283	-0.71162618	**4:33:32**	-0.500201416	-0.348210273	-0.71160556
4:33:36	-0.500187101	-0.349693251	-0.71158494	**4:33:40**	-0.500172786	-0.347860225	-0.711564319
4:33:44	-0.50015847	-0.3460272	-0.711543699	**4:33:48**	-0.500144155	-0.349474127	-0.711523079
4:33:52	-0.500129839	-0.352921055	-0.711502459	**4:33:56**	-0.500115524	-0.349930113	-0.711481839
4:34:00	-0.500101209	-0.3405013	-0.711461219	**4:34:04**	-0.500231974	-0.331158968	-0.711440598
4:34:08	-0.50036274	-0.33285482	-0.711419978	**4:34:12**	-0.500493506	-0.334550672	-0.711399358
4:34:16	-0.500624271	-0.330178863	-0.711378738	**4:34:20**	-0.500755037	-0.319739394	-0.711358118
4:34:24	-0.500885803	-0.309299924	-0.711337497	**4:34:28**	-0.501016568	-0.290860412	-0.711316877
4:34:32	-0.501147334	-0.272420901	-0.711296257	**4:34:36**	-0.5012781	-0.256914377	-0.711275637
4:34:40	-0.501408865	-0.244340845	-0.711255017	**4:34:44**	-0.501539631	-0.231767313	-0.711234396
4:34:48	-0.501670397	-0.230307348	-0.711213776	**4:34:52**	-0.501801162	-0.228847383	-0.711193156
4:34:56	-0.501931928	-0.228957107	-0.711172536	**4:35:00**	-0.502062694	-0.230636524	-0.711151916
4:35:04	-0.50206464	-0.232083203	-0.711131295	**4:35:08**	-0.502066587	-0.233062026	-0.711110675
4:35:12	-0.502068534	-0.234040854	-0.711090055	**4:35:16**	-0.502070481	-0.235019677	-0.711069435
4:35:20	-0.502072428	-0.227560848	-0.711048815	**4:35:24**	-0.502074374	-0.220102024	-0.711028194
4:35:28	-0.502076321	-0.218472562	-0.711007574	**4:35:32**	-0.502078268	-0.216843092	-0.710986954
4:35:36	-0.502080215	-0.218427869	-0.710966334	**4:35:40**	-0.502082162	-0.221084071	-0.710945714
4:35:44	-0.502084108	-0.224714471	-0.710925094	**4:35:48**	-0.502086055	-0.23126752	-0.710904473
4:35:52	-0.502088002	-0.23782056	-0.710883853	**4:35:56**	-0.502089949	-0.247353243	-0.710863233
4:36:00	-0.502091896	-0.257879141	-0.710842613	**4:36:04**	-0.502140027	-0.265323702	-0.710821993
4:36:08	-0.502188158	-0.26344167	-0.710801372	**4:36:12**	-0.50223629	-0.261559638	-0.710780752
4:36:16	-0.502284421	-0.263919406	-0.710760132	**4:36:20**	-0.502332552	-0.267693107	-0.710739512
4:36:24	-0.502380684	-0.270603484	-0.710718892	**4:36:28**	-0.502428815	-0.270923898	-0.710698271
4:36:32	-0.502476946	-0.271244309	-0.710677651	**4:36:36**	-0.502525077	-0.268477339	-0.710657031
4:36:40	-0.502573209	-0.26468124	-0.710636411	**4:36:44**	-0.50262134	-0.258702717	-0.710615791
4:36:48	-0.502669471	-0.246176906	-0.71059517	**4:36:52**	-0.502717603	-0.233651094	-0.71057455
4:36:56	-0.502765734	-0.223375991	-0.71055393	**4:37:00**	-0.502813865	-0.213851126	-0.71053331
4:37:04	-0.502799098	-0.206796576	-0.71051269	**4:37:08**	-0.502784331	-0.207265458	-0.710492069
4:37:12	-0.502769564	-0.207734339	-0.710471449	**4:37:16**	-0.502754797	-0.199006621	-0.710450829
4:37:20	-0.50274003	-0.187213372	-0.710430209	**4:37:24**	-0.502725263	-0.181173018	-0.710409589
4:37:28	-0.502710496	-0.192391321	-0.710388968	**4:37:32**	-0.502695729	-0.203609624	-0.710368348

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:37:36	-0.502680962	-0.215938141	-0.710347728	**4:37:40**	-0.502666195	-0.228636732	-0.710327108
4:37:44	-0.502651428	-0.247616713	-0.710306488	**4:37:48**	-0.50263666	-0.285440858	-0.710285868
4:37:52	-0.502621893	-0.323265005	-0.710265247	**4:37:56**	-0.502607126	-0.350041463	-0.710244627
4:38:00	-0.502592359	-0.376817915	-0.710224007	**4:38:04**	-0.502480986	-0.403075556	-0.710203387
4:38:08	-0.502369613	-0.427949495	-0.710182767	**4:38:12**	-0.502258239	-0.452823435	-0.710162146
4:38:16	-0.502146866	-0.456517391	-0.710141526	**4:38:20**	-0.502035493	-0.453151369	-0.710120906
4:38:24	-0.501924119	-0.449785348	-0.710100286	**4:38:28**	-0.501812746	-0.446419317	-0.710079666
4:38:32	-0.501701373	-0.443053295	-0.710059045	**4:38:36**	-0.501589999	-0.444458705	-0.710038425
4:38:40	-0.501478626	-0.447454596	-0.710017805	**4:38:44**	-0.501367253	-0.451771684	-0.709997185
4:38:48	-0.501255879	-0.460052326	-0.709976565	**4:38:52**	-0.501144506	-0.468332967	-0.709955944
4:38:56	-0.501033133	-0.469394443	-0.709935324	**4:39:00**	-0.500921759	-0.468049494	-0.709914704
4:39:04	-0.50091693	-0.46928931	-0.709894084	**4:39:08**	-0.500912101	-0.478092856	-0.709873464
4:39:12	-0.500907272	-0.486896402	-0.709852843	**4:39:16**	-0.500902443	-0.491048545	-0.709832223
4:39:20	-0.500897614	-0.493650203	-0.709811603	**4:39:24**	-0.500892785	-0.491701699	-0.709790983
4:39:28	-0.500887956	-0.485203068	-0.709770363	**4:39:32**	-0.500883127	-0.478704419	-0.709749743
4:39:36	-0.500878298	-0.46888887	-0.709729122	**4:39:40**	-0.500873468	-0.457967681	-0.709708502
4:39:44	-0.500868639	-0.447560096	-0.709687882	**4:39:48**	-0.50086381	-0.437666089	-0.709667262
4:39:52	-0.500858981	-0.427772081	-0.709646642	**4:39:56**	-0.500854152	-0.41022775	-0.709626021
4:40:00	-0.500849323	-0.390133304	-0.709605401	**4:40:04**	-0.500791145	-0.381365488	-0.709584781
4:40:08	-0.500732967	-0.383956085	-0.709564161	**4:40:12**	-0.500674789	-0.386546692	-0.709543541
4:40:16	-0.500616611	-0.394384859	-0.70952292	**4:40:20**	-0.500558433	-0.403972226	-0.7095023
4:40:24	-0.500500255	-0.404679135	-0.70948168	**4:40:28**	-0.500442077	-0.396505593	-0.70946106
4:40:32	-0.500383899	-0.388332051	-0.70944044	**4:40:36**	-0.500325721	-0.37159054	-0.709419819
4:40:40	-0.500267543	-0.351993042	-0.709399199	**4:40:44**	-0.500209365	-0.331897888	-0.709378579
4:40:48	-0.500151187	-0.310309775	-0.709357959	**4:40:52**	-0.500093009	-0.288721664	-0.709337339
4:40:56	-0.500034831	-0.27288912	-0.709316718	**4:41:00**	-0.499976653	-0.258975099	-0.709296098
4:41:04	-0.499974986	-0.245810852	-0.709275478	**4:41:08**	-0.499973319	-0.234794867	-0.709254858
4:41:12	-0.499971652	-0.223778884	-0.709234238	**4:41:16**	-0.499969985	-0.215041614	-0.709213618
4:41:20	-0.499968318	-0.207063904	-0.709192997	**4:41:24**	-0.499966651	-0.200537154	-0.709172377
4:41:28	-0.499964984	-0.198363235	-0.709151757	**4:41:32**	-0.499963317	-0.196189316	-0.709131137
4:41:36	-0.49996165	-0.181702282	-0.709110517	**4:41:40**	-0.499959983	-0.163110874	-0.709089896
4:41:44	-0.499958316	-0.150291928	-0.709069276	**4:41:48**	-0.499956649	-0.154790378	-0.709048656
4:41:52	-0.499954982	-0.159288828	-0.709028036	**4:41:56**	-0.499953315	-0.166331752	-0.709007416
4:42:00	-0.499951648	-0.174222843	-0.708986795	**4:42:04**	-0.499858999	-0.183692064	-0.708966175
4:42:08	-0.499766349	-0.198058383	-0.708945555	**4:42:12**	-0.4996737	-0.21242471	-0.708924935
4:42:16	-0.499581051	-0.222337311	-0.708904315	**4:42:20**	-0.499488402	-0.230765325	-0.708883694
4:42:24	-0.499395752	-0.238645555	-0.708863074	**4:42:28**	-0.499303103	-0.244882426	-0.708842454
4:42:32	-0.499210454	-0.251119296	-0.708821834	**4:42:36**	-0.499117805	-0.259337119	-0.708801214
4:42:40	-0.499025155	-0.268215261	-0.708780593	**4:42:44**	-0.498932506	-0.278137701	-0.708759973
4:42:48	-0.498839857	-0.291193042	-0.708739353	**4:42:52**	-0.498747208	-0.304248382	-0.708718733
4:42:56	-0.498654558	-0.312623564	-0.708698113	**4:43:00**	-0.498561909	-0.319438693	-0.708677493
4:43:04	-0.498544883	-0.326468769	-0.708656872	**4:43:08**	-0.498527858	-0.334008445	-0.708636252
4:43:12	-0.498510832	-0.341548126	-0.708615632	**4:43:16**	-0.498493806	-0.34984163	-0.708595012
4:43:20	-0.498476781	-0.358386411	-0.708574392	**4:43:24**	-0.498459755	-0.366490348	-0.708553771
4:43:28	-0.498442729	-0.373271743	-0.708533151	**4:43:32**	-0.498425703	-0.380053146	-0.708512531
4:43:36	-0.498408678	-0.388491037	-0.708491911	**4:43:40**	-0.498391652	-0.397481082	-0.708471291
4:43:44	-0.498374626	-0.405714004	-0.70845067	**4:43:48**	-0.498357601	-0.41167554	-0.70843005
4:43:52	-0.498340575	-0.417637067	-0.70840943	**4:43:56**	-0.498323549	-0.408527811	-0.70838881
4:44:00	-0.498306523	-0.399418546	-0.70836819	**4:44:04**	-0.498149666	-0.388501439	-0.708347569
4:44:08	-0.497992808	-0.372410806	-0.708326949	**4:44:12**	-0.49783595	-0.356320178	-0.708306329
4:44:16	-0.497679093	-0.344496888	-0.708285709	**4:44:20**	-0.497522235	-0.33409605	-0.708265089
4:44:24	-0.497365377	-0.325722442	-0.708244468	**4:44:28**	-0.49720852	-0.323430524	-0.708223848
4:44:32	-0.497051662	-0.321138606	-0.708203228	**4:44:36**	-0.496894804	-0.31538409	-0.708182608
4:44:40	-0.496737947	-0.308475374	-0.708161988	**4:44:44**	-0.496581089	-0.302094981	-0.708141367
4:44:48	-0.496424231	-0.297299562	-0.708120747	**4:44:52**	-0.496267374	-0.292504143	-0.708100127
4:44:56	-0.496110516	-0.281670675	-0.708079507	**4:45:00**	-0.995953658	-0.768824524	-1.208058887
4:45:04	-0.995975481	-0.757949276	-1.208038267	**4:45:08**	-0.995997304	-0.752667203	-1.208017646

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:45:12	-0.496019127	-0.247385131	-0.707997026	**4:45:16**	-0.49604095	-0.241142295	-0.707976406
4:45:20	-0.496062772	-0.23457921	-0.707955786	**4:45:24**	-0.496084595	-0.229042045	-0.707935166
4:45:28	-0.496106418	-0.226582633	-0.707914545	**4:45:32**	-0.496128241	-0.224123221	-0.707893925
4:45:36	-0.496150063	-0.220591612	-0.707873305	**4:45:40**	-0.496171886	-0.215987814	-0.707852685
4:45:44	-0.496193709	-0.211384016	-0.707832065	**4:45:48**	-0.496215532	-0.212322085	-0.707811444
4:45:52	-0.496237354	-0.213260146	-0.707790824	**4:45:56**	-0.496259177	-0.209998142	-0.707770204
4:46:00	-0.496281	-0.202536066	-0.707749584	**4:46:04**	-0.496352178	-0.195103409	-0.707728964
4:46:08	-0.496423357	-0.186202163	-0.707708343	**4:46:12**	-0.496494535	-0.177300917	-0.707687723
4:46:16	-0.496565714	-0.173566089	-0.707667103	**4:46:20**	-0.496636892	-0.174997673	-0.707646483
4:46:24	-0.49670807	-0.176429256	-0.707625863	**4:46:28**	-0.496779249	-0.193101685	-0.707605242
4:46:32	-0.496850427	-0.209774113	-0.707584622	**4:46:36**	-0.496921606	-0.227358692	-0.707564002
4:46:40	-0.496992784	-0.245855417	-0.707543382	**4:46:44**	-0.497063962	-0.264352145	-0.707522762
4:46:48	-0.497135141	-0.285468183	-0.707502142	**4:46:52**	-0.497206319	-0.306584222	-0.707481521
4:46:56	-0.497277498	-0.321533874	-0.707460901	**4:47:00**	-0.497348676	-0.330317139	-0.707440281
4:47:04	-0.49734204	-0.339054021	-0.707419661	**4:47:08**	-0.497335404	-0.337930805	-0.707399041
4:47:12	-0.497328768	-0.336807589	-0.70737842	**4:47:16**	-0.497322132	-0.337400563	-0.7073578
4:47:20	-0.497300573	-0.339700841	-0.707316961	**4:47:24**	-0.497259056	-0.341989217	-0.707249079
4:47:28	-0.497217538	-0.34803413	-0.707181197	**4:47:32**	-0.49717602	-0.354079043	-0.707113315
4:47:36	-0.497134502	-0.354412432	-0.707045433	**4:47:40**	-0.497092984	-0.349034295	-0.70697755
4:47:44	-0.497051466	-0.343656158	-0.706909668	**4:47:48**	-0.497009949	-0.338278022	-0.706841786
4:47:52	-0.496968431	-0.332899882	-0.706773904	**4:47:56**	-0.496926913	-0.322891671	-0.706706022
4:48:00	-0.496885395	-0.308253382	-0.70663814	**4:48:04**	-0.496799337	-0.293588545	-0.706570258
4:48:08	-0.496713279	-0.291809979	-0.706502376	**4:48:12**	-0.496627221	-0.290031412	-0.706434493
4:48:16	-0.496541163	-0.2865712	-0.706366611	**4:48:20**	-0.496455105	-0.281429341	-0.706298729
4:48:24	-0.496369047	-0.276287482	-0.706230847	**4:48:28**	-0.496282988	-0.271145625	-0.706162965
4:48:32	-0.49619693	-0.266003767	-0.706095083	**4:48:36**	-0.496110872	-0.258926771	-0.706027201
4:48:40	-0.496024814	-0.249914635	-0.705959318	**4:48:44**	-0.495938756	-0.240902502	-0.705891436
4:48:48	-0.495852698	-0.246721532	-0.705823554	**4:48:52**	-0.49576664	-0.252540567	-0.705755672
4:48:56	-0.495680582	-0.253745922	-0.70568779	**4:49:00**	-0.495594524	-0.250337601	-0.705619908
4:49:04	-0.495550747	-0.246954484	-0.705552026	**4:49:08**	-0.495506971	-0.233380646	-0.705484144
4:49:12	-0.495463194	-0.219806812	-0.705416261	**4:49:16**	-0.495419418	-0.215292332	-0.705348379
4:49:20	-0.495375641	-0.213797647	-0.705280497	**4:49:24**	-0.495331865	-0.212302963	-0.705212615
4:49:28	-0.495288088	-0.211980811	-0.705144733	**4:49:32**	-0.495244312	-0.211658658	-0.705076851
4:49:36	-0.495200536	-0.211924172	-0.705008969	**4:49:40**	-0.495156759	-0.212777368	-0.704941087
4:49:44	-0.495112983	-0.213630555	-0.704873204	**4:49:48**	-0.495069206	-0.211733588	-0.704805322
4:49:52	-0.49502543	-0.209836613	-0.70473744	**4:49:56**	-0.494981653	-0.20097027	-0.704669558
4:50:00	-0.494937877	-0.185134541	-0.704601676	**4:50:04**	-0.495000613	-0.169362311	-0.704533794
4:50:08	-0.495063349	-0.157908449	-0.704465912	**4:50:12**	-0.495126085	-0.146454588	-0.70439803
4:50:16	-0.495188821	-0.134074483	-0.704330147	**4:50:20**	-0.495251557	-0.120768136	-0.704262265
4:50:24	-0.495314293	-0.107461789	-0.704194383	**4:50:28**	-0.49537703	-0.103379018	-0.704126501
4:50:32	-0.495439766	-0.099296247	-0.704058619	**4:50:36**	-0.495502502	-0.091983178	-0.703990737
4:50:40	-0.495565238	-0.081439792	-0.703922855	**4:50:44**	-0.495627974	-0.070896407	-0.703854973
4:50:48	-0.49569071	-0.052999342	-0.70378709	**4:50:52**	-0.495753446	-0.035102258	-0.703719208
4:50:56	-0.495816182	-0.014638672	-0.703651326	**4:51:00**	-0.495878918	0.008391451	-0.703583444
4:51:04	-0.495836949	0.03148397	-0.703515562	**4:51:08**	-0.495794979	0.043968048	-0.70344768
4:51:12	-0.49575301	0.056452127	-0.703379798	**4:51:16**	-0.49571104	0.062752561	-0.703311916
4:51:20	-0.495669071	0.062869351	-0.703244033	**4:51:24**	-0.495627101	0.062986141	-0.703176151
4:51:28	-0.495585131	0.066561114	-0.703108269	**4:51:32**	-0.495543162	0.070136052	-0.703040387
4:51:36	-0.495501192	0.071203821	-0.702972505	**4:51:40**	-0.495459223	0.069764424	-0.702904623
4:51:44	-0.495417253	0.068325025	-0.702836741	**4:51:48**	-0.495375284	0.063507101	-0.702768858
4:51:52	-0.495333314	0.058689141	-0.702700976	**4:51:56**	-0.495291345	0.046546651	-0.702633094
4:52:00	-0.495249375	0.027079598	-0.702565212	**4:52:04**	-0.495248833	0.00758785	-0.70249733
4:52:08	-0.495248291	-0.027283778	-0.702429448	**4:52:12**	-0.49524775	-0.062155406	-0.702361566
4:52:16	-0.495247208	-0.089615423	-0.702293684	**4:52:20**	-0.495246666	-0.114604884	-0.702225801
4:52:24	-0.495246125	-0.139594363	-0.702157919	**4:52:28**	-0.495245583	-0.167815607	-0.702090037
4:52:32	-0.495245041	-0.196036849	-0.702022155	**4:52:36**	-0.495244499	-0.216892011	-0.701954273
4:52:40	-0.495243958	-0.230381093	-0.701886391	**4:52:44**	-0.495243416	-0.243870175	-0.701818509

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
4:52:48	-0.495242874	-0.259853274	-0.701750627	**4:52:52**	-0.495242332	-0.275836374	-0.701682744
4:52:56	-0.495241791	-0.290101956	-0.701614862	**4:53:00**	-0.495241249	-0.303795033	-0.70154698
4:53:04	-0.495179855	-0.317451837	-0.701479098	**4:53:08**	-0.495118461	-0.334624328	-0.701411216
4:53:12	-0.495057068	-0.351796821	-0.701343334	**4:53:16**	-0.494995674	-0.35986411	-0.701275452
4:53:20	-0.49493428	-0.358826192	-0.70120757	**4:53:24**	-0.494872886	-0.357788276	-0.701139687
4:53:28	-0.494811492	-0.3550861	-0.701071805	**4:53:32**	-0.494750098	-0.34739115	-0.701003923
4:53:36	-0.494688705	-0.342817862	-0.700936041	**4:53:40**	-0.494627311	-0.341366232	-0.700868159
4:53:44	-0.494565917	-0.339914602	-0.700800277	**4:53:48**	-0.494504523	-0.331052133	-0.700732395
4:53:52	-0.494443129	-0.322189665	-0.700664513	**4:53:56**	-0.494381736	-0.314059624	-0.70059663
4:54:00	-0.494320342	-0.30666201	-0.700528748	**4:54:04**	-0.494265728	-0.299268437	-0.700460866
4:54:08	-0.494211115	-0.299919518	-0.700392984	**4:54:12**	-0.494156502	-0.300570597	-0.700325102
4:54:16	-0.494101888	-0.305222467	-0.70025722	**4:54:20**	-0.494047275	-0.313875128	-0.700189338
4:54:24	-0.493992661	-0.322527788	-0.700121456	**4:54:28**	-0.493938048	-0.339796497	-0.700053573
4:54:32	-0.493883435	-0.357065208	-0.699985691	**4:54:36**	-0.493828821	-0.377023221	-0.699917809
4:54:40	-0.493774208	-0.397877675	-0.699849927	**4:54:44**	-0.493719594	-0.418732121	-0.699782045
4:54:48	-0.493664981	-0.433353927	-0.699714163	**4:54:52**	-0.493610368	-0.447975742	-0.699646281
4:54:56	-0.493555754	-0.458811864	-0.699578398	**4:55:00**	-0.493501141	-0.465862292	-0.699510516
4:55:04	-0.493426647	-0.47290087	-0.699442634	**4:55:08**	-0.493352153	-0.483625499	-0.699374752
4:55:12	-0.493277659	-0.494350128	-0.69930687	**4:55:16**	-0.493203165	-0.510874826	-0.699238988
4:55:20	-0.493128671	-0.533199574	-0.699171106	**4:55:24**	-0.493054178	-0.555524341	-0.699103224
4:55:28	-0.492979684	-0.579006655	-0.699035341	**4:55:32**	-0.49290519	-0.602488952	-0.698967459
4:55:36	-0.492830696	-0.619260756	-0.698899577	**4:55:40**	-0.492756202	-0.633795772	-0.698831695
4:55:44	-0.492681708	-0.645623305	-0.698763813	**4:55:48**	-0.492607214	-0.649328567	-0.698695931
4:55:52	-0.49253272	-0.653033865	-0.698628049	**4:55:56**	-0.492458227	-0.659995077	-0.698560167
4:56:00	-0.492383733	-0.668041571	-0.698492284	**4:56:04**	-0.49244749	-0.67448471	-0.698424402
4:56:08	-0.492511247	-0.675870416	-0.69835652	**4:56:12**	-0.492575004	-0.677256122	-0.698288638
4:56:16	-0.492638761	-0.680906259	-0.698220756	**4:56:20**	-0.492702518	-0.685311218	-0.698152874
4:56:24	-0.492766275	-0.692275644	-0.698084992	**4:56:28**	-0.492830032	-0.706918579	-0.69801711
4:56:32	-0.492893789	-0.721561514	-0.697949227	**4:56:36**	-0.492957546	-0.725592242	-0.697881345
4:56:40	-0.493021303	-0.726085556	-0.697813463	**4:56:44**	-0.49308506	-0.725030747	-0.697745581
4:56:48	-0.493148817	-0.719331392	-0.697677699	**4:56:52**	-0.493212574	-0.713632073	-0.697609817
4:56:56	-0.493276331	-0.701705373	-0.697541935	**4:57:00**	-0.493340088	-0.687702867	-0.697474053
4:57:04	-0.493278242	-0.669821572	-0.69740617	**4:57:08**	-0.493216397	-0.640528587	-0.697338288
4:57:12	-0.493154551	-0.611235602	-0.697270406	**4:57:16**	-0.493092706	-0.580752062	-0.697202524
4:57:20	-0.49303086	-0.549871641	-0.697134642	**4:57:24**	-0.492969015	-0.525746657	-0.69706676
4:57:28	-0.492907169	-0.508377091	-0.696998878	**4:57:32**	-0.492845324	-0.491007526	-0.696930996
4:57:36	-0.492783478	-0.461896504	-0.696863113	**4:57:40**	-0.492721633	-0.428871679	-0.696795231
4:57:44	-0.492659787	-0.398925291	-0.696727349	**4:57:48**	-0.492597942	-0.378214229	-0.696659467
4:57:52	-0.492536096	-0.357503172	-0.696591585	**4:57:56**	-0.49247425	-0.342376222	-0.696523703
4:58:00	-0.492412405	-0.327249271	-0.696455821	**4:58:04**	-0.492277777	-0.311406609	-0.696387938
4:58:08	-0.49214315	-0.29354696	-0.696320056	**4:58:12**	-0.492008522	-0.275687313	-0.696252174
4:58:16	-0.491873894	-0.258209352	-0.696184292	**4:58:20**	-0.491739266	-0.240858619	-0.69611641
4:58:24	-0.491604639	-0.225642878	-0.696048528	**4:58:28**	-0.491470011	-0.216832113	-0.695980646
4:58:32	-0.491335383	-0.208021347	-0.695912764	**4:58:36**	-0.491200756	-0.193705922	-0.695844881
4:58:40	-0.491066128	-0.177555607	-0.695776999	**4:58:44**	-0.4909315	-0.158068645	-0.695709117
4:58:48	-0.490796872	-0.128571719	-0.695641235	**4:58:52**	-0.490662245	-0.099074792	-0.695573353
4:58:56	-0.490527617	-0.081089481	-0.695505471	**4:59:00**	-0.490392989	-0.066941346	-0.695437589
4:59:04	-0.490337468	-0.055499936	-0.695369707	**4:59:08**	-0.490281946	-0.052037152	-0.695301824
4:59:12	-0.490226425	-0.048574368	-0.695233942	**4:59:16**	-0.490170904	-0.047069787	-0.69516606
4:59:20	-0.490115382	-0.046217969	-0.695098178	**4:59:24**	-0.490059861	-0.042299112	-0.695030296
4:59:28	-0.49000434	-0.029179186	-0.694962414	**4:59:32**	-0.489948818	-0.016059261	-0.694894532
4:59:36	-0.489893297	-0.006255668	-0.69482665	**4:59:40**	-0.489837776	0.002442463	-0.694758767
4:59:44	-0.489782254	0.01087979	-0.694690885	**4:59:48**	-0.489726733	0.018534654	-0.694623003
4:59:52	-0.489671211	0.026189517	-0.694555121	**4:59:56**	-0.48961569	0.048914107	-0.694487239
5:00:00	0.010439831	0.576661914	-0.194419357	**5:00:04**	0.010567006	0.599798791	-0.194351475
5:00:08	0.01069418	0.608974602	-0.194283593	**5:00:12**	-0.489178646	0.118150413	-0.69421571
5:00:16	-0.489051472	0.124919889	-0.694147828	**5:00:20**	-0.488924298	0.130887252	-0.694079946

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:00:24	-0.488797123	0.133999899	-0.694012064	**5:00:28**	-0.488669949	0.128548325	-0.693944182
5:00:32	-0.488542775	0.123096751	-0.6938763	**5:00:36**	-0.488415601	0.109471353	-0.693808418
5:00:40	-0.488288426	0.093121312	-0.693740536	**5:00:44**	-0.488161252	0.077610298	-0.693672653
5:00:48	-0.488034078	0.064616329	-0.693604771	**5:00:52**	-0.487906904	0.05162236	-0.693536889
5:00:56	-0.48777973	0.039027279	-0.693469007	**5:01:00**	-0.487652555	0.02656522	-0.693401125
5:01:04	-0.48761962	0.017489538	-0.693333243	**5:01:08**	-0.487586685	0.018741578	-0.693265361
5:01:12	-0.48755375	0.019993655	-0.693197479	**5:01:16**	-0.487520815	0.021758775	-0.693129596
5:01:20	-0.48748788	0.023694899	-0.693061714	**5:01:24**	-0.487454945	0.024056181	-0.692993832
5:01:28	-0.48742201	0.019692871	-0.69292595	**5:01:32**	-0.487389075	0.01532956	-0.692858068
5:01:36	-0.48735614	0.003333343	-0.692790186	**5:01:40**	-0.487323205	-0.011207188	-0.692722304
5:01:44	-0.48729027	-0.026540558	-0.692654421	**5:01:48**	-0.487257335	-0.044252444	-0.692586539
5:01:52	-0.4872244	-0.06196433	-0.692518657	**5:01:56**	-0.487191465	-0.074513705	-0.692450775
5:02:00	-0.48715853	-0.08534223	-0.692382893	**5:02:04**	-0.487036383	-0.097593381	-0.692315011
5:02:08	-0.486914237	-0.114271921	-0.692247129	**5:02:12**	-0.48679209	-0.130950462	-0.692179247
5:02:16	-0.486669944	-0.154081001	-0.692111364	**5:02:20**	-0.486547797	-0.179362214	-0.692043482
5:02:24	-0.486425651	-0.202436759	-0.6919756	**5:02:28**	-0.486303504	-0.218891322	-0.691907718
5:02:32	-0.486181358	-0.235345885	-0.691839836	**5:02:36**	-0.486059211	-0.251800445	-0.691771954
5:02:40	-0.485937065	-0.268255008	-0.691704072	**5:02:44**	-0.485814918	-0.283388347	-0.69163619
5:02:48	-0.485692772	-0.294558023	-0.691568307	**5:02:52**	-0.485570625	-0.305727698	-0.691500425
5:02:56	-0.485448479	-0.309872612	-0.691432543	**5:03:00**	-0.485326332	-0.311675937	-0.691364661
5:03:04	-0.485222024	-0.315193735	-0.691296779	**5:03:08**	-0.485117716	-0.323823055	-0.691228897
5:03:12	-0.485013409	-0.332452375	-0.691161015	**5:03:16**	-0.484909101	-0.323635815	-0.691093133
5:03:20	-0.484804793	-0.30900396	-0.69102525	**5:03:24**	-0.484700485	-0.294372105	-0.690957368
5:03:28	-0.484596177	-0.284692726	-0.690889486	**5:03:32**	-0.484491869	-0.279965824	-0.690821604
5:03:36	-0.484387562	-0.280982049	-0.690753722	**5:03:40**	-0.484283254	-0.283912651	-0.69068584
5:03:44	-0.484178946	-0.286695453	-0.690617958	**5:03:48**	-0.484074638	-0.289034853	-0.690550076
5:03:52	-0.48397033	-0.291374253	-0.690482193	**5:03:56**	-0.483866022	-0.281451193	-0.690414311
5:04:00	-0.483761715	-0.267440647	-0.690346429	**5:04:04**	-0.483940721	-0.251423689	-0.690278547
5:04:08	-0.484119727	-0.228880846	-0.690210665	**5:04:12**	-0.484298733	-0.206338002	-0.690142783
5:04:16	-0.484477739	-0.193880992	-0.690074901	**5:04:20**	-0.484656745	-0.184785916	-0.690007019
5:04:24	-0.484835751	-0.177829454	-0.689939136	**5:04:28**	-0.485014757	-0.177288819	-0.689871254
5:04:32	-0.485193763	-0.176748186	-0.689803372	**5:04:36**	-0.485372769	-0.191376457	-0.68973549
5:04:40	-0.485551775	-0.211061034	-0.689667608	**5:04:44**	-0.485730781	-0.231564995	-0.689599726
5:04:48	-0.485909787	-0.25452712	-0.689531844	**5:04:52**	-0.486088793	-0.277489247	-0.689463961
5:04:56	-0.486267799	-0.300047086	-0.689396079	**5:05:00**	-0.486446805	-0.322470162	-0.689328197
5:05:04	-0.48637999	-0.340936114	-0.689260315	**5:05:08**	-0.486313176	-0.347970276	-0.689192433
5:05:12	-0.486246361	-0.355004438	-0.689124551	**5:05:16**	-0.486179547	-0.355813	-0.689056669
5:05:20	-0.486112732	-0.354546364	-0.688988787	**5:05:24**	-0.486045918	-0.352446973	-0.688920904
5:05:28	-0.485979103	-0.347849327	-0.688853022	**5:05:32**	-0.485912289	-0.343251677	-0.68878514
5:05:36	-0.485845474	-0.333458465	-0.688717258	**5:05:40**	-0.485778659	-0.318469682	-0.688649376
5:05:44	-0.485711845	-0.303480902	-0.688581494	**5:05:48**	-0.48564503	-0.295175339	-0.688513612
5:05:52	-0.485578216	-0.286869776	-0.68844573	**5:05:56**	-0.485511401	-0.288043377	-0.688377847
5:06:00	-0.485444587	-0.29869614	-0.688309965	**5:06:04**	-0.485449163	-0.309391459	-0.688242083
5:06:08	-0.485453739	-0.349207425	-0.688174201	**5:06:12**	-0.485458316	-0.389023391	-0.688106319
5:06:16	-0.485462892	-0.427571562	-0.688038437	**5:06:20**	-0.485467468	-0.464851919	-0.687970555
5:06:24	-0.485472045	-0.502132294	-0.687902673	**5:06:28**	-0.485476621	-0.517106598	-0.68783479
5:06:32	-0.485481197	-0.532080902	-0.687766908	**5:06:36**	-0.485485774	-0.549695414	-0.687699026
5:06:40	-0.48549035	-0.569950097	-0.687631144	**5:06:44**	-0.485494926	-0.590204781	-0.687563262
5:06:48	-0.485499503	-0.596451127	-0.68749538	**5:06:52**	-0.485504079	-0.602697473	-0.687427498
5:06:56	-0.485508655	-0.611368416	-0.687359616	**5:07:00**	-0.485513232	-0.622463957	-0.687291733
5:07:04	-0.48545771	-0.63352371	-0.687223851	**5:07:08**	-0.485402189	-0.63157423	-0.687155969
5:07:12	-0.485346668	-0.629624714	-0.687088087	**5:07:16**	-0.485291146	-0.629268585	-0.687020205
5:07:20	-0.485235625	-0.630505808	-0.686952323	**5:07:24**	-0.485180104	-0.631743031	-0.686884441
5:07:28	-0.485124582	-0.631601784	-0.686816559	**5:07:32**	-0.485069061	-0.631460501	-0.686748676
5:07:36	-0.485013539	-0.627648072	-0.686680794	**5:07:40**	-0.484958018	-0.620164425	-0.686612912
5:07:44	-0.484902497	-0.612680778	-0.68654503	**5:07:48**	-0.484846975	-0.607094295	-0.686477148
5:07:52	-0.484791454	-0.601507847	-0.686409266	**5:07:56**	-0.484735933	-0.595010247	-0.686341384

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:08:00	-0.484680411	-0.587601531	-0.686273501	**5:08:04**	-0.484661082	-0.580214371	-0.686205619
5:08:08	-0.484641753	-0.566259459	-0.686137737	**5:08:12**	-0.484622424	-0.552304547	-0.686069855
5:08:16	-0.484603095	-0.537648959	-0.686001973	**5:08:20**	-0.484583766	-0.522759819	-0.685934091
5:08:24	-0.484564437	-0.507870661	-0.685866209	**5:08:28**	-0.484545108	-0.485267732	-0.685798327
5:08:32	-0.484525779	-0.462664802	-0.685730444	**5:08:36**	-0.48450645	-0.439686754	-0.685662562
5:08:40	-0.484487121	-0.416333577	-0.68559468	**5:08:44**	-0.484467792	-0.392980408	-0.685526798
5:08:48	-0.484448463	-0.357208488	-0.685458916	**5:08:52**	-0.484429134	-0.321436564	-0.685391034
5:08:56	-0.484409805	-0.284822885	-0.685323152	**5:09:00**	-0.484390476	-0.247928619	-0.68525527
5:09:04	-0.484314627	-0.211000665	-0.685187387	**5:09:08**	-0.484238778	-0.183669571	-0.685119505
5:09:12	-0.484162929	-0.156338478	-0.685051623	**5:09:16**	-0.484087079	-0.129312608	-0.684983741
5:09:20	-0.48401123	-0.102591954	-0.684915859	**5:09:24**	-0.483935381	-0.0758713	-0.684847977
5:09:28	-0.483859532	-0.052508192	-0.684780095	**5:09:32**	-0.483783683	-0.029145085	-0.684712213
5:09:36	-0.483707834	-0.015530429	-0.68464433	**5:09:40**	-0.483631985	-0.01166426	-0.684576448
5:09:44	-0.483556136	-0.007798091	-0.684508566	**5:09:48**	-0.483480287	-0.018535396	-0.684440684
5:09:52	-0.483404438	-0.029272701	-0.684372802	**5:09:56**	-0.483328589	-0.032507758	-0.68430492
5:10:00	-0.48325274	-0.028240569	-0.684237038	**5:10:04**	-0.483251778	-0.024018036	-0.684169156
5:10:08	-0.483250816	-0.021929293	-0.684101273	**5:10:12**	-0.483249854	-0.019840532	-0.684033391
5:10:16	-0.483248892	-0.021534161	-0.683965509	**5:10:20**	-0.483247931	-0.027010143	-0.683897627
5:10:24	-0.483246969	-0.032486126	-0.683829745	**5:10:28**	-0.483246007	-0.034613693	-0.683761863
5:10:32	-0.483245045	-0.036741278	-0.683693981	**5:10:36**	-0.483244083	-0.034383967	-0.683626099
5:10:40	-0.483243121	-0.027541799	-0.683558216	**5:10:44**	-0.48324216	-0.02069963	-0.683490334
5:10:48	-0.483241198	-0.024800678	-0.683422452	**5:10:52**	-0.483240236	-0.028901726	-0.68335457
5:10:56	-0.483239274	-0.032181476	-0.683286688	**5:11:00**	-0.483238312	-0.034639928	-0.683218806
5:11:04	-0.483190019	-0.037070166	-0.683150924	**5:11:08**	-0.483141725	-0.049046623	-0.683083041
5:11:12	-0.483093431	-0.061023079	-0.683015159	**5:11:16**	-0.483045137	-0.070619492	-0.682947277
5:11:20	-0.482996844	-0.077835861	-0.682879395	**5:11:24**	-0.48294855	-0.08409283	-0.682811513
5:11:28	-0.482900256	-0.087471632	-0.682743631	**5:11:32**	-0.482851962	-0.090850417	-0.682675749
5:11:36	-0.482803669	-0.099235686	-0.682607867	**5:11:40**	-0.482755375	-0.112627439	-0.682539984
5:11:44	-0.482707081	-0.126019173	-0.682472102	**5:11:48**	-0.482658787	-0.137124396	-0.68240422
5:11:52	-0.482610494	-0.148229618	-0.682336338	**5:11:56**	-0.4825622	-0.162076964	-0.682268456
5:12:00	-0.482513906	-0.178666444	-0.682200574	**5:12:04**	-0.482338596	-0.19518021	-0.682132692
5:12:08	-0.482163286	-0.192154953	-0.68206481	**5:12:12**	-0.481987976	-0.189129697	-0.681996927
5:12:16	-0.481812665	-0.186688037	-0.681929045	**5:12:20**	-0.481637355	-0.184829975	-0.681861163
5:12:24	-0.481462045	-0.182971903	-0.681793281	**5:12:28**	-0.481286735	-0.186422494	-0.681725399
5:12:32	-0.481111425	-0.189873084	-0.681657517	**5:12:36**	-0.480936114	-0.190563893	-0.681589635
5:12:40	-0.480760804	-0.188494927	-0.681521753	**5:12:44**	-0.480585494	-0.186425963	-0.68145387
5:12:48	-0.480410184	-0.191927399	-0.681385988	**5:12:52**	-0.480234873	-0.197428844	-0.681318106
5:12:56	-0.480059563	-0.208875505	-0.681250224	**5:13:00**	-0.479884253	-0.22626738	-0.681182342
5:13:04	-0.47983867	-0.243736589	-0.68111446	**5:13:08**	-0.479793086	-0.246175931	-0.681046578
5:13:12	-0.479747503	-0.248615268	-0.680978696	**5:13:16**	-0.47970192	-0.253460868	-0.680910813
5:13:20	-0.479656336	-0.260712728	-0.680842931	**5:13:24**	-0.479610753	-0.267964588	-0.680775049
5:13:28	-0.479565169	-0.275216447	-0.680707167	**5:13:32**	-0.479519586	-0.29029253	-0.680639285
5:13:36	-0.479474003	-0.303957421	-0.680571403	**5:13:40**	-0.479428419	-0.313388743	-0.680503521
5:13:44	-0.479382836	-0.322820065	-0.680435639	**5:13:48**	-0.479337252	-0.335005199	-0.680367756
5:13:52	-0.479291669	-0.347190332	-0.680299874	**5:13:56**	-0.479246086	-0.359097216	-0.680231992
5:14:00	-0.479200502	-0.370725857	-0.68016411	**5:14:04**	-0.47913526	-0.38234277	-0.680096228
5:14:08	-0.479070017	-0.390460144	-0.680028346	**5:14:12**	-0.479004775	-0.398577516	-0.679960464
5:14:16	-0.478939532	-0.411296668	-0.679892581	**5:14:20**	-0.47887429	-0.428617595	-0.679824699
5:14:24	-0.478809047	-0.445938524	-0.679756817	**5:14:28**	-0.478743805	-0.458147152	-0.679688935
5:14:32	-0.478678562	-0.470355781	-0.679621053	**5:14:36**	-0.47861332	-0.478489294	-0.679553171
5:14:40	-0.478548077	-0.482547708	-0.679485289	**5:14:44**	-0.478482835	-0.486606104	-0.679417407
5:14:48	-0.478417592	-0.488203628	-0.679349524	**5:14:52**	-0.47835235	-0.489801169	-0.679281642
5:14:56	-0.478287107	-0.490349704	-0.67921376	**5:15:00**	-0.978221865	-0.989849269	-1.179145878
5:15:04	-0.978183509	-0.989364861	-1.179077996	**5:15:08**	-0.978145153	-0.999247134	-1.179010114
5:15:12	-0.478106797	-0.509129389	-0.678942232	**5:15:16**	-0.478068441	-0.519011662	-0.67887435
5:15:20	-0.478030086	-0.528893917	-0.678806467	**5:15:24**	-0.47799173	-0.53877619	-0.678738585
5:15:28	-0.477953374	-0.534182149	-0.678670703	**5:15:32**	-0.477915018	-0.529588126	-0.678602821

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:15:36	-0.477876663	-0.522347233	-0.678534939	**5:15:40**	-0.477838307	-0.512459471	-0.678467057
5:15:44	-0.477799951	-0.502571708	-0.678399175	**5:15:48**	-0.477761595	-0.482012316	-0.678331293
5:15:52	-0.47772324	-0.461452906	-0.67826341	**5:15:56**	-0.477684884	-0.452140347	-0.678195528
5:16:00	-0.477646528	-0.454074604	-0.678127646	**5:16:04**	-0.477402876	-0.455886503	-0.678059764
5:16:08	-0.477159224	-0.446801535	-0.677991882	**5:16:12**	-0.476915572	-0.437716567	-0.677924
5:16:16	-0.47667192	-0.424873893	-0.677856118	**5:16:20**	-0.476428269	-0.408273488	-0.677788236
5:16:24	-0.476184617	-0.391673082	-0.677720353	**5:16:28**	-0.475940965	-0.372690883	-0.677652471
5:16:32	-0.475697313	-0.353708684	-0.677584589	**5:16:36**	-0.475453661	-0.345543856	-0.677516707
5:16:40	-0.475210009	-0.340984814	-0.677448825	**5:16:44**	-0.474966357	-0.336425777	-0.677380943
5:16:48	-0.474722705	-0.326400762	-0.677313061	**5:16:52**	-0.474478769	-0.316375579	-0.677244794
5:16:56	-0.474231988	-0.307297204	-0.677172672	**5:17:00**	-0.473985208	-0.299167331	-0.677100551
5:17:04	-0.473891774	-0.291128867	-0.677028429	**5:17:08**	-0.473798341	-0.276958452	-0.676956307
5:17:12	-0.473704908	-0.262788037	-0.676884186	**5:17:16**	-0.473611475	-0.242394883	-0.676812064
5:17:20	-0.473518041	-0.215778987	-0.676739943	**5:17:24**	-0.473424608	-0.189163096	-0.676667821
5:17:28	-0.473331175	-0.176149508	-0.6765957	**5:17:32**	-0.473237742	-0.163135929	-0.676523578
5:17:36	-0.473144308	-0.153845796	-0.676451457	**5:17:40**	-0.473050875	-0.148279118	-0.676379335
5:17:44	-0.472957442	-0.141932392	-0.676307214	**5:17:48**	-0.472864009	-0.133245487	-0.676235092
5:17:52	-0.472770576	-0.124558581	-0.67616297	**5:17:56**	-0.472677142	-0.111364059	-0.676090849
5:18:00	-0.472583709	-0.096667018	-0.676018727	**5:18:04**	-0.472497522	-0.081974295	-0.675946606
5:18:08	-0.472411334	-0.070384905	-0.675874484	**5:18:12**	-0.472325147	-0.058795516	-0.675802363
5:18:16	-0.472238959	-0.052989461	-0.675730241	**5:18:20**	-0.472152771	-0.05296674	-0.67565812
5:18:24	-0.472066584	-0.052944002	-0.675585998	**5:18:28**	-0.471980396	-0.059736816	-0.675513877
5:18:32	-0.471894209	-0.06652963	-0.675441755	**5:18:36**	-0.471808021	-0.07287703	-0.675369633
5:18:40	-0.471721834	-0.07877898	-0.675297512	**5:18:44**	-0.471635646	-0.084680929	-0.67522539
5:18:48	-0.471549459	-0.08865246	-0.675153269	**5:18:52**	-0.471463271	-0.092623991	-0.675081147
5:18:56	-0.471377084	-0.096595521	-0.675009026	**5:19:00**	-0.471290896	-0.100567052	-0.674936904
5:19:04	-0.471228632	-0.103438339	-0.674864783	**5:19:08**	-0.471166368	-0.102966113	-0.674792661
5:19:12	-0.471104104	-0.102493888	-0.67472054	**5:19:16**	-0.47104184	-0.098438007	-0.674648418
5:19:20	-0.470979576	-0.090798452	-0.674576296	**5:19:24**	-0.470917312	-0.083158897	-0.674504175
5:19:28	-0.470855048	-0.072469677	-0.674432053	**5:19:32**	-0.470792783	-0.061780473	-0.674359932
5:19:36	-0.470730519	-0.061573155	-0.67428781	**5:19:40**	-0.470668255	-0.071847757	-0.674215689
5:19:44	-0.470605991	-0.082122359	-0.674143567	**5:19:48**	-0.470543727	-0.086074522	-0.674071446
5:19:52	-0.470481463	-0.090026684	-0.673999324	**5:19:56**	-0.470419199	-0.087596469	-0.673927203
5:20:00	-0.470356935	-0.08303877	-0.673855081	**5:20:04**	-0.470310648	-0.078490613	-0.673782959
5:20:08	-0.470264362	-0.073223359	-0.673710838	**5:20:12**	-0.470218075	-0.067956088	-0.673638716
5:20:16	-0.470171789	-0.068502812	-0.673566595	**5:20:20**	-0.470125502	-0.074863533	-0.673494473
5:20:24	-0.470079216	-0.081224253	-0.673422352	**5:20:28**	-0.470032929	-0.086997708	-0.67335023
5:20:32	-0.469986643	-0.092771164	-0.673278109	**5:20:36**	-0.469940356	-0.103509125	-0.673205987
5:20:40	-0.469894069	-0.119211609	-0.673133866	**5:20:44**	-0.469847783	-0.134914085	-0.673061744
5:20:48	-0.469801496	-0.143053133	-0.672989622	**5:20:52**	-0.46975521	-0.15119218	-0.672917501
5:20:56	-0.469708923	-0.160840143	-0.672845379	**5:21:00**	-0.469662637	-0.171997023	-0.672773258
5:21:04	-0.469601728	-0.183145195	-0.672701136	**5:21:08**	-0.469540819	-0.183665776	-0.672629015
5:21:12	-0.46947991	-0.184186348	-0.672556893	**5:21:16**	-0.469419001	-0.188079584	-0.672484772
5:21:20	-0.469358092	-0.195345476	-0.67241265	**5:21:24**	-0.469297183	-0.202611368	-0.672340529
5:21:28	-0.469236274	-0.205038412	-0.672268407	**5:21:32**	-0.469175366	-0.207465448	-0.672196286
5:21:36	-0.469114457	-0.20623891	-0.672124164	**5:21:40**	-0.469053548	-0.201358786	-0.672052042
5:21:44	-0.468992639	-0.196478667	-0.671979921	**5:21:48**	-0.46893173	-0.200859847	-0.671907799
5:21:52	-0.468870821	-0.205241026	-0.671835678	**5:21:56**	-0.468809912	-0.212247429	-0.671763556
5:22:00	-0.468749003	-0.221879051	-0.671691435	**5:22:04**	-0.468671642	-0.231500866	-0.671619313
5:22:08	-0.468594282	-0.247040625	-0.671547192	**5:22:12**	-0.468516921	-0.262580384	-0.67147507
5:22:16	-0.46843956	-0.276542636	-0.671402949	**5:22:20**	-0.468362199	-0.28892738	-0.671330827
5:22:24	-0.468284838	-0.301312125	-0.671258705	**5:22:28**	-0.468207478	-0.302076717	-0.671186584
5:22:32	-0.468130117	-0.302841309	-0.671114462	**5:22:36**	-0.468052756	-0.305596065	-0.671042341
5:22:40	-0.467975395	-0.310340985	-0.670970219	**5:22:44**	-0.467898034	-0.315085905	-0.670898098
5:22:48	-0.467820674	-0.315827225	-0.670825976	**5:22:52**	-0.467743313	-0.316568545	-0.670753855
5:22:56	-0.467665952	-0.314027979	-0.670681733	**5:23:00**	-0.467588591	-0.308205519	-0.670609612
5:23:04	-0.467564272	-0.302414677	-0.67053749	**5:23:08**	-0.467539953	-0.296623835	-0.670465368

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:23:12	-0.467515634	-0.290832994	-0.670393247	**5:23:16**	-0.467491315	-0.286135167	-0.670321125
5:23:20	-0.467466996	-0.282530356	-0.670249004	**5:23:24**	-0.467442677	-0.278925546	-0.670176882
5:23:28	-0.467418358	-0.275320735	-0.670104761	**5:23:32**	-0.467394039	-0.261518598	-0.670032639
5:23:36	-0.46736972	-0.245357568	-0.669960518	**5:23:40**	-0.467345401	-0.222119859	-0.669888396
5:23:44	-0.467321081	-0.198882149	-0.669816275	**5:23:48**	-0.467296762	-0.185321596	-0.669744153
5:23:52	-0.467272443	-0.171761044	-0.669672031	**5:23:56**	-0.467248124	-0.156533629	-0.66959991
5:24:00	-0.467223805	-0.139639344	-0.669527788	**5:24:04**	-0.466910246	-0.122572647	-0.669455667
5:24:08	-0.466596686	-0.10697557	-0.669383545	**5:24:12**	-0.466283126	-0.09137851	-0.669311424
5:24:16	-0.465969567	-0.082898649	-0.669239302	**5:24:20**	-0.465656007	-0.08153602	-0.669167181
5:24:24	-0.465342448	-0.08017339	-0.669095059	**5:24:28**	-0.465028888	-0.072043209	-0.669022938
5:24:32	-0.464715329	-0.063913045	-0.668950816	**5:24:36**	-0.464401769	-0.057288902	-0.668878694
5:24:40	-0.46408821	-0.052170814	-0.668806573	**5:24:44**	-0.46377465	-0.047052709	-0.668734451
5:24:48	-0.46346109	-0.039238633	-0.66866233	**5:24:52**	-0.463147531	-0.031424539	-0.668590208
5:24:56	-0.462833971	-0.020858674	-0.668518087	**5:25:00**	-0.462520412	-0.007541004	-0.668445965
5:25:04	-0.462459955	0.005625777	-0.668373844	**5:25:08**	-0.462399497	0.016897101	-0.668301722
5:25:12	-0.46233904	0.028168425	-0.668229601	**5:25:16**	-0.462278583	0.038695763	-0.668157479
5:25:20	-0.462218126	0.048479186	-0.668085358	**5:25:24**	-0.462157669	0.058262574	-0.668013236
5:25:28	-0.462097211	0.071850379	-0.667941114	**5:25:32**	-0.462036754	0.085438184	-0.667868993
5:25:36	-0.461976297	0.096369456	-0.667796871	**5:25:40**	-0.46191584	0.104644194	-0.66772475
5:25:44	-0.461855383	0.112918932	-0.667652628	**5:25:48**	-0.461794925	0.117424746	-0.667580507
5:25:52	-0.461734468	0.12193056	-0.667508385	**5:25:56**	-0.461674011	0.130054832	-0.667436264
5:26:00	-0.461613554	0.141797559	-0.667364142	**5:26:04**	-0.461277128	0.153704788	-0.667292021
5:26:08	-0.460940702	0.161384515	-0.667219899	**5:26:12**	-0.460604276	0.169064241	-0.667147777
5:26:16	-0.46026785	0.173001727	-0.667075656	**5:26:20**	-0.459931424	0.173197007	-0.667003534
5:26:24	-0.459594998	0.173392287	-0.666931413	**5:26:28**	-0.459258572	0.166843055	-0.666859291
5:26:32	-0.458922146	0.160293824	-0.66678717	**5:26:36**	-0.45858572	0.149786226	-0.666715048
5:26:40	-0.458249294	0.135320297	-0.666642927	**5:26:44**	-0.457912868	0.120854368	-0.666570805
5:26:48	-0.457576442	0.114401528	-0.666498684	**5:26:52**	-0.457240016	0.107948723	-0.666426562
5:26:56	-0.456903591	0.095219792	-0.66635444	**5:27:00**	-0.456567165	0.076214768	-0.666282319
5:27:04	-0.456535166	0.05702828	-0.666210197	**5:27:08**	-0.456503168	0.035113702	-0.666138076
5:27:12	-0.456471169	0.013199124	-0.666065954	**5:27:16**	-0.456439171	-0.006684291	-0.665993833
5:27:20	-0.456407172	-0.024536561	-0.665921711	**5:27:24**	-0.456375174	-0.042388831	-0.66584959
5:27:28	-0.456343176	-0.046110169	-0.665777468	**5:27:32**	-0.456311177	-0.049831507	-0.665705347
5:27:36	-0.456279179	-0.050480173	-0.665633225	**5:27:40**	-0.45624718	-0.048056167	-0.665561103
5:27:44	-0.456215182	-0.045632143	-0.665488982	**5:27:48**	-0.456183184	-0.055084587	-0.66541686
5:27:52	-0.456151185	-0.064537031	-0.665344739	**5:27:56**	-0.456119187	-0.076523858	-0.665272617
5:28:00	-0.456087188	-0.091045033	-0.665200496	**5:28:04**	-0.456080645	-0.105581382	-0.665128374
5:28:08	-0.456074101	-0.122398736	-0.665056253	**5:28:12**	-0.456067557	-0.13921609	-0.664984131
5:28:16	-0.456061014	-0.155563478	-0.66491201	**5:28:20**	-0.45605447	-0.171754201	-0.664839888
5:28:24	-0.456047927	-0.186768881	-0.664767766	**5:28:28**	-0.456041383	-0.19825539	-0.664695645
5:28:32	-0.456034839	-0.209741899	-0.664623523	**5:28:36**	-0.456028296	-0.219735404	-0.664551402
5:28:40	-0.456021752	-0.228235906	-0.66447928	**5:28:44**	-0.456015208	-0.236736408	-0.664407159
5:28:48	-0.456008665	-0.235297991	-0.664335037	**5:28:52**	-0.456002121	-0.233859573	-0.664262916
5:28:56	-0.455995577	-0.23275514	-0.664190794	**5:29:00**	-0.455989034	-0.231984697	-0.664118673
5:29:04	-0.455940322	-0.231189117	-0.664046551	**5:29:08**	-0.455891609	-0.226750318	-0.663974429
5:29:12	-0.455842897	-0.222311518	-0.663902308	**5:29:16**	-0.455794185	-0.217608877	-0.663830186
5:29:20	-0.455745472	-0.212642395	-0.663758065	**5:29:24**	-0.45569676	-0.207675912	-0.663685943
5:29:28	-0.455648048	-0.218339298	-0.663613822	**5:29:32**	-0.455599335	-0.229002685	-0.6635417
5:29:36	-0.455550623	-0.242154145	-0.663469579	**5:29:40**	-0.455501911	-0.25779368	-0.663397457
5:29:44	-0.455453199	-0.273433215	-0.663325336	**5:29:48**	-0.455404486	-0.281313817	-0.663253214
5:29:52	-0.455355774	-0.28919442	-0.663181093	**5:29:56**	-0.455307062	-0.293156738	-0.663108971
5:30:00	0.044741651	0.206799226	-0.163036849	**5:30:04**	0.045022731	0.206893703	-0.162964728
5:30:08	0.045303811	0.209927406	-0.162892606	**5:30:12**	-0.454415108	-0.287038893	-0.662820485
5:30:16	-0.454134028	-0.293644015	-0.662748363	**5:30:20**	-0.453852947	-0.309887963	-0.662676242
5:30:24	-0.453571867	-0.32613191	-0.66260412	**5:30:28**	-0.453290786	-0.347235275	-0.662531999
5:30:32	-0.453009706	-0.36833864	-0.662459877	**5:30:36**	-0.452728626	-0.383925941	-0.662387756
5:30:40	-0.452447545	-0.393997194	-0.662315634	**5:30:44**	-0.452166465	-0.404068439	-0.662243512

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:30:48	-0.451885384	-0.403538803	-0.662171391	**5:30:52**	-0.451604304	-0.403009166	-0.662099269
5:30:56	-0.451323223	-0.399583998	-0.662027148	**5:31:00**	-0.451042143	-0.393263282	-0.661955026
5:31:04	-0.450945096	-0.387052265	-0.661882905	**5:31:08**	-0.450848049	-0.370700294	-0.661810783
5:31:12	-0.450751002	-0.354348332	-0.661738662	**5:31:16**	-0.450653955	-0.340404354	-0.66166654
5:31:20	-0.450556908	-0.328868371	-0.661594419	**5:31:24**	-0.450459861	-0.317332384	-0.661522297
5:31:28	-0.450362814	-0.327952375	-0.661450175	**5:31:32**	-0.450265767	-0.338572369	-0.661378054
5:31:36	-0.45016872	-0.347868583	-0.661305932	**5:31:40**	-0.450071673	-0.355841029	-0.661233811
5:31:44	-0.449974626	-0.363813466	-0.661161689	**5:31:48**	-0.449877579	-0.371785903	-0.661089568
5:31:52	-0.449780532	-0.379758348	-0.661017446	**5:31:56**	-0.449683484	-0.390103518	-0.660945325
5:32:00	-0.449586437	-0.402821413	-0.660873203	**5:32:04**	-0.449256674	-0.41540059	-0.660801082
5:32:08	-0.448926911	-0.426412965	-0.66072896	**5:32:12**	-0.448597148	-0.437425339	-0.660656838
5:32:16	-0.448267385	-0.445935431	-0.660584717	**5:32:20**	-0.447937622	-0.451943239	-0.660512595
5:32:24	-0.447607859	-0.457951049	-0.660440474	**5:32:28**	-0.447278097	-0.465909972	-0.660368352
5:32:32	-0.446948334	-0.473868914	-0.660296231	**5:32:36**	-0.446618571	-0.483804552	-0.660224109
5:32:40	-0.446288808	-0.495716904	-0.660151988	**5:32:44**	-0.445959045	-0.507629257	-0.660079866
5:32:48	-0.445629282	-0.516935313	-0.660007745	**5:32:52**	-0.445299519	-0.526241352	-0.659935623
5:32:56	-0.444969756	-0.53382537	-0.659863501	**5:33:00**	-0.444639993	-0.539687348	-0.65979138
5:33:04	-0.444615222	-0.545731129	-0.659719258	**5:33:08**	-0.444590451	-0.54540596	-0.659647137
5:33:12	-0.44456568	-0.545080792	-0.659575015	**5:33:16**	-0.444540909	-0.541072966	-0.659502894
5:33:20	-0.444516139	-0.535837563	-0.659430772	**5:33:24**	-0.444491368	-0.530602177	-0.659358651
5:33:28	-0.444466597	-0.517248821	-0.659286529	**5:33:32**	-0.444441826	-0.503895446	-0.659214408
5:33:36	-0.444417055	-0.494829494	-0.659142286	**5:33:40**	-0.444392285	-0.498625772	-0.659070164
5:33:44	-0.444367514	-0.502422051	-0.658998043	**5:33:48**	-0.444342743	-0.517426471	-0.658925921
5:33:52	-0.444317972	-0.53243089	-0.6588538	**5:33:56**	-0.444293201	-0.539558121	-0.658781678
5:34:00	-0.444268431	-0.538808164	-0.658709557	**5:34:04**	-0.444311441	-0.53809861	-0.658637435
5:34:08	-0.444354452	-0.531621709	-0.658565314	**5:34:12**	-0.444397463	-0.525144809	-0.658493192
5:34:16	-0.444440474	-0.517219606	-0.658421071	**5:34:20**	-0.444483485	-0.507846082	-0.658348949
5:34:24	-0.444526495	-0.498472558	-0.658276828	**5:34:28**	-0.444569506	-0.506599576	-0.658204706
5:34:32	-0.444612517	-0.514726575	-0.658132584	**5:34:36**	-0.444655528	-0.522269081	-0.658060463
5:34:40	-0.444698538	-0.529227074	-0.657988341	**5:34:44**	-0.444741549	-0.536185067	-0.65791622
5:34:48	-0.44478456	-0.534617922	-0.657844098	**5:34:52**	-0.444827571	-0.53305076	-0.657771977
5:34:56	-0.444870581	-0.527401801	-0.657699855	**5:35:00**	-0.444913592	-0.517671047	-0.657627734
5:35:04	-0.444850876	-0.50787727	-0.657555612	**5:35:08**	-0.444788161	-0.506653613	-0.657483491
5:35:12	-0.444725445	-0.505429955	-0.657411369	**5:35:16**	-0.444662729	-0.511679891	-0.657339247
5:35:20	-0.444600013	-0.5254034	-0.657267126	**5:35:24**	-0.444537297	-0.53912691	-0.657195004
5:35:28	-0.444474582	-0.553622172	-0.657122883	**5:35:32**	-0.444411866	-0.568117416	-0.657050761
5:35:36	-0.44434915	-0.579381545	-0.65697864	**5:35:40**	-0.444286434	-0.5895686	-0.656906518
5:35:44	-0.444223718	-0.599755655	-0.656834397	**5:35:48**	-0.444161002	-0.605760828	-0.656762275
5:35:52	-0.444098287	-0.611766	-0.656690154	**5:35:56**	-0.444035571	-0.614690277	-0.656618032
5:36:00	-0.443972855	-0.614533621	-0.65654591	**5:36:04**	-0.443951833	-0.614401818	-0.656473789
5:36:08	-0.443930812	-0.623032064	-0.656401667	**5:36:12**	-0.443909791	-0.63166231	-0.656329546
5:36:16	-0.443888769	-0.63502191	-0.656257424	**5:36:20**	-0.443867748	-0.633110866	-0.656185303
5:36:24	-0.443846726	-0.631199822	-0.656113181	**5:36:28**	-0.443825705	-0.635554033	-0.65604106
5:36:32	-0.443804683	-0.639908244	-0.655968938	**5:36:36**	-0.443783662	-0.642183096	-0.655896817
5:36:40	-0.44376264	-0.64237859	-0.655824695	**5:36:44**	-0.443741619	-0.645445429	-0.655752573
5:36:48	-0.443720597	-0.657126336	-0.655680452	**5:36:52**	-0.443699576	-0.668807243	-0.65560833
5:36:56	-0.443678554	-0.68048815	-0.655536209	**5:37:00**	-0.443657533	-0.692169057	-0.655464087
5:37:04	-0.443685162	-0.703878965	-0.655391966	**5:37:08**	-0.443712792	-0.717187517	-0.655319844
5:37:12	-0.443740421	-0.73049607	-0.655247723	**5:37:16**	-0.443768051	-0.737639525	-0.655175601
5:37:20	-0.44379568	-0.738617953	-0.65510348	**5:37:24**	-0.44382331	-0.739596381	-0.655031358
5:37:28	-0.443850939	-0.748899278	-0.654959236	**5:37:32**	-0.443878569	-0.758202174	-0.654887115
5:37:36	-0.443906198	-0.76450106	-0.654814993	**5:37:40**	-0.443933828	-0.767795934	-0.654742872
5:37:44	-0.443961457	-0.771090808	-0.65467075	**5:37:48**	-0.443989087	-0.756404358	-0.654598629
5:37:52	-0.444016716	-0.741717871	-0.654526507	**5:37:56**	-0.444044346	-0.729353338	-0.654454386
5:38:00	-0.444071975	-0.719310687	-0.654382264	**5:38:04**	-0.444054437	-0.709241147	-0.654310143
5:38:08	-0.444036898	-0.699171572	-0.654238021	**5:38:12**	-0.444019359	-0.689101997	-0.654165899
5:38:16	-0.444001821	-0.679531539	-0.654093778	**5:38:20**	-0.443984282	-0.670460162	-0.654021656

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:38:24	-0.443966743	-0.66138875	-0.653949535	**5:38:28**	-0.443949205	-0.652317374	-0.653877413
5:38:32	-0.443931666	-0.643245997	-0.653805292	**5:38:36**	-0.443914127	-0.639366604	-0.65373317
5:38:40	-0.443896589	-0.637217883	-0.653661049	**5:38:44**	-0.44387905	-0.635069162	-0.653588927
5:38:48	-0.443861511	-0.627625104	-0.653516806	**5:38:52**	-0.443843973	-0.620181009	-0.653444684
5:38:56	-0.443826434	-0.618938538	-0.653372563	**5:39:00**	-0.443808895	-0.623897616	-0.653300441
5:39:04	-0.443734435	-0.6288228	-0.653228319	**5:39:08**	-0.443659974	-0.638481602	-0.653156198
5:39:12	-0.443585513	-0.648140404	-0.653084076	**5:39:16**	-0.443511053	-0.650029494	-0.653011955
5:39:20	-0.443436592	-0.644148872	-0.652939833	**5:39:24**	-0.443362131	-0.636799286	-0.652867712
5:39:28	-0.44328767	-0.625042739	-0.65279559	**5:39:32**	-0.44321321	-0.613286193	-0.652723469
5:39:36	-0.443138749	-0.600389224	-0.652651347	**5:39:40**	-0.443064288	-0.586351903	-0.652579226
5:39:44	-0.442989828	-0.572314581	-0.652507104	**5:39:48**	-0.442915367	-0.563276674	-0.652434982
5:39:52	-0.442840906	-0.554238731	-0.652362861	**5:39:56**	-0.442766446	-0.542721315	-0.652290739
5:40:00	-0.442691985	-0.528724372	-0.652218618	**5:40:04**	-0.442769264	-0.514817898	-0.652146496
5:40:08	-0.442846542	-0.493811316	-0.652074375	**5:40:12**	-0.442923821	-0.472804734	-0.652002253
5:40:16	-0.4430011	-0.450240898	-0.651930132	**5:40:20**	-0.443078379	-0.426119808	-0.65185801
5:40:24	-0.443155657	-0.4019987	-0.651785889	**5:40:28**	-0.443232936	-0.383807522	-0.651713767
5:40:32	-0.443310215	-0.365616334	-0.651641645	**5:40:36**	-0.443387494	-0.348208951	-0.651569524
5:40:40	-0.443464772	-0.331585361	-0.651497402	**5:40:44**	-0.443542051	-0.314961775	-0.651425281
5:40:48	-0.44361933	-0.2874452	-0.651353159	**5:40:52**	-0.443696609	-0.259928625	-0.651281038
5:40:56	-0.443773887	-0.23607047	-0.651208916	**5:41:00**	-0.443851166	-0.215870735	-0.651136795
5:41:04	-0.443772188	-0.195577861	-0.651064673	**5:41:08**	-0.44369321	-0.183136737	-0.650992552
5:41:12	-0.443614232	-0.170695609	-0.65092043	**5:41:16**	-0.443535254	-0.15515429	-0.650848308
5:41:20	-0.443456276	-0.136512766	-0.650776187	**5:41:24**	-0.443377298	-0.11787125	-0.650704065
5:41:28	-0.44329832	-0.100620009	-0.650631944	**5:41:32**	-0.443219342	-0.083368776	-0.650559822
5:41:36	-0.443140364	-0.060438044	-0.650487701	**5:41:40**	-0.443061386	-0.03182783	-0.650415579
5:41:44	-0.442982408	-0.009896273	-0.650343458	**5:41:48**	-0.44290343	-0.00800069	-0.650271336
5:41:52	-0.442824452	-0.006105106	-0.650199215	**5:41:56**	-0.442745474	0.003850839	-0.650127093
5:42:00	-0.442666496	0.021867125	-0.650054971	**5:42:04**	-0.442527678	0.039919083	-0.64998285
5:42:08	-0.44238886	0.05334639	-0.649910728	**5:42:12**	-0.442250042	0.066773662	-0.649838607
5:42:16	-0.442111224	0.081664745	-0.649766485	**5:42:20**	-0.441972405	0.098019605	-0.649694364
5:42:24	-0.441833587	0.114374465	-0.649622242	**5:42:28**	-0.441694769	0.123734224	-0.649550121
5:42:32	-0.441555951	0.133093983	-0.649477999	**5:42:36**	-0.441417133	0.142453742	-0.649405878
5:42:40	-0.441278314	0.151813501	-0.649333756	**5:42:44**	-0.441139496	0.161173261	-0.649261635
5:42:48	-0.441000678	0.168800535	-0.649189513	**5:42:52**	-0.44086186	0.176427774	-0.649117391
5:42:56	-0.440723042	0.175543446	-0.64904527	**5:43:00**	-0.440584224	0.166147481	-0.648973148
5:43:04	-0.440529187	0.156701611	-0.648901027	**5:43:08**	-0.440474151	0.137257375	-0.648828905
5:43:12	-0.440419114	0.11781314	-0.648756784	**5:43:16**	-0.440364078	0.101079123	-0.648684662
5:43:20	-0.440309041	0.087055395	-0.648612541	**5:43:24**	-0.440254005	0.073031632	-0.648540419
5:43:28	-0.440198968	0.056668755	-0.648468298	**5:43:32**	-0.440143932	0.040305878	-0.648396176
5:43:36	-0.440088895	0.028341364	-0.648324054	**5:43:40**	-0.440033859	0.029571955	-0.648251933
5:43:44	-0.439978822	0.030802546	-0.648179811	**5:43:48**	-0.439923786	0.029856376	-0.64810769
5:43:52	-0.439868749	0.028910223	-0.648035568	**5:43:56**	-0.439813713	0.029314205	-0.647963447
5:44:00	-0.439758676	0.031068358	-0.647891325	**5:44:04**	-0.439576642	0.032154955	-0.647819204
5:44:08	-0.439394607	0.031011833	-0.647747082	**5:44:12**	-0.439212572	0.029868711	-0.647674961
5:44:16	-0.439030537	0.031422804	-0.647602839	**5:44:20**	-0.438848502	0.035674112	-0.647530717
5:44:24	-0.438666467	0.03992542	-0.647458596	**5:44:28**	-0.438484432	0.038385044	-0.647386474
5:44:32	-0.438302398	0.036844668	-0.647314353	**5:44:36**	-0.438120363	0.029884939	-0.647242231
5:44:40	-0.437938328	0.017505838	-0.64717011	**5:44:44**	-0.437756293	0.00512672	-0.647097988
5:44:48	-0.437574258	-0.014646725	-0.647025867	**5:44:52**	-0.437392223	-0.03442017	-0.646953745
5:44:56	-0.437210188	-0.051826717	-0.646881624	**5:45:00**	-0.937028153	-0.566866365	-1.146809502
5:45:04	-0.936952338	-0.581969348	-1.14673738	**5:45:08**	-0.936876522	-0.595645398	-1.146665259
5:45:12	-0.436800706	-0.109321466	-0.646593137	**5:45:16**	-0.43672489	-0.119650407	-0.646521016
5:45:20	-0.436649074	-0.126632246	-0.646448894	**5:45:24**	-0.436573258	-0.133614086	-0.646376773
5:45:28	-0.436497442	-0.146960948	-0.646304651	**5:45:32**	-0.436421626	-0.160307809	-0.64623253
5:45:36	-0.43634581	-0.174962321	-0.646160408	**5:45:40**	-0.436269995	-0.190924502	-0.646088287
5:45:44	-0.436194179	-0.206886683	-0.646016165	**5:45:48**	-0.436118363	-0.229260385	-0.645944043
5:45:52	-0.436042547	-0.251634087	-0.645871922	**5:45:56**	-0.435966731	-0.274540832	-0.6457998

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:46:00	-0.435890915	-0.29798062	-0.645727679	**5:46:04**	-0.434329737	-0.320535007	-0.645655557
5:46:08	-0.432768558	-0.334692565	-0.645583436	**5:46:12**	-0.431207379	-0.348850118	-0.645511314
5:46:16	-0.429646201	-0.356442984	-0.645439193	**5:46:20**	-0.428085022	-0.357471162	-0.645367071
5:46:24	-0.426523844	-0.358499338	-0.64529495	**5:46:28**	-0.424962665	-0.367909818	-0.645222828
5:46:32	-0.423401487	-0.377320287	-0.645150706	**5:46:36**	-0.421840308	-0.389295252	-0.645078585
5:46:40	-0.42027913	-0.402125045	-0.645006463	**5:46:44**	-0.418717951	-0.417195687	-0.644934342
5:46:48	-0.417156773	-0.438988882	-0.64486222	**5:46:52**	-0.415595594	-0.460782078	-0.644790099
5:46:56	-0.414034416	-0.470216619	-0.644717977	**5:47:00**	-0.412473237	-0.467292488	-0.644645856
5:47:04	-0.412416394	-0.465265085	-0.644573734	**5:47:08**	-0.41235955	-0.465246621	-0.644501613
5:47:12	-0.412302707	-0.465228158	-0.644429491	**5:47:16**	-0.412245864	-0.4632627	-0.64435737
5:47:20	-0.41218902	-0.459350232	-0.644285248	**5:47:24**	-0.412132177	-0.455437781	-0.644213126
5:47:28	-0.412075333	-0.458702216	-0.644141005	**5:47:32**	-0.41201849	-0.461966651	-0.644068883
5:47:36	-0.411961647	-0.474690685	-0.643996762	**5:47:40**	-0.411904803	-0.496874315	-0.64392464
5:47:44	-0.41184796	-0.519057945	-0.643852519	**5:47:48**	-0.411791117	-0.548473409	-0.643780397
5:47:52	-0.411734273	-0.577888925	-0.643708276	**5:47:56**	-0.41167743	-0.601342821	-0.643636154
5:48:00	-0.411620586	-0.618835166	-0.643564033	**5:48:04**	-0.410272121	-0.635557596	-0.643491911
5:48:08	-0.408923656	-0.652280026	-0.643419789	**5:48:12**	-0.407566038	-0.668997	-0.643335266
5:48:16	-0.406203581	-0.683534345	-0.643244186	**5:48:20**	-0.404841124	-0.695894945	-0.643153107
5:48:24	-0.403478667	-0.708255545	-0.643062027	**5:48:28**	-0.40211621	-0.710579125	-0.642970948
5:48:32	-0.400753753	-0.712902704	-0.642879868	**5:48:36**	-0.399391296	-0.715226248	-0.642788789
5:48:40	-0.398028839	-0.717549827	-0.642697709	**5:48:44**	-0.396666382	-0.719873406	-0.64260663
5:48:48	-0.395303925	-0.714303417	-0.64251555	**5:48:52**	-0.393941468	-0.708733428	-0.642424471
5:48:56	-0.392579011	-0.700951273	-0.642333391	**5:49:00**	-0.391216554	-0.690956913	-0.642242312
5:49:04	-0.391124487	-0.681719886	-0.642151233	**5:49:08**	-0.391032421	-0.672482787	-0.642060153
5:49:12	-0.390940354	-0.663245759	-0.641969074	**5:49:16**	-0.390848288	-0.652367629	-0.641877994
5:49:20	-0.390756221	-0.63984843	-0.641786915	**5:49:24**	-0.390664155	-0.627329231	-0.641695835
5:49:28	-0.390572088	-0.603829883	-0.641604756	**5:49:32**	-0.390480022	-0.580330535	-0.641513676
5:49:36	-0.390387955	-0.555610468	-0.641422597	**5:49:40**	-0.390295889	-0.529669681	-0.641331517
5:49:44	-0.390203822	-0.503728877	-0.641240438	**5:49:48**	-0.390111756	-0.488406302	-0.641149358
5:49:52	-0.39001969	-0.473083744	-0.641058279	**5:49:56**	-0.389927623	-0.45523931	-0.6409672
5:50:00	-0.389835557	-0.434873033	-0.64087612	**5:50:04**	-0.389827452	-0.414556806	-0.640785041
5:50:08	-0.389819348	-0.395566962	-0.640693961	**5:50:12**	-0.389811244	-0.376577128	-0.640602882
5:50:16	-0.38980314	-0.366087854	-0.640511802	**5:50:20**	-0.389795036	-0.364099141	-0.640420723
5:50:24	-0.389786932	-0.362110437	-0.640329643	**5:50:28**	-0.389778828	-0.354930674	-0.640238564
5:50:32	-0.389770724	-0.34775092	-0.640147484	**5:50:36**	-0.38976262	-0.342406703	-0.640056405
5:50:40	-0.389754516	-0.338898043	-0.639965325	**5:50:44**	-0.389746412	-0.335389373	-0.639874246
5:50:48	-0.389738308	-0.333161077	-0.639783166	**5:50:52**	-0.389730204	-0.330932781	-0.639692087
5:50:56	-0.389722099	-0.32614523	-0.639601008	**5:51:00**	-0.389713995	-0.318798416	-0.639509928
5:51:04	-0.38965626	-0.311422027	-0.639418849	**5:51:08**	-0.389598525	-0.303429736	-0.639327769
5:51:12	-0.38954079	-0.29543745	-0.63923669	**5:51:16**	-0.389483054	-0.288038198	-0.63914561
5:51:20	-0.389425319	-0.28123198	-0.639054531	**5:51:24**	-0.389367584	-0.274425763	-0.638963451
5:51:28	-0.389309849	-0.27164321	-0.638872372	**5:51:32**	-0.389252113	-0.268860658	-0.638781292
5:51:36	-0.389194378	-0.266419474	-0.638690213	**5:51:40**	-0.389136643	-0.264319661	-0.638599133
5:51:44	-0.389078907	-0.262219849	-0.638508054	**5:51:48**	-0.389021172	-0.251128532	-0.638416975
5:51:52	-0.388963437	-0.240037216	-0.638325895	**5:51:56**	-0.388905702	-0.222581613	-0.638234816
5:52:00	-0.388847966	-0.198761721	-0.638143736	**5:52:04**	-0.388350118	-0.174679486	-0.638052657
5:52:08	-0.387852271	-0.143213153	-0.637961577	**5:52:12**	-0.387354423	-0.111746829	-0.637870498
5:52:16	-0.386856575	-0.079674382	-0.637779418	**5:52:20**	-0.386358727	-0.046995803	-0.637688339
5:52:24	-0.385860879	-0.014317242	-0.637597259	**5:52:28**	-0.385363031	0.012384971	-0.63750618
5:52:32	-0.384865183	0.039087166	-0.6374151	**5:52:36**	-0.384367335	0.057673362	-0.637324021
5:52:40	-0.383869487	0.068143522	-0.637232941	**5:52:44**	-0.383371639	0.078613683	-0.637141862
5:52:48	-0.382873792	0.094531016	-0.637050783	**5:52:52**	-0.382375944	0.110448385	-0.636959703
5:52:56	-0.381878096	0.122063818	-0.636868624	**5:53:00**	-0.381380248	0.129377386	-0.636777544
5:53:04	-0.381322964	0.136428305	-0.636686465	**5:53:08**	-0.381265681	0.134825114	-0.636595385
5:53:12	-0.381208397	0.133221958	-0.636504306	**5:53:16**	-0.381151114	0.132523381	-0.636413226
5:53:20	-0.38109383	0.132729418	-0.636322147	**5:53:24**	-0.381036547	0.132935455	-0.636231067
5:53:28	-0.380979263	0.132555044	-0.636139988	**5:53:32**	-0.380921979	0.132174668	-0.636048908

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
5:53:36	-0.380864696	0.132356509	-0.635957829	**5:53:40**	-0.380807412	0.13422518	-0.63586675
5:53:44	-0.380750129	0.136093851	-0.63577567	**5:53:48**	-0.380692845	0.13714556	-0.635684591
5:53:52	-0.380635562	0.138197303	-0.635593511	**5:53:56**	-0.380578278	0.133478112	-0.635502432
5:54:00	-0.380520995	0.122987987	-0.635411352	**5:54:04**	-0.380100022	0.11271465	-0.635320273
5:54:08	-0.379679049	0.105314719	-0.635229193	**5:54:12**	-0.379258075	0.097914789	-0.635138114
5:54:16	-0.378837102	0.093470087	-0.635047034	**5:54:20**	-0.378416129	0.091980685	-0.634955955
5:54:24	-0.377995156	0.090491284	-0.634864875	**5:54:28**	-0.377574183	0.090260157	-0.634773796
5:54:32	-0.37715321	0.090028994	-0.634682716	**5:54:36**	-0.376732237	0.092267053	-0.634591637
5:54:40	-0.376311264	0.096974336	-0.634500558	**5:54:44**	-0.375890291	0.101681582	-0.634409478
5:54:48	-0.375469318	0.101860322	-0.634318399	**5:54:52**	-0.375048345	0.102039062	-0.634227319
5:54:56	-0.374627371	0.100077403	-0.63413624	**5:55:00**	-0.374206398	0.095975347	-0.63404516
5:55:04	-0.374111622	0.091678851	-0.633954081	**5:55:08**	-0.374016845	0.084952854	-0.633863001
5:55:12	-0.373922068	0.078226857	-0.633771922	**5:55:16**	-0.373827291	0.061343873	-0.633680842
5:55:20	-0.373732514	0.034303956	-0.633589763	**5:55:24**	-0.373637737	0.007264021	-0.633498683
5:55:28	-0.373542961	-0.019193338	-0.633407604	**5:55:32**	-0.373448184	-0.045650714	-0.633316525
5:55:36	-0.373353407	-0.069739932	-0.633225445	**5:55:40**	-0.37325863	-0.091461017	-0.633134366
5:55:44	-0.373163853	-0.113182093	-0.633043286	**5:55:48**	-0.373069076	-0.122850599	-0.632952207
5:55:52	-0.372974299	-0.132519107	-0.632861127	**5:55:56**	-0.372879523	-0.144427041	-0.632770048
5:56:00	-0.372784746	-0.158574403	-0.632678968	**5:56:04**	-0.371555525	-0.17204554	-0.632587889
5:56:08	-0.370326305	-0.182005209	-0.632496809	**5:56:12**	-0.369097085	-0.191964875	-0.63240573
5:56:16	-0.367867865	-0.199205965	-0.63231465	**5:56:20**	-0.366638644	-0.203728473	-0.632223571
5:56:24	-0.365409424	-0.208250982	-0.632132491	**5:56:28**	-0.364180204	-0.207796704	-0.632041412
5:56:32	-0.362950984	-0.207342427	-0.631950333	**5:56:36**	-0.361721763	-0.196394997	-0.631859253
5:56:40	-0.360492543	-0.174954415	-0.631768174	**5:56:44**	-0.359263323	-0.153513831	-0.631677094
5:56:48	-0.358034103	-0.145332656	-0.631586015	**5:56:52**	-0.356804882	-0.137151482	-0.631494935
5:56:56	-0.355575662	-0.128080606	-0.631403856	**5:57:00**	-0.354346442	-0.118120021	-0.631312776
5:57:04	-0.354301355	-0.108865289	-0.631221697	**5:57:08**	-0.354256268	-0.099610556	-0.631130617
5:57:12	-0.354211181	-0.090355815	-0.631039538	**5:57:16**	-0.354166094	-0.077213482	-0.630948458
5:57:20	-0.354121007	-0.060183548	-0.630857379	**5:57:24**	-0.35407592	-0.043153613	-0.6307663
5:57:28	-0.354030833	-0.03353561	-0.63067522	**5:57:32**	-0.353985747	-0.02391759	-0.630584141
5:57:36	-0.35394066	-0.023844419	-0.630493061	**5:57:40**	-0.353895573	-0.033316064	-0.630401982
5:57:44	-0.353850486	-0.042787708	-0.630310902	**5:57:48**	-0.353805399	-0.055338242	-0.630219823
5:57:52	-0.353760312	-0.067888766	-0.630128743	**5:57:56**	-0.353715225	-0.079642989	-0.630037664
5:58:00	-0.353670138	-0.090600899	-0.629946584	**5:58:04**	-0.354184225	-0.101892124	-0.629855505
5:58:08	-0.354698313	-0.111973449	-0.629764425	**5:58:12**	-0.3552124	-0.122054774	-0.629673346
5:58:16	-0.355726487	-0.1315909	-0.629582267	**5:58:20**	-0.356240574	-0.140581827	-0.629491187
5:58:24	-0.356754662	-0.149572755	-0.629400108	**5:58:28**	-0.357268749	-0.161785044	-0.629309028
5:58:32	-0.357782836	-0.173997334	-0.629217949	**5:58:36**	-0.358296923	-0.179310493	-0.629126869
5:58:40	-0.358811011	-0.177724523	-0.62903579	**5:58:44**	-0.359325098	-0.176138553	-0.62894471
5:58:48	-0.359839185	-0.189099461	-0.628853631	**5:58:52**	-0.360353273	-0.202060369	-0.628762551
5:58:56	-0.36086736	-0.21384349	-0.628671472	**5:59:00**	-0.361381447	-0.224448823	-0.628580392
5:59:04	-0.361406378	-0.234762578	-0.628489313	**5:59:08**	-0.361431309	-0.23008402	-0.628398233
5:59:12	-0.361456239	-0.225405463	-0.628307154	**5:59:16**	-0.36148117	-0.222857974	-0.628216075
5:59:20	-0.361506101	-0.222441552	-0.628124995	**5:59:24**	-0.361531031	-0.222025131	-0.628033916
5:59:28	-0.361555962	-0.217017064	-0.627942836	**5:59:32**	-0.361580893	-0.212008997	-0.627851757
5:59:36	-0.361605823	-0.199897253	-0.627760677	**5:59:40**	-0.361630754	-0.180681831	-0.627669598
5:59:44	-0.361655685	-0.16146641	-0.627578518	**5:59:48**	-0.361680615	-0.142930227	-0.627487439
5:59:52	-0.361705546	-0.124394044	-0.627396359	**5:59:56**	-0.361730477	-0.106604597	-0.62730528
6:00:00	0.138244593	0.452873474	-0.1272142	**6:00:04**	0.138569127	0.447855524	-0.127123121
6:00:08	0.138893661	0.442837556	-0.127032042	**6:00:12**	-0.360781805	-0.062180394	-0.626940962
6:00:16	-0.360457271	-0.067198353	-0.626849883	**6:00:20**	-0.360132737	-0.072590179	-0.626758803
6:00:24	-0.359808203	-0.078355872	-0.626667724	**6:00:28**	-0.359483669	-0.084121565	-0.626576644
6:00:32	-0.359159136	-0.089887259	-0.626485565	**6:00:36**	-0.358834602	-0.095652952	-0.626394485
6:00:40	-0.358510068	-0.101204029	-0.626303406	**6:00:44**	-0.358185534	-0.106540474	-0.626212326
6:00:48	-0.357861	-0.111876927	-0.626121247	**6:00:52**	-0.357536466	-0.114824277	-0.626030167
6:00:56	-0.357211932	-0.117771627	-0.625939088	**6:01:00**	-0.356887398	-0.129620078	-0.625848008
6:01:04	-0.356782231	-0.150500384	-0.625756929	**6:01:08**	-0.356677064	-0.17138069	-0.62566585

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:01:12	-0.356571898	-0.197371975	-0.62557477	**6:01:16**	-0.356466731	-0.223363258	-0.625483691
6:01:20	-0.356361565	-0.242453793	-0.625392611	**6:01:24**	-0.356256398	-0.254643576	-0.625301532
6:01:28	-0.356151232	-0.266833363	-0.625210452	**6:01:32**	-0.356046065	-0.269593983	-0.625119373
6:01:36	-0.355940899	-0.272354599	-0.625028293	**6:01:40**	-0.355835732	-0.272454245	-0.624937214
6:01:44	-0.355730565	-0.26989292	-0.624846134	**6:01:48**	-0.355625399	-0.267331591	-0.624755055
6:01:52	-0.355520232	-0.263816102	-0.624663975	**6:01:56**	-0.355415066	-0.260300609	-0.624572896
6:02:00	-0.355309899	-0.257859915	-0.624481817	**6:02:04**	-0.355734355	-0.256809722	-0.624390737
6:02:08	-0.356158811	-0.255759528	-0.624299658	**6:02:12**	-0.356583266	-0.255202087	-0.624208578
6:02:16	-0.357007722	-0.254644642	-0.624117499	**6:02:20**	-0.357432178	-0.251969399	-0.624026419
6:02:24	-0.357856633	-0.247176352	-0.62393534	**6:02:28**	-0.358281089	-0.242383304	-0.62384426
6:02:32	-0.358705545	-0.240648649	-0.623753181	**6:02:36**	-0.359130001	-0.238913993	-0.623662101
6:02:40	-0.359554456	-0.238856806	-0.623571022	**6:02:44**	-0.359978912	-0.240477084	-0.623479942
6:02:48	-0.360403368	-0.242097363	-0.623388863	**6:02:52**	-0.360827823	-0.246914006	-0.623297783
6:02:56	-0.361252279	-0.25173065	-0.623206704	**6:03:00**	-0.361676735	-0.257595924	-0.623115625
6:03:04	-0.361628486	-0.264228056	-0.623024545	**6:03:08**	-0.361580237	-0.270860189	-0.622933466
6:03:12	-0.361531988	-0.278339324	-0.622842386	**6:03:16**	-0.361483739	-0.28581846	-0.622751307
6:03:20	-0.36143549	-0.292617372	-0.622660227	**6:03:24**	-0.361387241	-0.298736069	-0.622569148
6:03:28	-0.361338992	-0.304854766	-0.622478068	**6:03:32**	-0.361290743	-0.30822768	-0.622386989
6:03:36	-0.361242494	-0.311600593	-0.622295909	**6:03:40**	-0.361194245	-0.314397593	-0.62220483
6:03:44	-0.361145996	-0.31661867	-0.62211375	**6:03:48**	-0.361097747	-0.318839747	-0.622022671
6:03:52	-0.361049498	-0.3699552	-0.621931592	**6:03:56**	-0.361001249	-0.421070645	-0.621840512
6:04:00	-0.360953	-0.458992511	-0.621749433	**6:04:04**	-0.361118404	-0.483848155	-0.621658353
6:04:08	-0.361283808	-0.508703799	-0.621567274	**6:04:12**	-0.361449212	-0.508789692	-0.621476194
6:04:16	-0.361614616	-0.508875585	-0.621385115	**6:04:20**	-0.36178002	-0.50784621	-0.621294035
6:04:24	-0.361945424	-0.505701603	-0.621202956	**6:04:28**	-0.362110828	-0.503556978	-0.621111876
6:04:32	-0.362276232	-0.502554267	-0.621020797	**6:04:36**	-0.362441636	-0.50155154	-0.620929717
6:04:40	-0.36260704	-0.502517016	-0.620838638	**6:04:44**	-0.362772444	-0.505450662	-0.620747558
6:04:48	-0.362937849	-0.508384326	-0.620656479	**6:04:52**	-0.363103253	-0.51497075	-0.6205654
6:04:56	-0.363268657	-0.521557156	-0.62047432	**6:05:00**	-0.363434061	-0.529266682	-0.620383241
6:05:04	-0.363376777	-0.537966552	-0.620292161	**6:05:08**	-0.363319494	-0.546666458	-0.620201082
6:05:12	-0.36326221	-0.55664965	-0.620110002	**6:05:16**	-0.363204927	-0.566632842	-0.620018923
6:05:20	-0.363147643	-0.576616035	-0.619927843	**6:05:24**	-0.36309036	-0.586599191	-0.619836764
6:05:28	-0.363033076	-0.596069588	-0.619745684	**6:05:32**	-0.362975792	-0.604001525	-0.619654605
6:05:36	-0.362918509	-0.611933463	-0.619563525	**6:05:40**	-0.362861225	-0.620047133	-0.619472446
6:05:44	-0.362803942	-0.628342537	-0.619381367	**6:05:48**	-0.362746658	-0.63663794	-0.619290287
6:05:52	-0.362689375	-0.644933379	-0.619199208	**6:05:56**	-0.362632091	-0.653228782	-0.619108128
6:06:00	-0.362574808	-0.660658689	-0.619017049	**6:06:04**	-0.361768647	-0.666776706	-0.618925969
6:06:08	-0.360962487	-0.672894687	-0.61883489	**6:06:12**	-0.360156327	-0.673876041	-0.61874381
6:06:16	-0.359350166	-0.674857394	-0.618652731	**6:06:20**	-0.358544006	-0.673776478	-0.618561651
6:06:24	-0.357737846	-0.67063333	-0.618470572	**6:06:28**	-0.356931686	-0.667490145	-0.618379492
6:06:32	-0.356125525	-0.664346961	-0.618288413	**6:06:36**	-0.355319365	-0.661203812	-0.618197333
6:06:40	-0.354513205	-0.658332854	-0.618106254	**6:06:44**	-0.353707044	-0.655734158	-0.618015175
6:06:48	-0.352900884	-0.653135462	-0.617924095	**6:06:52**	-0.352094724	-0.67033478	-0.617833016
6:06:56	-0.351288564	-0.687534099	-0.617741936	**6:07:00**	-0.350482403	-0.690992171	-0.617650857
6:07:04	-0.350435961	-0.68116189	-0.617559777	**6:07:08**	-0.350389519	-0.671331572	-0.617468698
6:07:12	-0.350343077	-0.671398966	-0.617377618	**6:07:16**	-0.350296635	-0.671466395	-0.617286539
6:07:20	-0.350250193	-0.672891722	-0.617195459	**6:07:24**	-0.350203751	-0.675675018	-0.61710438
6:07:28	-0.350157309	-0.678458315	-0.6170133	**6:07:32**	-0.350110866	-0.681241576	-0.616922221
6:07:36	-0.350064424	-0.684024872	-0.616831142	**6:07:40**	-0.350017982	-0.685886927	-0.616740062
6:07:44	-0.34997154	-0.68682781	-0.616648983	**6:07:48**	-0.349925098	-0.687768658	-0.616557903
6:07:52	-0.349878656	-0.686923017	-0.616466824	**6:07:56**	-0.349832214	-0.68607734	-0.616375744
6:08:00	-0.349785772	-0.683438814	-0.616284665	**6:08:04**	-0.349497819	-0.678863406	-0.616193585
6:08:08	-0.349209865	-0.674287999	-0.616102506	**6:08:12**	-0.348921912	-0.666005347	-0.616011426
6:08:16	-0.348633959	-0.657722659	-0.615920347	**6:08:20**	-0.348346006	-0.647313039	-0.615829267
6:08:24	-0.348058053	-0.634776451	-0.615738188	**6:08:28**	-0.347770099	-0.622239863	-0.615647109
6:08:32	-0.347482146	-0.608377353	-0.615556029	**6:08:36**	-0.347194193	-0.594514844	-0.61546495
6:08:40	-0.34690624	-0.579526194	-0.61537387	**6:08:44**	-0.346618287	-0.563411404	-0.615282791

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:08:48	-0.346330334	-0.547296614	-0.615191711	**6:08:52**	-0.34604238	-0.528297228	-0.615100632
6:08:56	-0.345754427	-0.509297841	-0.615009552	**6:09:00**	-0.345466474	-0.489235646	-0.614918473
6:09:04	-0.345388863	-0.468236041	-0.614827393	**6:09:08**	-0.345311252	-0.447236418	-0.614736314
6:09:12	-0.34523364	-0.425179991	-0.614645234	**6:09:16**	-0.345156029	-0.403123564	-0.614554155
6:09:20	-0.345078418	-0.381067119	-0.614463075	**6:09:24**	-0.345000807	-0.359010692	-0.614371996
6:09:28	-0.344923195	-0.336954265	-0.614280917	**6:09:32**	-0.344845584	-0.315722084	-0.614189837
6:09:36	-0.344767973	-0.294489904	-0.614098758	**6:09:40**	-0.344690362	-0.27405992	-0.614007678
6:09:44	-0.34461275	-0.254432132	-0.613916599	**6:09:48**	-0.344535139	-0.234804344	-0.613825519
6:09:52	-0.344457528	-0.182685039	-0.61373444	**6:09:56**	-0.344379917	-0.130565739	-0.61364336
6:10:00	-0.344302306	-0.053022437	-0.613552281	**6:10:04**	-0.345180999	0.049374799	-0.613461201
6:10:08	-0.346059693	0.151772052	-0.613370122	**6:10:12**	-0.346938387	0.211751228	-0.613279042
6:10:16	-0.347817081	0.27173037	-0.613187963	**6:10:20**	-0.348695775	0.31406543	-0.613096884
6:10:24	-0.349574468	0.33875634	-0.613005804	**6:10:28**	-0.350453162	0.363447286	-0.612914725
6:10:32	-0.351331856	0.365966071	-0.612823645	**6:10:36**	-0.35221055	0.368484855	-0.612732566
6:10:40	-0.353089244	0.366026752	-0.612641486	**6:10:44**	-0.353967938	0.358591761	-0.612550407
6:10:48	-0.354846631	0.351156806	-0.612459327	**6:10:52**	-0.355725325	0.338775446	-0.612368248
6:10:56	-0.356604019	0.326394087	-0.612277168	**6:11:00**	-0.357482713	0.312724467	-0.612186089
6:11:04	-0.357423171	0.298325925	-0.612095009	**6:11:08**	-0.357363628	0.283927312	-0.61200393
6:11:12	-0.357304086	0.269528771	-0.61191285	**6:11:16**	-0.357244544	0.255130158	-0.611821771
6:11:20	-0.357185002	0.240946569	-0.611730692	**6:11:24**	-0.35712546	0.226977969	-0.611639612
6:11:28	-0.357065918	0.213009368	-0.611548533	**6:11:32**	-0.357006375	0.199040733	-0.611457453
6:11:36	-0.356946833	0.185072132	-0.611366374	**6:11:40**	-0.356887291	0.171685042	-0.611275294
6:11:44	-0.356827749	0.158879496	-0.611184215	**6:11:48**	-0.356768207	0.146073951	-0.611093135
6:11:52	-0.356708665	0.136555835	-0.611002056	**6:11:56**	-0.356649122	0.127037719	-0.610910976
6:12:00	-0.35658958	0.118743875	-0.610819897	**6:12:04**	-0.356513767	0.111683931	-0.610728817
6:12:08	-0.356437954	0.104624023	-0.610637738	**6:12:12**	-0.35636214	0.099080546	-0.610546659
6:12:16	-0.356286327	0.093537068	-0.610455579	**6:12:20**	-0.356210513	0.08799359	-0.6103645
6:12:24	-0.3561347	0.082450095	-0.61027342	**6:12:28**	-0.356058887	0.076906617	-0.610182341
6:12:32	-0.355983073	0.073351347	-0.610091261	**6:12:36**	-0.35590726	0.069796078	-0.610000182
6:12:40	-0.355831447	0.067099624	-0.609909102	**6:12:44**	-0.355755633	0.065261988	-0.609818023
6:12:48	-0.35567982	0.063424352	-0.609726943	**6:12:52**	-0.355604006	0.097397211	-0.609635864
6:12:56	-0.355528193	0.13137007	-0.609544784	**6:13:00**	-0.35545238	0.154699954	-0.609453705
6:13:04	-0.355410003	0.167366967	-0.609362625	**6:13:08**	-0.355367627	0.180033981	-0.609271546
6:13:12	-0.35532525	0.169765519	-0.609180467	**6:13:16**	-0.355282874	0.159497022	-0.609089387
6:13:20	-0.355240497	0.147048015	-0.608998308	**6:13:24**	-0.35519812	0.132418426	-0.608907228
6:13:28	-0.355155744	0.117788872	-0.608816149	**6:13:32**	-0.355113367	0.099661413	-0.608725069
6:13:36	-0.355070991	0.081533972	-0.60863399	**6:13:40**	-0.355028614	0.061666265	-0.60854291
6:13:44	-0.354986238	0.040058292	-0.608451831	**6:13:48**	-0.354943861	0.018450337	-0.608360751
6:13:52	-0.354901484	-0.003157618	-0.608269672	**6:13:56**	-0.354859108	-0.02476559	-0.608178592
6:14:00	-0.354816731	-0.045716358	-0.608087513	**6:14:04**	-0.354900124	-0.066084917	-0.607996434
6:14:08	-0.354983518	-0.086453475	-0.607905354	**6:14:12**	-0.355066911	-0.105201049	-0.607814275
6:14:16	-0.355150304	-0.123948614	-0.607723195	**6:14:20**	-0.355233697	-0.142276643	-0.607632116
6:14:24	-0.35531709	-0.160185123	-0.607541036	**6:14:28**	-0.355400483	-0.178093606	-0.607449957
6:14:32	-0.355483876	-0.194245673	-0.607358877	**6:14:36**	-0.355567269	-0.210397742	-0.607267798
6:14:40	-0.355650663	-0.22477267	-0.607176718	**6:14:44**	-0.355734056	-0.237370458	-0.607085639
6:14:48	-0.355817449	-0.249968245	-0.606994559	**6:14:52**	-0.355900842	-0.259420238	-0.60690348
6:14:56	-0.355984235	-0.268872231	-0.6068124	**6:15:00**	-0.856067628	-0.776692071	-1.106721321
6:15:04	-0.855954782	-0.782762776	-1.106630242	**6:15:08**	-0.855841936	-0.788833481	-1.106539162
6:15:12	-0.355729091	-0.292780159	-0.606448083	**6:15:16**	-0.355616245	-0.296726837	-0.606357003
6:15:20	-0.355503399	-0.300673515	-0.606265924	**6:15:24**	-0.355390553	-0.304620192	-0.606174844
6:15:28	-0.355277707	-0.30856687	-0.606083765	**6:15:32**	-0.355164861	-0.312513548	-0.605992685
6:15:36	-0.355052015	-0.316460225	-0.605901606	**6:15:40**	-0.354939169	-0.319872585	-0.605810526
6:15:44	-0.354826323	-0.322750627	-0.605719447	**6:15:48**	-0.354713477	-0.32562866	-0.605628367
6:15:52	-0.354600632	-0.318190153	-0.605537288	**6:15:56**	-0.354487786	-0.310751647	-0.605446209
6:16:00	-0.35437494	-0.311392606	-0.605355129	**6:16:04**	-0.354400263	-0.320195375	-0.60526405
6:16:08	-0.354425587	-0.328998145	-0.60517297	**6:16:12**	-0.354450911	-0.335210909	-0.605081891
6:16:16	-0.354476234	-0.341423674	-0.604990811	**6:16:20**	-0.354501558	-0.34393669	-0.604899732

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:16:24	-0.354526882	-0.342749977	-0.604808652	**6:16:28**	-0.354552206	-0.341563254	-0.604717573
6:16:32	-0.354577529	-0.337152984	-0.604626493	**6:16:36**	-0.354602853	-0.332742714	-0.604535414
6:16:40	-0.354628177	-0.328332435	-0.604444334	**6:16:44**	-0.3546535	-0.323922165	-0.604353255
6:16:48	-0.354678824	-0.319511895	-0.604262175	**6:16:52**	-0.354704148	-0.31830819	-0.604171096
6:16:56	-0.354729471	-0.317104484	-0.604080017	**6:17:00**	-0.354754795	-0.317929596	-0.603988937
6:17:04	-0.354716484	-0.320745603	-0.603897858	**6:17:08**	-0.354678173	-0.323561611	-0.603806778
6:17:12	-0.354639862	-0.327845124	-0.603715699	**6:17:16**	-0.354601551	-0.332128638	-0.603624619
6:17:20	-0.35456324	-0.336037272	-0.60353354	**6:17:24**	-0.354524929	-0.339571027	-0.60344246
6:17:28	-0.354486618	-0.343104781	-0.603351381	**6:17:32**	-0.354448307	-0.346638536	-0.603260301
6:17:36	-0.354409996	-0.35017229	-0.603169222	**6:17:40**	-0.354371685	-0.354883934	-0.603078142
6:17:44	-0.354333374	-0.360773465	-0.602987063	**6:17:48**	-0.354295063	-0.366663006	-0.602895984
6:17:52	-0.354256752	-0.373770565	-0.602804904	**6:17:56**	-0.354218441	-0.380878107	-0.602713825
6:18:00	-0.35418013	-0.387985667	-0.602622745	**6:18:04**	-0.35400752	-0.395013156	-0.602531666
6:18:08	-0.353834911	-0.402040662	-0.602440586	**6:18:12**	-0.353662302	-0.408563776	-0.602349507
6:18:16	-0.353489692	-0.415086907	-0.602258427	**6:18:20**	-0.353317083	-0.42161002	-0.602167348
6:18:24	-0.353144474	-0.428133151	-0.602076268	**6:18:28**	-0.352971864	-0.434656264	-0.601985189
6:18:32	-0.352799255	-0.440386734	-0.601894109	**6:18:36**	-0.352626646	-0.446117222	-0.60180303
6:18:40	-0.352454036	-0.451000529	-0.601711951	**6:18:44**	-0.352281427	-0.455036691	-0.601620871
6:18:48	-0.352108818	-0.459072852	-0.601529792	**6:18:52**	-0.351936208	-0.449549465	-0.601438712
6:18:56	-0.351763599	-0.440026078	-0.601347633	**6:19:00**	-0.35159099	-0.441479412	-0.601256553
6:19:04	-0.351535513	-0.453979323	-0.601165474	**6:19:08**	-0.351480036	-0.466479216	-0.601074394
6:19:12	-0.35142456	-0.470802265	-0.600983315	**6:19:16**	-0.351369083	-0.475125297	-0.600892235
6:19:20	-0.351313607	-0.475460704	-0.600801156	**6:19:24**	-0.35125813	-0.47180845	-0.600710076
6:19:28	-0.351202653	-0.468156196	-0.600618997	**6:19:32**	-0.351147177	-0.4598635	-0.600527917
6:19:36	-0.3510917	-0.451570786	-0.600436838	**6:19:40**	-0.351036223	-0.441666974	-0.600345759
6:19:44	-0.350980747	-0.430152045	-0.600254679	**6:19:48**	-0.35092527	-0.418637116	-0.6001636
6:19:52	-0.350869793	-0.405659228	-0.60007252	**6:19:56**	-0.350814317	-0.392681359	-0.599981441
6:20:00	-0.35075884	-0.379061526	-0.599890361	**6:20:04**	-0.35120703	-0.365099975	-0.599799282
6:20:08	-0.351655219	-0.351138433	-0.599708202	**6:20:12**	-0.352103408	-0.334732513	-0.599617123
6:20:16	-0.352551598	-0.318326592	-0.599526043	**6:20:20**	-0.352999787	-0.301268929	-0.599434964
6:20:24	-0.353447977	-0.283559515	-0.599343884	**6:20:28**	-0.353896166	-0.265850105	-0.599252805
6:20:32	-0.354344355	-0.249954258	-0.599161726	**6:20:36**	-0.354792545	-0.234058413	-0.599070646
6:20:40	-0.355240734	-0.218740735	-0.598979567	**6:20:44**	-0.355688924	-0.204001224	-0.598888487
6:20:48	-0.356137113	-0.189261714	-0.598797408	**6:20:52**	-0.356585303	-0.176719067	-0.598706328
6:20:56	-0.357033492	-0.164176424	-0.598615249	**6:21:00**	-0.357481681	-0.153239851	-0.598524169
6:21:04	-0.357365673	-0.14357304	-0.59843309	**6:21:08**	-0.357249665	-0.133906234	-0.59834201
6:21:12	-0.357134179	-0.126847383	-0.598251638	**6:21:16**	-0.357042801	-0.119802904	-0.59819393
6:21:20	-0.356951424	-0.113539885	-0.598136223	**6:21:24**	-0.356860046	-0.108058326	-0.598078515
6:21:28	-0.356768668	-0.102576767	-0.598020807	**6:21:32**	-0.35667729	-0.098441906	-0.597963099
6:21:36	-0.356585912	-0.094307036	-0.597905392	**6:21:40**	-0.356494534	-0.090830552	-0.597847684
6:21:44	-0.356403156	-0.088012437	-0.597789976	**6:21:48**	-0.356311779	-0.085194331	-0.597732268
6:21:52	-0.356220401	-0.047380828	-0.597674561	**6:21:56**	-0.356129023	-0.009567324	-0.597616853
6:22:00	-0.356037645	0.03220714	-0.597559145	**6:22:04**	-0.357728906	0.076879996	-0.597501438
6:22:08	-0.359420168	0.121552852	-0.59744373	**6:22:12**	-0.361111429	0.138622398	-0.597386022
6:22:16	-0.362802691	0.155691944	-0.597328314	**6:22:20**	-0.364493952	0.166065441	-0.597270607
6:22:24	-0.366185214	0.169742817	-0.597212899	**6:22:28**	-0.367876475	0.173420229	-0.597155191
6:22:32	-0.369567737	0.171454186	-0.597097484	**6:22:36**	-0.371258998	0.169488143	-0.597039776
6:22:40	-0.37295026	0.166341103	-0.596982068	**6:22:44**	-0.374641522	0.162013136	-0.59692436
6:22:48	-0.376332783	0.157685169	-0.596866653	**6:22:52**	-0.378024045	0.153357167	-0.596808945
6:22:56	-0.379715306	0.1490292	-0.596751237	**6:23:00**	-0.381406568	0.144701198	-0.59669353
6:23:04	-0.381375269	0.141400022	-0.596635822	**6:23:08**	-0.381343971	0.138098811	-0.596578114
6:23:12	-0.381312673	0.134797635	-0.596520406	**6:23:16**	-0.381281375	0.13149646	-0.596462699
6:23:20	-0.381250076	0.128554699	-0.596404991	**6:23:24**	-0.381218778	0.125972426	-0.596347283
6:23:28	-0.38118748	0.123390116	-0.596289576	**6:23:32**	-0.381156182	0.122681379	-0.596231868
6:23:36	-0.381124883	0.121972642	-0.59617416	**6:23:40**	-0.381093585	0.12244778	-0.596116452
6:23:44	-0.381062287	0.124106758	-0.596058745	**6:23:48**	-0.381030989	0.125765736	-0.596001037
6:23:52	-0.380999691	0.128289749	-0.595943329	**6:23:56**	-0.380968392	0.130813761	-0.595885621

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:24:00	-0.380937094	0.133337809	-0.595827914	**6:24:04**	-0.382014179	0.135201131	-0.595770206
6:24:08	-0.383091264	0.137064453	-0.595712498	**6:24:12**	-0.384168349	0.137526745	-0.595654791
6:24:16	-0.385245434	0.137989036	-0.595597083	**6:24:20**	-0.38632252	0.137476791	-0.595539375
6:24:24	-0.387399605	0.13599001	-0.595481667	**6:24:28**	-0.38847669	0.134503229	-0.59542396
6:24:32	-0.389553775	0.131203383	-0.595366252	**6:24:36**	-0.39063086	0.127903501	-0.595308544
6:24:40	-0.391707945	0.123894239	-0.595250837	**6:24:44**	-0.39278503	0.119175597	-0.595193129
6:24:48	-0.393862115	0.114456955	-0.595135421	**6:24:52**	-0.3949392	0.106820247	-0.595077713
6:24:56	-0.396016285	0.099183504	-0.595020006	**6:25:00**	-0.39709337	0.095366563	-0.594962298
6:25:04	-0.397091434	0.096012611	-0.59490459	**6:25:08**	-0.397089498	0.096658624	-0.594846883
6:25:12	-0.397087562	0.095969122	-0.594789175	**6:25:16**	-0.397085626	0.09527962	-0.594731467
6:25:20	-0.39708369	0.093409902	-0.594673759	**6:25:24**	-0.397081754	0.090359897	-0.594616052
6:25:28	-0.397079818	0.087309892	-0.594558344	**6:25:32**	-0.397077882	0.081702339	-0.594500636
6:25:36	-0.397075946	0.076094786	-0.594442928	**6:25:40**	-0.39707401	0.06989883	-0.594385221
6:25:44	-0.397072074	0.063114401	-0.594327513	**6:25:48**	-0.397070138	0.056329971	-0.594269805
6:25:52	-0.397068202	0.049041788	-0.594212098	**6:25:56**	-0.397066266	0.041753605	-0.59415439
6:26:00	-0.39706433	0.033523786	-0.594096682	**6:26:04**	-0.398094382	0.02373718	-0.594038974
6:26:08	-0.399124433	0.013950592	-0.593981267	**6:26:12**	-0.400154484	0.001721019	-0.593923559
6:26:16	-0.401184536	-0.010508554	-0.593865851	**6:26:20**	-0.402214587	-0.022738144	-0.593808144
6:26:24	-0.403244638	-0.034967717	-0.593750436	**6:26:28**	-0.40427469	-0.047197289	-0.593692728
6:26:32	-0.405304741	-0.059426862	-0.59363502	**6:26:36**	-0.406334792	-0.071656435	-0.593577313
6:26:40	-0.407364843	-0.084483416	-0.593519605	**6:26:44**	-0.408394895	-0.09790779	-0.593461897
6:26:48	-0.409424946	-0.111332163	-0.59340419	**6:26:52**	-0.410454997	-0.126279913	-0.593346482
6:26:56	-0.411485049	-0.141227671	-0.593288774	**6:27:00**	-0.4125151	-0.15566592	-0.593231066
6:27:04	-0.412421464	-0.168924847	-0.593173359	**6:27:08**	-0.412327827	-0.182183779	-0.593115651
6:27:12	-0.412234191	-0.193775808	-0.593057943	**6:27:16**	-0.412140554	-0.205367837	-0.593000235
6:27:20	-0.412046918	-0.21620953	-0.592942528	**6:27:24**	-0.411953281	-0.226300888	-0.59288482
6:27:28	-0.411859645	-0.236392247	-0.592827112	**6:27:32**	-0.411766008	-0.246483605	-0.592769405
6:27:36	-0.411672372	-0.256574963	-0.592711697	**6:27:40**	-0.411578735	-0.267195461	-0.592653989
6:27:44	-0.411485099	-0.278345096	-0.592596281	**6:27:48**	-0.411391462	-0.289494733	-0.592538574
6:27:52	-0.411297826	-0.32376432	-0.592480866	**6:27:56**	-0.411204189	-0.358033907	-0.592423158
6:28:00	-0.411110553	-0.3968057	-0.592365451	**6:28:04**	-0.411096623	-0.440127229	-0.592307743
6:28:08	-0.411082694	-0.48344874	-0.592250035	**6:28:12**	-0.411068765	-0.499613529	-0.592192327
6:28:16	-0.411054835	-0.515778318	-0.59213462	**6:28:20**	-0.411040906	-0.526970659	-0.592076912
6:28:24	-0.411026977	-0.533190537	-0.592019204	**6:28:28**	-0.411013047	-0.539410414	-0.591961497
6:28:32	-0.410999118	-0.542375673	-0.591903789	**6:28:36**	-0.410985189	-0.545340915	-0.591846081
6:28:40	-0.410971259	-0.548306174	-0.591788373	**6:28:44**	-0.41095733	-0.551271434	-0.591730666
6:28:48	-0.410943401	-0.554236693	-0.591672958	**6:28:52**	-0.410929471	-0.55701283	-0.59161525
6:28:56	-0.410915542	-0.559788966	-0.591557543	**6:29:00**	-0.410901613	-0.561287181	-0.591499835
6:29:04	-0.410842759	-0.561480731	-0.591442127	**6:29:08**	-0.410783906	-0.561674245	-0.591384419
6:29:12	-0.410725052	-0.551181368	-0.591326712	**6:29:16**	-0.410666198	-0.540688525	-0.591269004
6:29:20	-0.410607345	-0.530723615	-0.591211296	**6:29:24**	-0.410548491	-0.521286671	-0.591153588
6:29:28	-0.410489638	-0.511849727	-0.591095881	**6:29:32**	-0.410430784	-0.508267958	-0.591038173
6:29:36	-0.410371931	-0.504686171	-0.590980465	**6:29:40**	-0.410313077	-0.503651541	-0.590922758
6:29:44	-0.410254224	-0.505164031	-0.59086505	**6:29:48**	-0.41019537	-0.506676539	-0.590807342
6:29:52	-0.410136517	-0.510963983	-0.590749634	**6:29:56**	-0.410077663	-0.515251426	-0.590691927
6:30:00	0.089981191	-0.020088598	-0.090634219	**6:30:04**	0.090189123	-0.025386636	-0.090576511
6:30:08	0.090397055	-0.030684655	-0.090518804	**6:30:12**	-0.409395012	-0.533532336	-0.590461096
6:30:16	-0.40918708	-0.536380017	-0.590403388	**6:30:20**	-0.408979148	-0.53861629	-0.59034568
6:30:24	-0.408771215	-0.54024112	-0.590287973	**6:30:28**	-0.408563283	-0.541865932	-0.590230265
6:30:32	-0.408355351	-0.54349078	-0.590172557	**6:30:36**	-0.408147418	-0.545115627	-0.59011485
6:30:40	-0.407939486	-0.546932938	-0.590057142	**6:30:44**	-0.407731554	-0.548942746	-0.589999434
6:30:48	-0.407523621	-0.550952555	-0.589941726	**6:30:52**	-0.407315689	-0.561223661	-0.589884019
6:30:56	-0.407107757	-0.571494802	-0.589826311	**6:31:00**	-0.406899824	-0.583124588	-0.589768603
6:31:04	-0.406896082	-0.596234733	-0.589710895	**6:31:08**	-0.406892339	-0.609344912	-0.589653188
6:31:12	-0.406888596	-0.609853701	-0.58959548	**6:31:16**	-0.406884853	-0.610362489	-0.589537772
6:31:20	-0.40688111	-0.572041582	-0.589480065	**6:31:24**	-0.406877367	-0.494890908	-0.589422357
6:31:28	-0.406873624	-0.417740234	-0.589364649	**6:31:32**	-0.406869881	-0.315060075	-0.589306941

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:31:36	-0.406866138	-0.21237992	-0.589249234	**6:31:40**	-0.406862395	-0.129675161	-0.589191526
6:31:44	-0.406858652	-0.066945819	-0.589133818	**6:31:48**	-0.40685491	-0.004216459	-0.589076111
6:31:52	-0.406851167	0.031897006	-0.589018403	**6:31:56**	-0.406847424	0.068010489	-0.588960695
6:32:00	-0.406843681	0.087029372	-0.588902987	**6:32:04**	-0.406863288	0.100336167	-0.58884528
6:32:08	-0.406882895	0.113642961	-0.588787572	**6:32:12**	-0.406902501	0.118172003	-0.588729864
6:32:16	-0.406922108	0.122701044	-0.588672157	**6:32:20**	-0.406941715	0.126536907	-0.588614449
6:32:24	-0.406961322	0.129679556	-0.588556741	**6:32:28**	-0.406980929	0.132822205	-0.588499033
6:32:32	-0.407000536	0.130650401	-0.588441326	**6:32:36**	-0.407020142	0.128478561	-0.588383618
6:32:40	-0.407039749	0.124575764	-0.58832591	**6:32:44**	-0.407059356	0.118942011	-0.588268202
6:32:48	-0.407078963	0.113308221	-0.588210495	**6:32:52**	-0.40709857	0.106252687	-0.588152787
6:32:56	-0.407118177	0.099197154	-0.588095079	**6:33:00**	-0.407137783	0.092141655	-0.588037372
6:33:04	-0.407130878	0.085101924	-0.587979664	**6:33:08**	-0.407123973	0.078062194	-0.587921956
6:33:12	-0.407117068	0.071803968	-0.587864248	**6:33:16**	-0.407110163	0.065545778	-0.587806541
6:33:20	-0.407103258	0.059701967	-0.587748833	**6:33:24**	-0.407096353	0.054272606	-0.587691125
6:33:28	-0.407089448	0.048843246	-0.587633418	**6:33:32**	-0.407082543	0.042545245	-0.58757571
6:33:36	-0.407075638	0.036247244	-0.587518002	**6:33:40**	-0.407068733	0.029320657	-0.587460294
6:33:44	-0.407061828	0.021765483	-0.587402587	**6:33:48**	-0.407054923	0.01421031	-0.587344879
6:33:52	-0.407048018	0.040040306	-0.587287171	**6:33:56**	-0.407041113	0.065870284	-0.587229464
6:34:00	-0.407034208	0.066109072	-0.587171756	**6:34:04**	-0.407265029	0.040614893	-0.587114048
6:34:08	-0.40749585	0.015120715	-0.58705634	**6:34:12**	-0.40772667	-0.010373464	-0.586998633
6:34:16	-0.407957491	-0.035867625	-0.586940925	**6:34:20**	-0.408188312	-0.058246656	-0.586883217
6:34:24	-0.408419132	-0.077510523	-0.58682551	**6:34:28**	-0.408649953	-0.096774407	-0.586767802
6:34:32	-0.408880773	-0.112051964	-0.586710094	**6:34:36**	-0.409111594	-0.12732952	-0.586652386
6:34:40	-0.409342415	-0.140282707	-0.586594679	**6:34:44**	-0.409573235	-0.150911525	-0.586536971
6:34:48	-0.409804056	-0.161540342	-0.586479263	**6:34:52**	-0.410034876	-0.167557506	-0.586421555
6:34:56	-0.410265697	-0.173574664	-0.586363848	**6:35:00**	-0.410496518	-0.177748003	-0.58630614
6:35:04	-0.410430436	-0.179900537	-0.586248432	**6:35:08**	-0.410364355	-0.182053072	-0.586190725
6:35:12	-0.410298274	-0.182249983	-0.586133017	**6:35:16**	-0.410232193	-0.182446895	-0.586075309
6:35:20	-0.410166112	-0.181767847	-0.586017601	**6:35:24**	-0.410100031	-0.18021283	-0.585959894
6:35:28	-0.410033949	-0.178657818	-0.585902186	**6:35:32**	-0.409967868	-0.17526797	-0.585844478
6:35:36	-0.409901787	-0.171878126	-0.585786771	**6:35:40**	-0.409835706	-0.16793194	-0.585729063
6:35:44	-0.409769625	-0.163429418	-0.585671355	**6:35:48**	-0.409703544	-0.158926895	-0.585613647
6:35:52	-0.409637462	-0.153734427	-0.58555594	**6:35:56**	-0.409571381	-0.148541958	-0.585498232
6:36:00	-0.4095053	-0.144438759	-0.585440524	**6:36:04**	-0.409397425	-0.141399926	-0.585382817
6:36:08	-0.40928955	-0.138361093	-0.585325109	**6:36:12**	-0.409181675	-0.140734685	-0.585267401
6:36:16	-0.4090738	-0.143108277	-0.585209693	**6:36:20**	-0.408965926	-0.147774279	-0.585151986
6:36:24	-0.408858051	-0.154732675	-0.585094278	**6:36:28**	-0.408750176	-0.16169107	-0.58503657
6:36:32	-0.408642301	-0.169727045	-0.584978862	**6:36:36**	-0.408534426	-0.177763025	-0.584921155
6:36:40	-0.408426551	-0.184941747	-0.584863447	**6:36:44**	-0.408318676	-0.19126322	-0.584805739
6:36:48	-0.408210801	-0.197584693	-0.584748032	**6:36:52**	-0.408102926	-0.183244919	-0.584690324
6:36:56	-0.407995051	-0.168905146	-0.584632616	**6:37:00**	-0.407887176	-0.140776678	-0.584574908
6:37:04	-0.40784323	-0.098897616	-0.584517201	**6:37:08**	-0.407799283	-0.057018554	-0.584459493
6:37:12	-0.407755337	-0.039118989	-0.584401785	**6:37:16**	-0.40771139	-0.021219424	-0.584344078
6:37:20	-0.407667444	-0.011838282	-0.58428637	**6:37:24**	-0.407623497	-0.010975529	-0.584228662
6:37:28	-0.40757955	-0.010112776	-0.584170954	**6:37:32**	-0.407535604	-0.017122983	-0.584113247
6:37:36	-0.407491657	-0.02413319	-0.584055539	**6:37:40**	-0.407447711	-0.032922906	-0.583997831
6:37:44	-0.407403764	-0.043492164	-0.583940124	**6:37:48**	-0.407359818	-0.054061406	-0.583882416
6:37:52	-0.407315871	-0.067786333	-0.583824708	**6:37:56**	-0.407271925	-0.081511278	-0.583767
6:38:00	-0.407227978	-0.09478086	-0.583709293	**6:38:04**	-0.407308378	-0.107669219	-0.583651585
6:38:08	-0.407388778	-0.120557578	-0.583593877	**6:38:12**	-0.407469179	-0.132491866	-0.583536169
6:38:16	-0.407549579	-0.144426144	-0.583478462	**6:38:20**	-0.407629979	-0.155572523	-0.583420754
6:38:24	-0.407710379	-0.165930984	-0.583363046	**6:38:28**	-0.407790779	-0.176289445	-0.583305339
6:38:32	-0.407871179	-0.183548316	-0.583247631	**6:38:36**	-0.40795158	-0.190807187	-0.583189923
6:38:40	-0.40803198	-0.19642416	-0.583132215	**6:38:44**	-0.40811238	-0.200399226	-0.583074508
6:38:48	-0.40819278	-0.204374292	-0.5830168	**6:38:52**	-0.40827318	-0.205184074	-0.582959092
6:38:56	-0.408353581	-0.205993852	-0.582901385	**6:39:00**	-0.408433981	-0.205797282	-0.582843677
6:39:04	-0.408395003	-0.204523195	-0.582785969	**6:39:08**	-0.408356026	-0.203249109	-0.582728261

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:39:12	-0.408317048	-0.201975022	-0.582670554	**6:39:16**	-0.408278071	-0.200700936	-0.582612846
6:39:20	-0.408239093	-0.19871118	-0.582555138	**6:39:24**	-0.408200115	-0.196005751	-0.582497431
6:39:28	-0.408161138	-0.193300323	-0.582439723	**6:39:32**	-0.40812216	-0.190594899	-0.582382015
6:39:36	-0.408083183	-0.18788947	-0.582324307	**6:39:40**	-0.408044205	-0.184756085	-0.5822666
6:39:44	-0.408005227	-0.181194749	-0.582208892	**6:39:48**	-0.40796625	-0.177633408	-0.582151184
6:39:52	-0.407927272	-0.160029874	-0.582093477	**6:39:56**	-0.407888295	-0.142426335	-0.582035769
6:40:00	-0.407849317	-0.13112915	-0.581978061	**6:40:04**	-0.407866028	-0.126171506	-0.581920353
6:40:08	-0.40788274	-0.12121387	-0.581862646	**6:40:12**	-0.407899451	-0.116755538	-0.581804938
6:40:16	-0.407916162	-0.112297206	-0.58174723	**6:40:20**	-0.407932874	-0.108659141	-0.581689522
6:40:24	-0.407949585	-0.105841326	-0.581631815	**6:40:28**	-0.407966296	-0.10302352	-0.581574107
6:40:32	-0.407983007	-0.102998023	-0.581516399	**6:40:36**	-0.407999719	-0.102972526	-0.581458692
6:40:40	-0.40801643	-0.105556246	-0.581400984	**6:40:44**	-0.408033141	-0.110749192	-0.581343276
6:40:48	-0.408049852	-0.115942139	-0.581285568	**6:40:52**	-0.408066564	-0.128608767	-0.581227861
6:40:56	-0.408083275	-0.141275395	-0.581170153	**6:41:00**	-0.408099986	-0.156634645	-0.581112445
6:41:04	-0.40806146	-0.174653592	-0.581054738	**6:41:08**	-0.408022934	-0.192672543	-0.58099703
6:41:12	-0.407984409	-0.211621331	-0.580939322	**6:41:16**	-0.407945883	-0.23057012	-0.580881614
6:41:20	-0.407907357	-0.248274874	-0.580823907	**6:41:24**	-0.407868831	-0.264735594	-0.580766199
6:41:28	-0.407830305	-0.281196315	-0.580708491	**6:41:32**	-0.407791779	-0.294926006	-0.580650784
6:41:36	-0.407753254	-0.308655696	-0.580593076	**6:41:40**	-0.407714728	-0.320191078	-0.580535368
6:41:44	-0.407676202	-0.329532154	-0.58047766	**6:41:48**	-0.407637676	-0.33887323	-0.580419953
6:41:52	-0.40759915	-0.343169433	-0.580362245	**6:41:56**	-0.407560624	-0.347465645	-0.580304537
6:42:00	-0.407522098	-0.34924459	-0.580246829	**6:42:04**	-0.407504289	-0.348518634	-0.580189122
6:42:08	-0.407486479	-0.347792677	-0.580131414	**6:42:12**	-0.407468669	-0.344015367	-0.580073706
6:42:16	-0.40745086	-0.340238057	-0.580015999	**6:42:20**	-0.40743305	-0.33529206	-0.579958291
6:42:24	-0.40741524	-0.329177377	-0.579900583	**6:42:28**	-0.407397431	-0.323062702	-0.579842875
6:42:32	-0.407379621	-0.314582875	-0.579785168	**6:42:36**	-0.407361811	-0.306103049	-0.57972746
6:42:40	-0.407344002	-0.295774214	-0.579669752	**6:42:44**	-0.407326192	-0.283596366	-0.579612045
6:42:48	-0.407308382	-0.271418526	-0.579554337	**6:42:52**	-0.407290573	-0.225259434	-0.579496629
6:42:56	-0.407272763	-0.179100345	-0.579438921	**6:43:00**	-0.407254953	-0.139466	-0.579381214
6:43:04	-0.40719881	-0.106333554	-0.579323506	**6:43:08**	-0.407142667	-0.073201107	-0.579265798
6:43:12	-0.407086524	-0.062480361	-0.579208091	**6:43:16**	-0.407030381	-0.051759632	-0.579150383
6:43:20	-0.406974237	-0.046215324	-0.579092675	**6:43:24**	-0.406918094	-0.045847473	-0.579034967
6:43:28	-0.406861951	-0.045479604	-0.57897726	**6:43:32**	-0.406805808	-0.050694435	-0.578919552
6:43:36	-0.406749665	-0.055909284	-0.578861844	**6:43:40**	-0.406693521	-0.061991654	-0.578804136
6:43:44	-0.406637378	-0.068941581	-0.578746429	**6:43:48**	-0.406581235	-0.075891491	-0.578688721
6:43:52	-0.406525092	-0.080252284	-0.578631013	**6:43:56**	-0.406468949	-0.084613077	-0.578573306
6:44:00	-0.406412806	-0.088973852	-0.578515598	**6:44:04**	-0.406367734	-0.093341245	-0.57845789
6:44:08	-0.406322663	-0.097708637	-0.578400182	**6:44:12**	-0.406277591	-0.101451778	-0.578342475
6:44:16	-0.40623252	-0.10519491	-0.578284767	**6:44:20**	-0.406187449	-0.107909102	-0.578227059
6:44:24	-0.406142377	-0.109594353	-0.578169352	**6:44:28**	-0.406097306	-0.111279596	-0.578111644
6:44:32	-0.406052235	-0.109956501	-0.578053936	**6:44:36**	-0.406007163	-0.108633407	-0.577996228
6:44:40	-0.405962092	-0.10554149	-0.577938521	**6:44:44**	-0.405917021	-0.100680732	-0.577880813
6:44:48	-0.405871949	-0.095819984	-0.577823105	**6:44:52**	-0.405826878	-0.088767524	-0.577765398
6:44:56	-0.405781806	-0.081715038	-0.57770769	**6:45:00**	-0.905736735	-0.579438059	-1.077649982
6:45:04	-0.905704533	-0.581944241	-1.077592274	**6:45:08**	-0.905672332	-0.584450423	-1.077534567
6:45:12	-0.40564013	-0.070253077	-0.577476859	**6:45:16**	-0.405607928	-0.056055731	-0.577419151
6:45:20	-0.405575727	-0.041182864	-0.577361444	**6:45:24**	-0.405543525	-0.025634459	-0.577303736
6:45:28	-0.405511323	-0.010086072	-0.577246028	**6:45:32**	-0.405479122	0.001134479	-0.57718832
6:45:36	-0.40544692	0.012355047	-0.577130613	**6:45:40**	-0.405414718	0.020950542	-0.577072905
6:45:44	-0.405382517	0.026920966	-0.577015197	**6:45:48**	-0.405350315	0.03289139	-0.576957489
6:45:52	-0.405318113	0.038861813	-0.576899782	**6:45:56**	-0.405285912	0.044832237	-0.576842074
6:46:00	-0.40525371	0.062341314	-0.576784366	**6:46:04**	-0.405219381	0.091390331	-0.576726659
6:46:08	-0.405185051	0.120439313	-0.576668951	**6:46:12**	-0.405150722	0.141864324	-0.576611243
6:46:16	-0.405116393	0.163289299	-0.576553535	**6:46:20**	-0.405082063	0.176862738	-0.576495828
6:46:24	-0.405047734	0.18258464	-0.57643812	**6:46:28**	-0.405013405	0.188306507	-0.576380412
6:46:32	-0.404979075	0.181514491	-0.576322705	**6:46:36**	-0.404944746	0.174722475	-0.576264997
6:46:40	-0.404910417	0.164780742	-0.576207289	**6:46:44**	-0.404876087	0.151689291	-0.576149581

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:46:48	-0.404841758	0.138597841	-0.576091874	**6:46:52**	-0.404807429	0.123461993	-0.576034166
6:46:56	-0.4047731	0.108326145	-0.575976458	**6:47:00**	-0.40473877	0.092546042	-0.575918751
6:47:04	-0.40470702	0.076120076	-0.575861043	**6:47:08**	-0.40467527	0.059694146	-0.575803335
6:47:12	-0.40464352	0.043843241	-0.575745627	**6:47:16**	-0.40461177	0.027992337	-0.57568792
6:47:20	-0.40458002	0.014100665	-0.575630212	**6:47:24**	-0.40454827	0.002168228	-0.575572504
6:47:28	-0.404516521	-0.009764192	-0.575514796	**6:47:32**	-0.404484771	-0.021050759	-0.575457089
6:47:36	-0.404453021	-0.032337343	-0.575399381	**6:47:40**	-0.404421271	-0.045973025	-0.575341673
6:47:44	-0.404389521	-0.061957822	-0.575283966	**6:47:48**	-0.404357771	-0.07794262	-0.575226258
6:47:52	-0.404326021	-0.098592517	-0.57516855	**6:47:56**	-0.404294271	-0.119242423	-0.575110842
6:48:00	-0.404262521	-0.141334902	-0.575053135	**6:48:04**	-0.404238048	-0.164874293	-0.574995427
6:48:08	-0.404213576	-0.188413685	-0.574937719	**6:48:12**	-0.404189103	-0.213733321	-0.574880012
6:48:16	-0.40416463	-0.239052958	-0.574822304	**6:48:20**	-0.404140158	-0.264372594	-0.574764596
6:48:24	-0.404115685	-0.289692231	-0.574706888	**6:48:28**	-0.404091212	-0.315011868	-0.574649181
6:48:32	-0.40406674	-0.338426666	-0.574591473	**6:48:36**	-0.404042267	-0.361841474	-0.574533765
6:48:40	-0.404017795	-0.383379938	-0.574476058	**6:48:44**	-0.403993322	-0.403042076	-0.57441835
6:48:48	-0.403968849	-0.422704206	-0.574360642	**6:48:52**	-0.403944377	-0.47668401	-0.574302934
6:48:56	-0.403919904	-0.530663831	-0.574245227	**6:49:00**	-0.403895431	-0.593280656	-0.574187519
6:49:04	-0.403823929	-0.664506432	-0.574129811	**6:49:08**	-0.403752428	-0.735732209	-0.574072103
6:49:12	-0.403680926	-0.775506858	-0.574014396	**6:49:16**	-0.403609424	-0.815281508	-0.573956688
6:49:20	-0.403537922	-0.835443429	-0.57389898	**6:49:24**	-0.40346642	-0.835992692	-0.573841273
6:49:28	-0.403394918	-0.836541956	-0.573783565	**6:49:32**	-0.403323416	-0.836499334	-0.573725857
6:49:36	-0.403251914	-0.836456713	-0.573668149	**6:49:40**	-0.403180412	-0.836414092	-0.573610442
6:49:44	-0.403108911	-0.836371471	-0.573552734	**6:49:48**	-0.403037409	-0.83632885	-0.573495026
6:49:52	-0.402965907	-0.836286229	-0.573437319	**6:49:56**	-0.402894405	-0.836243607	-0.573379611
6:50:00	-0.402822903	-0.836200986	-0.573321903	**6:50:04**	-0.402798304	-0.836186323	-0.573264195
6:50:08	-0.402773705	-0.83617166	-0.573206488	**6:50:12**	-0.402749106	-0.836156997	-0.57314878
6:50:16	-0.402724507	-0.836142334	-0.573091072	**6:50:20**	-0.402699907	-0.831808183	-0.573033365
6:50:24	-0.402675308	-0.823154581	-0.572975657	**6:50:28**	-0.402650709	-0.814500943	-0.572917949
6:50:32	-0.40262611	-0.801684253	-0.572860241	**6:50:36**	-0.402601511	-0.788867564	-0.572802534
6:50:40	-0.402576912	-0.775380541	-0.572744826	**6:50:44**	-0.402552313	-0.761223186	-0.572687118
6:50:48	-0.402527714	-0.747065794	-0.572629411	**6:50:52**	-0.402503114	-0.732908438	-0.572571703
6:50:56	-0.402478515	-0.718751082	-0.572513995	**6:51:00**	-0.402453916	-0.706016857	-0.572456287
6:51:04	-0.402389642	-0.694682076	-0.57239858	**6:51:08**	-0.402325368	-0.683347296	-0.572340872
6:51:12	-0.402261093	-0.673567744	-0.572283164	**6:51:16**	-0.402196819	-0.663788192	-0.572225456
6:51:20	-0.402132545	-0.654373882	-0.572167749	**6:51:24**	-0.402068271	-0.64532485	-0.572110041
6:51:28	-0.402003996	-0.636275818	-0.572052333	**6:51:32**	-0.401939722	-0.62772029	-0.571994626
6:51:36	-0.401875448	-0.619164762	-0.571936918	**6:51:40**	-0.401811174	-0.609884505	-0.57187921
6:51:44	-0.401746899	-0.599879519	-0.571821502	**6:51:48**	-0.401682625	-0.589874568	-0.571763795
6:51:52	-0.401618351	-0.553306342	-0.571706087	**6:51:56**	-0.401554077	-0.516738081	-0.571648379
6:52:00	-0.401489802	-0.460369833	-0.571590672	**6:52:04**	-0.401452582	-0.38421769	-0.571532964
6:52:08	-0.401415362	-0.308065551	-0.571475256	**6:52:12**	-0.401378141	-0.257485034	-0.571417548
6:52:16	-0.401340921	-0.206904516	-0.571359841	**6:52:20**	-0.4013037	-0.168385294	-0.571302133
6:52:24	-0.40126648	-0.141927356	-0.571244425	**6:52:28**	-0.40122926	-0.115469427	-0.571186718
6:52:32	-0.401192039	-0.103410811	-0.57112901	**6:52:36**	-0.401154819	-0.091352195	-0.571071302
6:52:40	-0.401117599	-0.083161887	-0.571013594	**6:52:44**	-0.401080378	-0.078839879	-0.570955887
6:52:48	-0.401043158	-0.07451787	-0.570898179	**6:52:52**	-0.401005938	-0.074990608	-0.570840471
6:52:56	-0.400968717	-0.075463364	-0.570782763	**6:53:00**	-0.400931497	-0.077333296	-0.570725056
6:53:04	-0.400865416	-0.080583201	-0.570667348	**6:53:08**	-0.400799334	-0.083833105	-0.57060964
6:53:12	-0.400733253	-0.08818721	-0.570551933	**6:53:16**	-0.400667172	-0.092541298	-0.570494225
6:53:20	-0.400601091	-0.096228099	-0.570436517	**6:53:24**	-0.40053501	-0.099247586	-0.570378809
6:53:28	-0.400468929	-0.102267074	-0.570321102	**6:53:32**	-0.400402847	-0.102945555	-0.570263394
6:53:36	-0.400336766	-0.103624046	-0.570205686	**6:53:40**	-0.400270685	-0.10309928	-0.570147979
6:53:44	-0.400204604	-0.101371257	-0.570090271	**6:53:48**	-0.400138523	-0.099643235	-0.570032563
6:53:52	-0.400072442	-0.096512529	-0.569974855	**6:53:56**	-0.40000636	-0.093381823	-0.569917148
6:54:00	-0.399940279	-0.090858333	-0.56985944	**6:54:04**	-0.399913738	-0.088965617	-0.569801732
6:54:08	-0.399887196	-0.08707292	-0.569744025	**6:54:12**	-0.399860655	-0.087606917	-0.569686317
6:54:16	-0.399834113	-0.088140931	-0.569628609	**6:54:20**	-0.399807572	-0.088674927	-0.569570901

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
6:54:24	-0.39978103	-0.089208942	-0.569513194	**6:54:28**	-0.399754488	-0.089742938	-0.569455486
6:54:32	-0.399727947	-0.086624494	-0.569397778	**6:54:36**	-0.399701405	-0.08350605	-0.56934007
6:54:40	-0.399674864	-0.078759933	-0.569282363	**6:54:44**	-0.399648322	-0.072386143	-0.569224655
6:54:48	-0.399621781	-0.066012335	-0.569166947	**6:54:52**	-0.399595239	-0.03562486	-0.56910924
6:54:56	-0.399568698	-0.005237384	-0.569051532	**6:55:00**	-0.399542156	0.029868538	-0.568993824
6:55:04	-0.399508148	0.069697377	-0.568936116	**6:55:08**	-0.399474139	0.109526179	-0.568878409
6:55:12	-0.39944013	0.121918003	-0.568820701	**6:55:16**	-0.399406122	0.134309792	-0.568762993
6:55:20	-0.399372113	0.148065092	-0.568705286	**6:55:24**	-0.399338105	0.163183869	-0.568647578
6:55:28	-0.399304096	0.178302646	-0.56858987	**6:55:32**	-0.399270087	0.185659562	-0.568532162
6:55:36	-0.399236079	0.193016478	-0.568474455	**6:55:40**	-0.39920207	0.197986458	-0.568416747
6:55:44	-0.399168062	0.200569502	-0.568359039	**6:55:48**	-0.399134053	0.203152581	-0.568301332
6:55:52	-0.399100044	0.203522817	-0.568243624	**6:55:56**	-0.399066036	0.20389309	-0.568185916
6:56:00	-0.398996093	0.204284746	-0.56807952	**6:56:04**	-0.3988579	0.204717121	-0.567928135
6:56:08	-0.398719707	0.20514946	-0.567776749	**6:56:12**	-0.398581514	0.207513427	-0.567625363
6:56:16	-0.398443321	0.209877393	-0.567473977	**6:56:20**	-0.398305128	0.212541583	-0.567322591
6:56:24	-0.398166935	0.215505926	-0.567171205	**6:56:28**	-0.398028742	0.218470268	-0.56701982
6:56:32	-0.397890549	0.219536736	-0.566868434	**6:56:36**	-0.397752356	0.220603169	-0.566717048
6:56:40	-0.397614163	0.218992958	-0.566565662	**6:56:44**	-0.39747597	0.214706104	-0.566414276
6:56:48	-0.397337777	0.210419215	-0.566262891	**6:56:52**	-0.397199584	0.20005328	-0.566111505
6:56:56	-0.397061391	0.189687345	-0.565960119	**6:57:00**	-0.396923198	0.177639661	-0.565808733
6:57:04	-0.396829536	0.163883613	-0.565657347	**6:57:08**	-0.396735875	0.150127565	-0.565505961
6:57:12	-0.396642213	0.137355361	-0.565354576	**6:57:16**	-0.396548551	0.124583194	-0.56520319
6:57:20	-0.396454889	0.111075496	-0.565051804	**6:57:24**	-0.396361227	0.09683234	-0.564900418
6:57:28	-0.396267566	0.082589148	-0.564749032	**6:57:32**	-0.396173904	0.065568125	-0.564597646
6:57:36	-0.396080242	0.04854712	-0.564446261	**6:57:40**	-0.39598658	0.030684441	-0.564294875
6:57:44	-0.395892918	0.011980124	-0.564143489	**6:57:48**	-0.395799257	-0.006724211	-0.563992103
6:57:52	-0.395705595	-0.0731426	-0.563840717	**6:57:56**	-0.395611933	-0.139561007	-0.563689331
6:58:00	-0.395518271	-0.186952374	-0.563537946	**6:58:04**	-0.395373587	-0.2152863	-0.56338656
6:58:08	-0.395228903	-0.243620229	-0.563235174	**6:58:12**	-0.395084218	-0.2461742	-0.563083788
6:58:16	-0.394939534	-0.24872817	-0.562932402	**6:58:20**	-0.39479485	-0.253076223	-0.562781017
6:58:24	-0.394650165	-0.259218358	-0.562629631	**6:58:28**	-0.394505481	-0.265360494	-0.562478245
6:58:32	-0.394360797	-0.276684574	-0.562326859	**6:58:36**	-0.394216113	-0.288008656	-0.562175473
6:58:40	-0.394071428	-0.300089035	-0.562024087	**6:58:44**	-0.393926744	-0.312925724	-0.561872702
6:58:48	-0.39378206	-0.325762403	-0.561721316	**6:58:52**	-0.393637375	-0.338599092	-0.56156993
6:58:56	-0.393492691	-0.351435772	-0.561418544	**6:59:00**	-0.393348007	-0.36332578	-0.561267158
6:59:04	-0.393250279	-0.374297105	-0.561115772	**6:59:08**	-0.393152552	-0.385268422	-0.560964387
6:59:12	-0.393054825	-0.385542244	-0.560813001	**6:59:16**	-0.392957097	-0.385816066	-0.560661615
6:59:20	-0.39285937	-0.383625746	-0.560510229	**6:59:24**	-0.392761643	-0.378971293	-0.560358843
6:59:28	-0.392663915	-0.37431684	-0.560207457	**6:59:32**	-0.392566188	-0.369662387	-0.560056072
6:59:36	-0.392468461	-0.365007934	-0.559904686	**6:59:40**	-0.392370733	-0.360353481	-0.5597533
6:59:44	-0.392273006	-0.355699028	-0.559601914	**6:59:48**	-0.392175279	-0.351339638	-0.559450528
6:59:52	-0.392077551	-0.347865454	-0.559299143	**6:59:56**	-0.391979824	-0.34439127	-0.559147757
7:00:00	0.108117903	0.162463848	-0.058996371	**7:00:04**	0.10831548	0.172759427	-0.058844985
7:00:08	0.108513057	0.183054988	-0.058693599	**7:00:12**	-0.391289366	-0.306649437	-0.558542213
7:00:16	-0.391091789	-0.296353867	-0.558390828	**7:00:20**	-0.390894212	-0.286917295	-0.558239442
7:00:24	-0.390696635	-0.278339727	-0.558088056	**7:00:28**	-0.390499058	-0.269762157	-0.55793667
7:00:32	-0.390301481	-0.265686906	-0.557785284	**7:00:36**	-0.390103904	-0.261611655	-0.557633898
7:00:40	-0.389906327	-0.259005874	-0.557482513	**7:00:44**	-0.38970875	-0.257869564	-0.557331127
7:00:48	-0.389511173	-0.256733253	-0.557179741	**7:00:52**	-0.389313596	-0.269752651	-0.557028355
7:00:56	-0.389116019	-0.282772049	-0.556876969	**7:01:00**	-0.388918442	-0.292584771	-0.556725584
7:01:04	-0.388813036	-0.299245751	-0.556574198	**7:01:08**	-0.388707629	-0.305906731	-0.556422812
7:01:12	-0.388602222	-0.304935431	-0.556271426	**7:01:16**	-0.388496816	-0.30396413	-0.55612004
7:01:20	-0.388391409	-0.302305869	-0.555968654	**7:01:24**	-0.388286002	-0.299960651	-0.555817269
7:01:28	-0.388180596	-0.297615428	-0.555665883	**7:01:32**	-0.388075189	-0.299415284	-0.555514497
7:01:36	-0.387969782	-0.301215135	-0.555363111	**7:01:40**	-0.387864376	-0.30301499	-0.555211725
7:01:44	-0.387758969	-0.304814841	-0.555060339	**7:01:48**	-0.387653562	-0.306614697	-0.554908954
7:01:52	-0.387548156	-0.304479395	-0.554757568	**7:01:56**	-0.387442749	-0.302344094	-0.554606182

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:02:00	-0.387337342	-0.299657101	-0.554454796	**7:02:04**	-0.387178316	-0.296386449	-0.55430341
7:02:08	-0.387019289	-0.293115798	-0.554152024	**7:02:12**	-0.386860262	-0.290872684	-0.554000639
7:02:16	-0.386701236	-0.288629574	-0.553849253	**7:02:20**	-0.386542209	-0.28290448	-0.553697867
7:02:24	-0.386383182	-0.273697403	-0.553546481	**7:02:28**	-0.386224156	-0.264490325	-0.553395095
7:02:32	-0.386065129	-0.263351352	-0.55324371	**7:02:36**	-0.385906103	-0.262212378	-0.553092324
7:02:40	-0.385747076	-0.261073404	-0.552940938	**7:02:44**	-0.385588049	-0.259934431	-0.552789552
7:02:48	-0.385429023	-0.258795457	-0.552638166	**7:02:52**	-0.385269996	-0.253624289	-0.55248678
7:02:56	-0.38511097	-0.248453121	-0.552335395	**7:03:00**	-0.384951943	-0.24376813	-0.552184009
7:03:04	-0.384828467	-0.239590504	-0.552032623	**7:03:08**	-0.384704991	-0.235412878	-0.551881237
7:03:12	-0.384581516	-0.231767302	-0.551729851	**7:03:16**	-0.38445804	-0.228121727	-0.551578465
7:03:20	-0.384334564	-0.225173018	-0.55142708	**7:03:24**	-0.384211088	-0.222921176	-0.551275694
7:03:28	-0.384087613	-0.220669335	-0.551124308	**7:03:32**	-0.383964137	-0.216433504	-0.550972922
7:03:36	-0.383840661	-0.212197673	-0.550821536	**7:03:40**	-0.383717185	-0.206594801	-0.55067015
7:03:44	-0.38359371	-0.199624891	-0.550518765	**7:03:48**	-0.383470234	-0.192654978	-0.550367379
7:03:52	-0.383346758	-0.174249409	-0.550215993	**7:03:56**	-0.383223283	-0.155843837	-0.550064607
7:04:00	-0.383099807	-0.143670981	-0.549913221	**7:04:04**	-0.38299857	-0.137744082	-0.549761836
7:04:08	-0.382897332	-0.131817192	-0.54961045	**7:04:12**	-0.382796095	-0.145820406	-0.549459064
7:04:16	-0.382694858	-0.159823624	-0.549307678	**7:04:20**	-0.382593621	-0.172677937	-0.549156292
7:04:24	-0.382492383	-0.184383349	-0.549004906	**7:04:28**	-0.382391146	-0.196088758	-0.548853521
7:04:32	-0.382289909	-0.20779417	-0.548702135	**7:04:36**	-0.382188672	-0.219499581	-0.548550749
7:04:40	-0.382087434	-0.233259858	-0.548399363	**7:04:44**	-0.381986197	-0.249074999	-0.548247977
7:04:48	-0.38188496	-0.264890142	-0.548096591	**7:04:52**	-0.381783723	-0.269379474	-0.547945206
7:04:56	-0.381682485	-0.273868806	-0.54779382	**7:05:00**	-0.381581248	-0.282228636	-0.547642434
7:05:04	-0.381484424	-0.294461585	-0.547491048	**7:05:08**	-0.3813876	-0.306694535	-0.547339662
7:05:12	-0.381290776	-0.321879876	-0.547188276	**7:05:16**	-0.381193953	-0.337065226	-0.547036891
7:05:20	-0.381097129	-0.350722216	-0.546885505	**7:05:24**	-0.381000305	-0.362850847	-0.546734119
7:05:28	-0.380903481	-0.374979478	-0.546582733	**7:05:32**	-0.380806657	-0.384755014	-0.546431347
7:05:36	-0.380709833	-0.394530541	-0.546279962	**7:05:40**	-0.380613009	-0.403298472	-0.546128576
7:05:44	-0.380516185	-0.411058807	-0.54597719	**7:05:48**	-0.380419362	-0.418819142	-0.545825804
7:05:52	-0.380322538	-0.425265972	-0.545674418	**7:05:56**	-0.380225714	-0.431712821	-0.545523032
7:06:00	-0.38012889	-0.43716918	-0.545371647	**7:06:04**	-0.380081652	-0.441664644	-0.545220261
7:06:08	-0.380034414	-0.446160108	-0.545068875	**7:06:12**	-0.379987176	-0.453422939	-0.544917489
7:06:16	-0.379939939	-0.460685789	-0.544766103	**7:06:20**	-0.379892701	-0.468824899	-0.544614717
7:06:24	-0.379845463	-0.477840308	-0.544463332	**7:06:28**	-0.379798225	-0.486855698	-0.544311946
7:06:32	-0.379750987	-0.495871106	-0.54416056	**7:06:36**	-0.379703749	-0.504886514	-0.544009174
7:06:40	-0.379656511	-0.514101011	-0.543857788	**7:06:44**	-0.379609274	-0.523514615	-0.543706402
7:06:48	-0.379562036	-0.532928219	-0.543555017	**7:06:52**	-0.379514798	-0.49698701	-0.543403631
7:06:56	-0.37946756	-0.461045819	-0.543252245	**7:07:00**	-0.379420322	-0.438657319	-0.543100859
7:07:04	-0.379318981	-0.429789296	-0.542949473	**7:07:08**	-0.37921764	-0.420921255	-0.542798088
7:07:12	-0.379116299	-0.42124643	-0.542646702	**7:07:16**	-0.379014958	-0.421571605	-0.542495316
7:07:20	-0.378913616	-0.423175235	-0.54234393	**7:07:24**	-0.378812275	-0.426057319	-0.542192544
7:07:28	-0.378710934	-0.428939421	-0.542041158	**7:07:32**	-0.378609593	-0.43041415	-0.541889773
7:07:36	-0.378508252	-0.431888879	-0.541738387	**7:07:40**	-0.378406911	-0.432465087	-0.541587001
7:07:44	-0.37830557	-0.432142738	-0.541435615	**7:07:48**	-0.378204228	-0.431820407	-0.541284229
7:07:52	-0.378102887	-0.431498059	-0.541132843	**7:07:56**	-0.378001546	-0.431175728	-0.540981458
7:08:00	-0.377900205	-0.43085338	-0.540830072	**7:08:04**	-0.377793014	-0.430527562	-0.540678686
7:08:08	-0.377685823	-0.430201727	-0.5405273	**7:08:12**	-0.377578632	-0.429425006	-0.540375914
7:08:16	-0.377471441	-0.428648284	-0.540224528	**7:08:20**	-0.37736425	-0.426999334	-0.540073143
7:08:24	-0.377257059	-0.424478172	-0.539921757	**7:08:28**	-0.377149868	-0.42195701	-0.539770371
7:08:32	-0.377042677	-0.417258056	-0.539618985	**7:08:36**	-0.376935486	-0.412559083	-0.539467599
7:08:40	-0.376828295	-0.407380109	-0.539316214	**7:08:44**	-0.376721104	-0.40172115	-0.539164828
7:08:48	-0.376613913	-0.396062155	-0.539013442	**7:08:52**	-0.376506722	-0.390403196	-0.538862056
7:08:56	-0.376399531	-0.384744202	-0.53871067	**7:09:00**	-0.37629234	-0.379420445	-0.538559284
7:09:04	-0.37618603	-0.374432433	-0.538407899	**7:09:08**	-0.37607972	-0.369444404	-0.538256513
7:09:12	-0.37597341	-0.366314988	-0.538105127	**7:09:16**	-0.375867099	-0.363185573	-0.537953741
7:09:20	-0.375760789	-0.363988837	-0.537802355	**7:09:24**	-0.375654479	-0.368724788	-0.537650969
7:09:28	-0.375548169	-0.373460739	-0.537499584	**7:09:32**	-0.375441859	-0.376133968	-0.537348198

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:09:36	-0.375335549	-0.378807197	-0.537196812	**7:09:40**	-0.375229239	-0.379400908	-0.537045426
7:09:44	-0.375122929	-0.377915101	-0.53689404	**7:09:48**	-0.375016618	-0.376429294	-0.536742654
7:09:52	-0.374910308	-0.3331395	-0.536591269	**7:09:56**	-0.374803998	-0.289849706	-0.536439883
7:10:00	-0.374697688	-0.259115291	-0.536288497	**7:10:04**	-0.374439367	-0.240845642	-0.536137111
7:10:08	-0.374181047	-0.222575994	-0.535985725	**7:10:12**	-0.373922726	-0.211451888	-0.53583434
7:10:16	-0.373664405	-0.207473326	-0.535682954	**7:10:20**	-0.373406085	-0.206221314	-0.535531568
7:10:24	-0.373147764	-0.207695852	-0.535380182	**7:10:28**	-0.372889444	-0.20917039	-0.535228796
7:10:32	-0.372631123	-0.21440956	-0.53507741	**7:10:36**	-0.372372802	-0.219648731	-0.534926025
7:10:40	-0.372114482	-0.224887901	-0.534774639	**7:10:44**	-0.371856161	-0.230127071	-0.534623253
7:10:48	-0.37159784	-0.235366241	-0.534471867	**7:10:52**	-0.37133952	-0.239367433	-0.534320481
7:10:56	-0.371081199	-0.243368624	-0.534169095	**7:11:00**	-0.370822879	-0.246679011	-0.53401771
7:11:04	-0.37068043	-0.249367663	-0.533866324	**7:11:08**	-0.370537982	-0.252056314	-0.533714938
7:11:12	-0.370395534	-0.251926498	-0.533563552	**7:11:16**	-0.370253086	-0.251796683	-0.533412166
7:11:20	-0.370110637	-0.249877168	-0.533260781	**7:11:24**	-0.369968189	-0.246167956	-0.533109395
7:11:28	-0.369825741	-0.242458743	-0.532958009	**7:11:32**	-0.369683293	-0.23587372	-0.532806623
7:11:36	-0.369540844	-0.229288697	-0.532655237	**7:11:40**	-0.369398396	-0.222703674	-0.532503851
7:11:44	-0.369255948	-0.216118651	-0.532352466	**7:11:48**	-0.369113499	-0.209533628	-0.53220108
7:11:52	-0.368971051	-0.206034493	-0.532049694	**7:11:56**	-0.368828603	-0.202535358	-0.531898308
7:12:00	-0.368686155	-0.201015069	-0.531746922	**7:12:04**	-0.368526098	-0.201463126	-0.531595536
7:12:08	-0.367942713	-0.201658844	-0.530870577	**7:12:12**	-0.349285191	-0.19422138	-0.505656694
7:12:16	-0.330627669	-0.186783918	-0.480442811	**7:12:20**	-0.311970147	-0.179999793	-0.455228929
7:12:24	-0.293312624	-0.173869007	-0.430015046	**7:12:28**	-0.274655102	-0.167738222	-0.404801164
7:12:32	-0.25599758	-0.160670918	-0.379587281	**7:12:36**	-0.237340058	-0.153603615	-0.354373398
7:12:40	-0.218682535	-0.145879573	-0.329159516	**7:12:44**	-0.200025013	-0.137498791	-0.303945633
7:12:48	-0.181367491	-0.12911801	-0.278731751	**7:12:52**	-0.162709969	-0.06374356	-0.253517868
7:12:56	-0.14950408	-0.001618746	-0.235690487	**7:13:00**	-0.157709564	0.029857218	-0.246873699
7:13:04	-0.165986864	0.043404516	-0.25805691	**7:13:08**	-0.174264163	0.056951806	-0.269240122
7:13:12	-0.182541462	0.048359444	-0.280423334	**7:13:16**	-0.190818762	0.039767065	-0.291606546
7:13:20	-0.199096061	0.028933038	-0.302789758	**7:13:24**	-0.207373361	0.015857354	-0.31397297
7:13:28	-0.21565066	0.00278167	-0.325156181	**7:13:32**	-0.22392796	-0.013541713	-0.336339393
7:13:36	-0.232205259	-0.029865095	-0.347522605	**7:13:40**	-0.240482558	-0.045619972	-0.358705817
7:13:44	-0.248759858	-0.060806333	-0.369889029	**7:13:48**	-0.257037157	-0.075992704	-0.381072241
7:13:52	-0.265314457	-0.087942794	-0.392255452	**7:13:56**	-0.273591756	-0.099892884	-0.403438664
7:14:00	-0.281869055	-0.109765552	-0.414621876	**7:14:04**	-0.290020395	-0.117485711	-0.425805088
7:14:08	-0.298171735	-0.125205871	-0.4369883	**7:14:12**	-0.306323075	-0.129165562	-0.448171512
7:14:16	-0.314474415	-0.133125249	-0.459354724	**7:14:20**	-0.322625755	-0.135341837	-0.470537935
7:14:24	-0.330777095	-0.135815321	-0.481721147	**7:14:28**	-0.338928435	-0.136288805	-0.492904359
7:14:32	-0.347079775	-0.132481866	-0.504087571	**7:14:36**	-0.355231115	-0.128674932	-0.515270783
7:14:40	-0.363382455	-0.122865218	-0.526453995	**7:14:44**	-0.371533795	-0.115052748	-0.537637206
7:14:48	-0.379685135	-0.107240269	-0.548820418	**7:14:52**	-0.387836475	-0.099427789	-0.56000363
7:14:56	-0.380125072	-0.082159784	-0.549694171	**7:15:00**	-0.863113671	-0.560166826	-1.026784003
7:15:04	-0.846211967	-0.539057917	-1.003873835	**7:15:08**	-0.829310263	-0.51794899	-0.980963668
7:15:12	-0.312408559	0.00398349	-0.4580535	**7:15:16**	-0.295506855	0.025915971	-0.435143332
7:15:20	-0.278605151	0.047848469	-0.412233164	**7:15:24**	-0.261703448	0.069780949	-0.389322997
7:15:28	-0.244801744	0.09171343	-0.366412829	**7:15:32**	-0.22790004	0.106171892	-0.343502661
7:15:36	-0.210998336	0.120630336	-0.320592493	**7:15:40**	-0.194096632	0.134488261	-0.297682325
7:15:44	-0.177194928	0.147745652	-0.274772158	**7:15:48**	-0.160293224	0.161003042	-0.25186199
7:15:52	-0.14339152	0.203374896	-0.228951822	**7:15:56**	-0.362596999	0.105006936	-0.525946857
7:16:00	-0.366756979	0.126811727	-0.531573485	**7:16:04**	-0.370909186	0.140608631	-0.537200112
7:16:08	-0.375061392	0.154405535	-0.54282674	**7:16:12**	-0.379213598	0.152637008	-0.548453368
7:16:16	-0.383365804	0.15086848	-0.554079995	**7:16:20**	-0.38751801	0.147543977	-0.559706623
7:16:24	-0.391670216	0.142663464	-0.56533325	**7:16:28**	-0.395822422	0.137782951	-0.570959878
7:16:32	-0.399974628	0.132902473	-0.576586506	**7:16:36**	-0.404126834	0.12802196	-0.582213133
7:16:40	-0.40827904	0.123485266	-0.587839761	**7:16:44**	-0.412431247	0.119292389	-0.593466388
7:16:48	-0.416583453	0.115099512	-0.599093016	**7:16:52**	-0.420378652	0.111119441	-0.60423593
7:16:56	-0.419945277	0.109659958	-0.603649484	**7:17:00**	-0.419511901	0.107906789	-0.603063037
7:17:04	-0.419042934	0.105881221	-0.602476591	**7:17:08**	-0.418573968	0.103855617	-0.601890145

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:17:12	-0.418105001	0.103071695	-0.601303699	**7:17:16**	-0.417636034	0.102287772	-0.600717252
7:17:20	-0.417167067	0.102404485	-0.600130806	**7:17:24**	-0.4166981	0.103421797	-0.59954436
7:17:28	-0.416229133	0.104439109	-0.598957914	**7:17:32**	-0.415760166	0.10782236	-0.598371468
7:17:36	-0.4152912	0.111205646	-0.597785021	**7:17:40**	-0.414822233	0.116729116	-0.597198575
7:17:44	-0.414353266	0.124392843	-0.596612129	**7:17:48**	-0.413884299	0.132056534	-0.596025683
7:17:52	-0.413415332	0.140376311	-0.595439236	**7:17:56**	-0.412946365	0.148696124	-0.59485279
7:18:00	-0.412477398	0.15541118	-0.594266344	**7:18:04**	-0.411765195	0.16066654	-0.593679898
7:18:08	-0.411052991	0.165921865	-0.593093452	**7:18:12**	-0.410340788	0.166588105	-0.592507005
7:18:16	-0.409628584	0.167254345	-0.591920559	**7:18:20**	-0.408916381	0.165923193	-0.591334113
7:18:24	-0.408204177	0.162594648	-0.590747667	**7:18:28**	-0.407491974	0.159266104	-0.59016122
7:18:32	-0.40677977	0.152438731	-0.589574774	**7:18:36**	-0.406067567	0.145611358	-0.588988328
7:18:40	-0.405355363	0.13878402	-0.588401882	**7:18:44**	-0.40464316	0.131956647	-0.587815436
7:18:48	-0.403930956	0.125129273	-0.587228989	**7:18:52**	-0.403218753	0.062578079	-0.586642543
7:18:56	-0.402506549	2.6849E-05	-0.586056097	**7:19:00**	-0.401794346	-0.053050021	-0.585469651
7:19:04	-0.401396752	-0.096840109	-0.584883204	**7:19:08**	-0.400999157	-0.140630189	-0.584296758
7:19:12	-0.400601563	-0.160156039	-0.583710312	**7:19:16**	-0.400203969	-0.179681879	-0.583123866
7:19:20	-0.399806375	-0.193009505	-0.58253742	**7:19:24**	-0.399408781	-0.200138901	-0.581950973
7:19:28	-0.399011187	-0.207268297	-0.581364527	**7:19:32**	-0.398613593	-0.208340787	-0.580778081
7:19:36	-0.398215999	-0.209413279	-0.580191635	**7:19:40**	-0.397818405	-0.208661849	-0.579605189
7:19:44	-0.397420811	-0.206086502	-0.579018742	**7:19:48**	-0.397023217	-0.203511154	-0.578432296
7:19:52	-0.396625623	-0.201545907	-0.57784585	**7:19:56**	-0.396228029	-0.199580657	-0.577259404
7:20:00	-0.395830435	-0.198233625	-0.576672957	**7:20:04**	-0.394727375	-0.197084293	-0.576086511
7:20:08	-0.393624315	-0.19593496	-0.575500065	**7:20:12**	-0.392521255	-0.197617541	-0.574913619
7:20:16	-0.391418195	-0.199300121	-0.574327173	**7:20:20**	-0.390315135	-0.202989127	-0.573740726
7:20:24	-0.389212075	-0.208684557	-0.57315428	**7:20:28**	-0.388109015	-0.214379985	-0.572567834
7:20:32	-0.387005955	-0.223033182	-0.571981388	**7:20:36**	-0.385902895	-0.231686379	-0.571394941
7:20:40	-0.384799836	-0.241316575	-0.570808495	**7:20:44**	-0.383696776	-0.251923771	-0.570222049
7:20:48	-0.382593716	-0.262530968	-0.569635603	**7:20:52**	-0.381490656	-0.276211149	-0.569049157
7:20:56	-0.380387596	-0.289891337	-0.56846271	**7:21:00**	-0.379284536	-0.304439828	-0.567876264
7:21:04	-0.378877907	-0.320271772	-0.567289818	**7:21:08**	-0.378471279	-0.336103706	-0.566703372
7:21:12	-0.37806465	-0.35193565	-0.566116925	**7:21:16**	-0.377658022	-0.367767594	-0.565530479
7:21:20	-0.377251393	-0.383163921	-0.564944033	**7:21:24**	-0.376844764	-0.398124657	-0.564357587
7:21:28	-0.376438136	-0.413085375	-0.563771141	**7:21:32**	-0.376031507	-0.425805876	-0.563184694
7:21:36	-0.375624879	-0.438526376	-0.562598248	**7:21:40**	-0.37521825	-0.450420374	-0.562011802
7:21:44	-0.374811621	-0.461487905	-0.561425356	**7:21:48**	-0.374404993	-0.472555417	-0.560838909
7:21:52	-0.373998364	-0.516519624	-0.560252463	**7:21:56**	-0.373591736	-0.56048383	-0.559666017
7:22:00	-0.373185107	-0.614137527	-0.559079571	**7:22:04**	-0.372167943	-0.677116766	-0.558493125
7:22:08	-0.371150779	-0.740096005	-0.557906678	**7:22:12**	-0.370133615	-0.770379984	-0.557320232
7:22:16	-0.369116451	-0.800663963	-0.556733786	**7:22:20**	-0.368099287	-0.815502777	-0.55614734
7:22:24	-0.367082122	-0.814896461	-0.555560893	**7:22:28**	-0.366064958	-0.814290145	-0.554974447
7:22:32	-0.365047794	-0.813683829	-0.554388001	**7:22:36**	-0.36403063	-0.813077514	-0.553801555
7:22:40	-0.363013466	-0.812471198	-0.553215109	**7:22:44**	-0.361996302	-0.811864882	-0.552628662
7:22:48	-0.360979138	-0.811258566	-0.552042216	**7:22:52**	-0.359961974	-0.810652251	-0.55145577
7:22:56	-0.35894481	-0.810045935	-0.550869324	**7:23:00**	-0.357927645	-0.80320293	-0.550282877
7:23:04	-0.357494365	-0.790471243	-0.549696431	**7:23:08**	-0.357061085	-0.777739557	-0.549109985
7:23:12	-0.356627804	-0.76500787	-0.548523539	**7:23:16**	-0.356194524	-0.752276184	-0.547937093
7:23:20	-0.355761243	-0.740434935	-0.547350646	**7:23:24**	-0.355327963	-0.729484053	-0.5467642
7:23:28	-0.354894682	-0.718533172	-0.546177754	**7:23:32**	-0.354461402	-0.706765291	-0.545591308
7:23:36	-0.354028121	-0.694997411	-0.545004861	**7:23:40**	-0.353594841	-0.682484053	-0.544418415
7:23:44	-0.35316156	-0.669225252	-0.543831969	**7:23:48**	-0.35272828	-0.655966451	-0.543245523
7:23:52	-0.352294999	-0.640921197	-0.542659077	**7:23:56**	-0.351861719	-0.625875942	-0.54207263
7:24:00	-0.351428439	-0.609635656	-0.541486184	**7:24:04**	-0.350473057	-0.591889157	-0.540899738
7:24:08	-0.349517676	-0.574142623	-0.540313292	**7:24:12**	-0.348562294	-0.553206934	-0.539726845
7:24:16	-0.347606913	-0.532271245	-0.539140399	**7:24:20**	-0.346651531	-0.510252016	-0.538553953
7:24:24	-0.34569615	-0.487149282	-0.537967507	**7:24:28**	-0.344740768	-0.464046548	-0.537381061
7:24:32	-0.343785387	-0.440943814	-0.536794614	**7:24:36**	-0.342830005	-0.41784108	-0.536208168
7:24:40	-0.341874624	-0.394514723	-0.535621722	**7:24:44**	-0.340919242	-0.37096471	-0.535035276

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:24:48	-0.339963861	-0.347414723	-0.53444883	**7:24:52**	-0.339008479	-0.347990561	-0.533862383
7:24:56	-0.338053098	-0.34856639	-0.533275937	**7:25:00**	-0.337097717	-0.350463619	-0.532689491
7:25:04	-0.336721354	-0.354027367	-0.532103045	**7:25:08**	-0.336344991	-0.357591132	-0.531516598
7:25:12	-0.335968628	-0.363076506	-0.530930152	**7:25:16**	-0.335592265	-0.368561861	-0.530343706
7:25:20	-0.335215902	-0.369671966	-0.52975726	**7:25:24**	-0.334839539	-0.36640682	-0.529170814
7:25:28	-0.334463176	-0.363141656	-0.528584367	**7:25:32**	-0.334086813	-0.355097877	-0.527997921
7:25:36	-0.33371045	-0.347054115	-0.527411475	**7:25:40**	-0.333334087	-0.338346521	-0.526825029
7:25:44	-0.332957724	-0.328975114	-0.526238582	**7:25:48**	-0.332581361	-0.319603707	-0.525652136
7:25:52	-0.332204999	-0.3102323	-0.52506569	**7:25:56**	-0.331828636	-0.300860893	-0.524479244
7:26:00	-0.331452273	-0.292409395	-0.523892798	**7:26:04**	-0.330363668	-0.28445326	-0.523306351
7:26:08	-0.329275063	-0.276497124	-0.522719905	**7:26:12**	-0.328186459	-0.271971966	-0.522133459
7:26:16	-0.327097854	-0.267446799	-0.521547013	**7:26:20**	-0.326009249	-0.264099564	-0.520960566
7:26:24	-0.324920645	-0.261930259	-0.52037412	**7:26:28**	-0.32383204	-0.259760948	-0.519787674
7:26:32	-0.322743435	-0.257591638	-0.519201228	**7:26:36**	-0.321654831	-0.255422332	-0.518614782
7:26:40	-0.320566226	-0.251242973	-0.518028335	**7:26:44**	-0.319477622	-0.245053568	-0.517441889
7:26:48	-0.318389017	-0.238864159	-0.516855443	**7:26:52**	-0.317300412	-0.228095743	-0.516268997
7:26:56	-0.316211808	-0.217327328	-0.51568255	**7:27:00**	-0.315123203	-0.204904421	-0.515096104
7:27:04	-0.314729223	-0.191241078	-0.514509658	**7:27:08**	-0.314335242	-0.177577735	-0.513923212
7:27:12	-0.313941262	-0.162581843	-0.513336766	**7:27:16**	-0.313547282	-0.147585949	-0.512750319
7:27:20	-0.313153302	-0.13331527	-0.512163873	**7:27:24**	-0.312759321	-0.119769808	-0.511577427
7:27:28	-0.312365341	-0.106224342	-0.510990981	**7:27:32**	-0.311971361	-0.094715927	-0.510404534
7:27:36	-0.311577381	-0.083207504	-0.509818088	**7:27:40**	-0.3111834	-0.072369369	-0.509231642
7:27:44	-0.31078942	-0.062201524	-0.508645196	**7:27:48**	-0.31039544	-0.052033678	-0.50805875
7:27:52	-0.31000146	-0.001786275	-0.507472303	**7:27:56**	-0.309607479	0.048461129	-0.506885857
7:28:00	-0.309213499	0.104096833	-0.506299411	**7:28:04**	-0.30944109	0.164750276	-0.505712965
7:28:08	-0.309668681	0.225403754	-0.505126518	**7:28:12**	-0.309896272	0.250724376	-0.504540072
7:28:16	-0.310123863	0.276044999	-0.503953626	**7:28:20**	-0.310351454	0.298388434	-0.50336718
7:28:24	-0.310579045	0.317754755	-0.502780734	**7:28:28**	-0.310806636	0.337121039	-0.502194287
7:28:32	-0.311034226	0.34006073	-0.501607841	**7:28:36**	-0.311261817	0.343000421	-0.501021395
7:28:40	-0.311489408	0.340330552	-0.500434949	**7:28:44**	-0.311716999	0.332051122	-0.499848502
7:28:48	-0.31194459	0.323771693	-0.499262056	**7:28:52**	-0.312172181	0.308199924	-0.49867561
7:28:56	-0.312399772	0.292628156	-0.498089164	**7:29:00**	-0.312627363	0.275860503	-0.497502718
7:29:04	-0.312166075	0.258307595	-0.496916271	**7:29:08**	-0.311704788	0.240754688	-0.496329825
7:29:12	-0.3112435	0.226606173	-0.495743379	**7:29:16**	-0.310782213	0.212457658	-0.495156933
7:29:20	-0.310320925	0.199982648	-0.494570486	**7:29:24**	-0.309859638	0.189181216	-0.49398404
7:29:28	-0.30939835	0.178379784	-0.493397594	**7:29:32**	-0.308937063	0.167578352	-0.492811148
7:29:36	-0.308475775	0.15677692	-0.492224702	**7:29:40**	-0.308014488	0.144921365	-0.491638255
7:29:44	-0.3075532	0.132011725	-0.491051809	**7:29:48**	-0.307091913	0.119102084	-0.490465363
7:29:52	-0.306630625	0.104783223	-0.489878917	**7:29:56**	-0.306169338	0.090464362	-0.48929247
7:30:00	0.19429195	0.577015457	0.011293976	**7:30:04**	0.194300404	0.564166597	0.011880422
7:30:08	0.194308858	0.551317737	0.012466868	**7:30:12**	-0.305682688	0.041317838	-0.486946686
7:30:16	-0.305674233	0.03131794	-0.486360239	**7:30:20**	-0.305665779	0.021865336	-0.485773793
7:30:24	-0.305657325	0.012960045	-0.485187347	**7:30:28**	-0.305648871	0.004054753	-0.484600901
7:30:32	-0.305640416	-0.004243429	-0.484014455	**7:30:36**	-0.305631962	-0.012541594	-0.483428008
7:30:40	-0.305623508	-0.020490185	-0.482841562	**7:30:44**	-0.305615054	-0.028089202	-0.482255116
7:30:48	-0.305606599	-0.035688201	-0.48166867	**7:30:52**	-0.305598145	-0.061957698	-0.481082223
7:30:56	-0.305589691	-0.088227195	-0.480495777	**7:31:00**	-0.305581237	-0.111512236	-0.479909331
7:31:04	-0.306531559	-0.132384341	-0.479322885	**7:31:08**	-0.304757508	-0.151632486	-0.475045143
7:31:12	-0.300893887	-0.16601397	-0.467936211	**7:31:16**	-0.297030265	-0.180395453	-0.460827279
7:31:20	-0.292215985	-0.192285252	-0.453718348	**7:31:24**	-0.287080955	-0.202058847	-0.446609416
7:31:28	-0.281945926	-0.211832443	-0.439500484	**7:31:32**	-0.276810896	-0.213175099	-0.432391552
7:31:36	-0.271675867	-0.21451776	-0.42528262	**7:31:40**	-0.269101216	-0.214315803	-0.421642784
7:31:44	-0.270995906	-0.21370713	-0.424058525	**7:31:48**	-0.272890596	-0.213098463	-0.426474267
7:31:52	-0.274785286	-0.219855125	-0.428890008	**7:31:56**	-0.276679976	-0.226611783	-0.43130575
7:32:00	-0.278574665	-0.233368445	-0.433721491	**7:32:04**	-0.280274467	-0.240008933	-0.436137232
7:32:08	-0.281974268	-0.246649425	-0.438552974	**7:32:12**	-0.28367407	-0.254028534	-0.440968715
7:32:16	-0.285373871	-0.261407643	-0.443384457	**7:32:20**	-0.287073673	-0.265585463	-0.445800198

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:32:24	-0.288773474	-0.266561996	-0.448215939	**7:32:28**	-0.290473276	-0.267538537	-0.450631681
7:32:32	-0.292173077	-0.269921039	-0.453047422	**7:32:36**	-0.293872879	-0.272303541	-0.455463164
7:32:40	-0.29557268	-0.276145422	-0.457878905	**7:32:44**	-0.297272482	-0.281446664	-0.460294646
7:32:48	-0.298972283	-0.286747916	-0.462710388	**7:32:52**	-0.300672085	-0.292049158	-0.465126129
7:32:56	-0.302371886	-0.297350401	-0.467541871	**7:33:00**	-0.304071688	-0.30140004	-0.469957612
7:33:04	-0.30587287	-0.304258508	-0.472373353	**7:33:08**	-0.307674053	-0.307116967	-0.474789095
7:33:12	-0.309475235	-0.307271531	-0.477204836	**7:33:16**	-0.311276418	-0.307426096	-0.479620578
7:33:20	-0.3130776	-0.30758066	-0.482036319	**7:33:24**	-0.314878783	-0.307735225	-0.484452061
7:33:28	-0.316679965	-0.307889789	-0.486867802	**7:33:32**	-0.318481148	-0.306819718	-0.489283543
7:33:36	-0.32028233	-0.305749646	-0.491699285	**7:33:40**	-0.322083512	-0.304679574	-0.494115026
7:33:44	-0.323884695	-0.303609502	-0.496530768	**7:33:48**	-0.325685877	-0.30253943	-0.498946509
7:33:52	-0.325801688	-0.317327701	-0.499078715	**7:33:56**	-0.325597642	-0.331925309	-0.498777541
7:34:00	-0.325393595	-0.360140245	-0.498476367	**7:34:04**	-0.325008894	-0.401864798	-0.498175193
7:34:08	-0.324624193	-0.443589351	-0.497874019	**7:34:12**	-0.324239492	-0.470644808	-0.497572845
7:34:16	-0.323854791	-0.497700264	-0.497271671	**7:34:20**	-0.323470089	-0.516680846	-0.496970497
7:34:24	-0.323085388	-0.527586483	-0.496669323	**7:34:28**	-0.322700687	-0.538492155	-0.496368149
7:34:32	-0.322315986	-0.537520702	-0.496066976	**7:34:36**	-0.321931285	-0.53654925	-0.495765802
7:34:40	-0.321546584	-0.531244311	-0.495464628	**7:34:44**	-0.321161883	-0.521605922	-0.495163454
7:34:48	-0.320777182	-0.511967498	-0.49486228	**7:34:52**	-0.32039248	-0.498917469	-0.494561106
7:34:56	-0.320007779	-0.485867404	-0.494259932	**7:35:00**	-0.319623078	-0.471903896	-0.493958758
7:35:04	-0.319449297	-0.457152654	-0.493657584	**7:35:08**	-0.319275516	-0.442401411	-0.49335641
7:35:12	-0.319101735	-0.426398095	-0.493055236	**7:35:16**	-0.318927954	-0.410394778	-0.492754062
7:35:20	-0.318754173	-0.394391462	-0.492452888	**7:35:24**	-0.318580392	-0.378388145	-0.492151714
7:35:28	-0.318406611	-0.362384829	-0.491850541	**7:35:32**	-0.318232831	-0.347005764	-0.491549367
7:35:36	-0.31805905	-0.331626699	-0.491248193	**7:35:40**	-0.317885269	-0.317875191	-0.490947019
7:35:44	-0.317711488	-0.305751251	-0.490645845	**7:35:48**	-0.317537707	-0.29362731	-0.490344671
7:35:52	-0.317363926	-0.284923252	-0.490043497	**7:35:56**	-0.317190145	-0.276219194	-0.489742323
7:36:00	-0.317016364	-0.268611183	-0.489441149	**7:36:04**	-0.316121248	-0.261669241	-0.489139975
7:36:08	-0.315226132	-0.2547273	-0.488838801	**7:36:12**	-0.314331016	-0.248425648	-0.488537627
7:36:16	-0.3134359	-0.242123991	-0.488236453	**7:36:20**	-0.312540784	-0.235822338	-0.487935279
7:36:24	-0.311645668	-0.229520681	-0.487634106	**7:36:28**	-0.310752097	-0.223219949	-0.487332932
7:36:32	-0.309858932	-0.216049127	-0.487031758	**7:36:36**	-0.308965766	-0.208878306	-0.486730584
7:36:40	-0.308072601	-0.201361385	-0.48642941	**7:36:44**	-0.307179436	-0.193498367	-0.486128236
7:36:48	-0.30628627	-0.185635347	-0.485827062	**7:36:52**	-0.305393105	-0.153819709	-0.485525888
7:36:56	-0.30449994	-0.122004068	-0.485224714	**7:37:00**	-0.303606774	-0.080844458	-0.48492354
7:37:04	-0.303377575	-0.030736651	-0.484622366	**7:37:08**	-0.303148375	0.019371155	-0.484321192
7:37:12	-0.302919175	0.050325379	-0.484020018	**7:37:16**	-0.302689976	0.081279585	-0.483718844
7:37:20	-0.302460776	0.094778817	-0.48341767	**7:37:24**	-0.302231576	0.090823056	-0.483116497
7:37:28	-0.302002377	0.086867295	-0.482815323	**7:37:32**	-0.301773177	0.091516613	-0.482514149
7:37:36	-0.301485328	0.096200874	-0.48213351	**7:37:40**	-0.301168138	0.099457359	-0.481713117
7:37:44	-0.300850949	0.101268579	-0.481292724	**7:37:48**	-0.300533759	0.103079782	-0.480872331
7:37:52	-0.30021657	0.101058498	-0.480451939	**7:37:56**	-0.29989938	0.099037197	-0.480031546
7:38:00	-0.29958219	0.095334147	-0.479611153	**7:38:04**	-0.299411699	0.089861903	-0.47919076
7:38:08	-0.299241208	0.084389642	-0.478770367	**7:38:12**	-0.299070716	0.078917381	-0.478349974
7:38:16	-0.298900225	0.073445137	-0.477929582	**7:38:20**	-0.298729733	0.068348315	-0.477509189
7:38:24	-0.298559242	0.06362695	-0.477088796	**7:38:28**	-0.298388751	0.058905567	-0.476668403
7:38:32	-0.298218259	0.056334904	-0.47624801	**7:38:36**	-0.298047768	0.05376424	-0.475827617
7:38:40	-0.297877276	0.050806182	-0.475407224	**7:38:44**	-0.297706785	0.047460693	-0.474986832
7:38:48	-0.297536293	0.044115222	-0.474566439	**7:38:52**	-0.297365802	0.03974892	-0.474146046
7:38:56	-0.297195311	0.035382618	-0.473725653	**7:39:00**	-0.297024819	0.03060922	-0.47330526
7:39:04	-0.296724795	0.025505921	-0.472884867	**7:39:08**	-0.296424771	0.020402622	-0.472464474
7:39:12	-0.296124747	0.01353161	-0.472044082	**7:39:16**	-0.295824723	0.006660581	-0.471623689
7:39:20	-0.295524699	-0.00021043	-0.471203296	**7:39:24**	-0.295224675	-0.00708146	-0.470782903
7:39:28	-0.294924651	-0.013952471	-0.47036251	**7:39:32**	-0.294624627	-0.019121411	-0.469942117
7:39:36	-0.294324603	-0.024290351	-0.469521725	**7:39:40**	-0.294024579	-0.029459281	-0.469101332
7:39:44	-0.293724555	-0.034628212	-0.468680939	**7:39:48**	-0.293424531	-0.039797152	-0.468260546
7:39:52	-0.293124507	-0.075638965	-0.467840153	**7:39:56**	-0.292824483	-0.111480777	-0.46741976

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:40:00	-0.292524459	-0.12966901	-0.466999367	**7:40:04**	-0.292164785	-0.130168101	-0.466578975
7:40:08	-0.29180511	-0.130667193	-0.466158582	**7:40:12**	-0.291445436	-0.119675565	-0.465738189
7:40:16	-0.291085761	-0.108683941	-0.465317796	**7:40:20**	-0.290726087	-0.101817703	-0.464897403
7:40:24	-0.290366412	-0.09907685	-0.46447701	**7:40:28**	-0.290006738	-0.096335998	-0.464056618
7:40:32	-0.289647063	-0.099496953	-0.463636225	**7:40:36**	-0.289287389	-0.102657907	-0.463215832
7:40:40	-0.288927714	-0.107633917	-0.462795439	**7:40:44**	-0.28856804	-0.114424983	-0.462375046
7:40:48	-0.288208365	-0.121216048	-0.461954653	**7:40:52**	-0.287848691	-0.128007113	-0.46153426
7:40:56	-0.287489016	-0.13479818	-0.461113868	**7:41:00**	-0.287129342	-0.142428463	-0.460693475
7:41:04	-0.286804925	-0.150918978	-0.460273082	**7:41:08**	-0.286480508	-0.159409494	-0.459852689
7:41:12	-0.28615609	-0.171112491	-0.459432296	**7:41:16**	-0.285831673	-0.182815486	-0.459011903
7:41:20	-0.285507256	-0.192250869	-0.45859151	**7:41:24**	-0.285182839	-0.19941864	-0.458171118
7:41:28	-0.284858421	-0.206586411	-0.457750725	**7:41:32**	-0.284892738	-0.209286332	-0.457816385
7:41:36	-0.28525127	-0.212179511	-0.458277111	**7:41:40**	-0.285616175	-0.22067125	-0.458737836
7:41:44	-0.285981079	-0.234757747	-0.459198561	**7:41:48**	-0.286345984	-0.248844244	-0.459659287
7:41:52	-0.286710888	-0.260843842	-0.460120012	**7:41:56**	-0.287075793	-0.272843439	-0.460580738
7:42:00	-0.287440698	-0.283723079	-0.461041463	**7:42:04**	-0.287701524	-0.293420713	-0.461502189
7:42:08	-0.287962351	-0.303118355	-0.461962914	**7:42:12**	-0.288223178	-0.309732117	-0.462423639
7:42:16	-0.288484005	-0.316345869	-0.462884365	**7:42:20**	-0.288744831	-0.321597051	-0.46334509
7:42:24	-0.289005658	-0.325485654	-0.463805816	**7:42:28**	-0.289266485	-0.329374256	-0.464266541
7:42:32	-0.289527312	-0.333262859	-0.464727266	**7:42:36**	-0.289788139	-0.337151461	-0.465187992
7:42:40	-0.290048965	-0.340495167	-0.465648717	**7:42:44**	-0.290309792	-0.343294012	-0.466109443
7:42:48	-0.290570619	-0.346092857	-0.466570168	**7:42:52**	-0.290831446	-0.430760315	-0.467030893
7:42:56	-0.291092272	-0.515427773	-0.467491619	**7:43:00**	-0.291353099	-0.596846529	-0.467952344
7:43:04	-0.291721618	-0.675080704	-0.46841307	**7:43:08**	-0.292090136	-0.753314916	-0.468873795
7:43:12	-0.292458654	-0.760286592	-0.46933452	**7:43:16**	-0.292827173	-0.767258232	-0.469795246
7:43:20	-0.293195691	-0.770853905	-0.470255971	**7:43:24**	-0.293564209	-0.771073573	-0.470716697
7:43:28	-0.293932728	-0.771293241	-0.471177422	**7:43:32**	-0.294301246	-0.771512909	-0.471638147
7:43:36	-0.294669765	-0.771732577	-0.472098873	**7:43:40**	-0.295038283	-0.771952245	-0.472559598
7:43:44	-0.295406801	-0.772171913	-0.473020324	**7:43:48**	-0.29577532	-0.772391581	-0.473481049
7:43:52	-0.296143838	-0.772611249	-0.473941775	**7:43:56**	-0.296512356	-0.772830917	-0.4744025
7:44:00	-0.296880875	-0.761644829	-0.474863225	**7:44:04**	-0.297341112	-0.739107622	-0.475323951
7:44:08	-0.297801349	-0.716570414	-0.475784676	**7:44:12**	-0.298261586	-0.690849488	-0.476245402
7:44:16	-0.298721823	-0.665128561	-0.476706127	**7:44:20**	-0.299182059	-0.63940767	-0.477166852
7:44:24	-0.299642296	-0.613686743	-0.477627578	**7:44:28**	-0.300102533	-0.587965817	-0.478088303
7:44:32	-0.30056277	-0.563639952	-0.478549029	**7:44:36**	-0.301023007	-0.539314088	-0.479009754
7:44:40	-0.301483244	-0.513604282	-0.479470479	**7:44:44**	-0.301943481	-0.486510535	-0.479931205
7:44:48	-0.302403718	-0.459416805	-0.48039193	**7:44:52**	-0.302863955	-0.427908245	-0.480852656
7:44:56	-0.303324192	-0.396399703	-0.481313381	**7:45:00**	-0.803784429	-0.862979253	-0.981774106
7:45:04	-0.804270396	-0.827662267	-0.982234832	**7:45:08**	-0.804756363	-0.792345281	-0.982695557
7:45:12	-0.305242331	-0.255206112	-0.483156283	**7:45:16**	-0.305728298	-0.218066945	-0.483617008
7:45:20	-0.306214265	-0.180927776	-0.484077733	**7:45:24**	-0.306700232	-0.143788609	-0.484538459
7:45:28	-0.306880817	-0.106467405	-0.484585416	**7:45:32**	-0.306648564	-0.07118873	-0.484073014
7:45:36	-0.306416311	-0.035910045	-0.483560612	**7:45:40**	-0.306184058	-0.002863673	-0.48304821
7:45:44	-0.305951805	0.027950378	-0.482535808	**7:45:48**	-0.305719552	0.058764429	-0.482023406
7:45:52	-0.305487299	0.119564356	-0.481511004	**7:45:56**	-0.305255046	0.180364247	-0.480998601
7:46:00	-0.305022793	0.251519788	-0.480486199	**7:46:04**	-0.304513649	0.333195956	-0.479973797
7:46:08	-0.304004506	0.414872125	-0.479461395	**7:46:12**	-0.303495363	0.415175617	-0.478948993
7:46:16	-0.302986219	0.41547911	-0.478436591	**7:46:20**	-0.302477076	0.415782602	-0.477924188
7:46:24	-0.301967933	0.416086095	-0.477411786	**7:46:28**	-0.301458789	0.416389587	-0.476899384
7:46:32	-0.300949646	0.416693079	-0.476386982	**7:46:36**	-0.300440503	0.416996572	-0.47587458
7:46:40	-0.29993136	0.417300064	-0.475362178	**7:46:44**	-0.299430762	0.417598463	-0.474849775
7:46:48	-0.298931364	0.417896146	-0.474337373	**7:46:52**	-0.298431966	0.418193829	-0.473824971
7:46:56	-0.297932569	0.418491513	-0.473312569	**7:47:00**	-0.297433171	0.418789196	-0.472800167
7:47:04	-0.29690891	0.4191017	-0.472287765	**7:47:08**	-0.296384649	0.419414203	-0.471775362
7:47:12	-0.295860389	0.419726707	-0.47126296	**7:47:16**	-0.295336128	0.420039211	-0.470750558
7:47:20	-0.294811867	0.420351714	-0.470238156	**7:47:24**	-0.294287606	0.420664218	-0.469725754
7:47:28	-0.293763345	0.420976722	-0.469213352	**7:47:32**	-0.293239085	0.421289226	-0.468700949

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:47:36	-0.292714824	0.421601729	-0.468188547	**7:47:40**	-0.292190563	0.421914233	-0.467676145
7:47:44	-0.291666302	0.422226737	-0.467163743	**7:47:48**	-0.291142042	0.42253924	-0.466651341
7:47:52	-0.290617781	0.422851744	-0.466138939	**7:47:56**	-0.29009352	0.423164248	-0.465626537
7:48:00	-0.289569259	0.423476752	-0.465114134	**7:48:04**	-0.289133487	0.423736509	-0.464601732
7:48:08	-0.288697715	0.423996266	-0.46408933	**7:48:12**	-0.288261943	0.424256023	-0.463576928
7:48:16	-0.287826171	0.42451578	-0.463064526	**7:48:20**	-0.287390399	0.412082728	-0.462552124
7:48:24	-0.286954627	0.386956832	-0.462039721	**7:48:28**	-0.286518855	0.361830935	-0.461527319
7:48:32	-0.286083083	0.323655906	-0.461014917	**7:48:36**	-0.285647311	0.285480912	-0.460502515
7:48:40	-0.285211538	0.248806219	-0.459990113	**7:48:44**	-0.284775766	0.213631825	-0.459477711
7:48:48	-0.284339994	0.178457432	-0.458965308	**7:48:52**	-0.283904222	0.062388801	-0.458452906
7:48:56	-0.283447316	-0.053667231	-0.457911869	**7:49:00**	-0.282902863	-0.177404597	-0.457252213
7:49:04	-0.282331807	-0.308859619	-0.456592557	**7:49:08**	-0.281760752	-0.440314634	-0.455932901
7:49:12	-0.281189696	-0.541813342	-0.455273245	**7:49:16**	-0.280618641	-0.64331205	-0.454613589
7:49:20	-0.280047586	-0.707716283	-0.453953934	**7:49:24**	-0.27947653	-0.735026006	-0.453294278
7:49:28	-0.278905475	-0.762335728	-0.452634622	**7:49:32**	-0.27833442	-0.761995331	-0.451974966
7:49:36	-0.277763364	-0.761654934	-0.45131531	**7:49:40**	-0.277192309	-0.761314537	-0.450655654
7:49:44	-0.276621254	-0.760974139	-0.449995998	**7:49:48**	-0.276050198	-0.760633742	-0.449336343
7:49:52	-0.275479143	-0.760293345	-0.448676687	**7:49:56**	-0.274908087	-0.759952948	-0.448017031
7:50:00	-0.274337032	-0.751997107	-0.447357375	**7:50:04**	-0.273678979	-0.736373928	-0.446697719
7:50:08	-0.273020925	-0.720750786	-0.446038063	**7:50:12**	-0.272362872	-0.700263916	-0.445378407
7:50:16	-0.271704819	-0.679777046	-0.444718752	**7:50:20**	-0.271046765	-0.660598263	-0.444059096
7:50:24	-0.270388712	-0.642727601	-0.44339944	**7:50:28**	-0.269730658	-0.624856939	-0.442739784
7:50:32	-0.269072605	-0.607813793	-0.442080128	**7:50:36**	-0.268414552	-0.590770646	-0.441420472
7:50:40	-0.267756498	-0.573521429	-0.440760817	**7:50:44**	-0.267098445	-0.556066071	-0.440101161
7:50:48	-0.266440392	-0.538610712	-0.439441505	**7:50:52**	-0.265782338	-0.521155353	-0.438781849
7:50:56	-0.265373812	-0.503848734	-0.438460282	**7:51:00**	-0.265108515	-0.48727704	-0.438332776
7:51:04	-0.265182278	-0.471557003	-0.438205271	**7:51:08**	-0.265256042	-0.455836931	-0.438077766
7:51:12	-0.265329806	-0.438771964	-0.437950261	**7:51:16**	-0.26540357	-0.42170698	-0.437822756
7:51:20	-0.265477333	-0.404642013	-0.43769525	**7:51:24**	-0.265551097	-0.387577028	-0.437567745
7:51:28	-0.265624861	-0.370512062	-0.43744024	**7:51:32**	-0.265698625	-0.350687544	-0.437312735
7:51:36	-0.265772388	-0.330863026	-0.43718523	**7:51:40**	-0.265846152	-0.309537018	-0.437057725
7:51:44	-0.265919916	-0.286709519	-0.436930219	**7:51:48**	-0.26599368	-0.263882029	-0.436802714
7:51:52	-0.266026769	-0.306146473	-0.436675209	**7:51:56**	-0.26605568	-0.348408435	-0.436547704
7:52:00	-0.26608459	-0.380578394	-0.436420199	**7:52:04**	-0.26623123	-0.402726526	-0.436292693
7:52:08	-0.266377869	-0.424874658	-0.436165188	**7:52:12**	-0.266524509	-0.429769551	-0.436037683
7:52:16	-0.266671148	-0.434664427	-0.435910178	**7:52:20**	-0.266817788	-0.431426373	-0.435782673
7:52:24	-0.266964427	-0.420055372	-0.435655168	**7:52:28**	-0.267111066	-0.408684371	-0.435527662
7:52:32	-0.267257706	-0.388817845	-0.435400157	**7:52:36**	-0.267404345	-0.368951319	-0.435272652
7:52:40	-0.267550985	-0.34728347	-0.435145147	**7:52:44**	-0.267697624	-0.32381428	-0.435017642
7:52:48	-0.267844264	-0.30034509	-0.434890136	**7:52:52**	-0.267990903	-0.27801499	-0.434762631
7:52:56	-0.268137542	-0.255684891	-0.434635126	**7:53:00**	-0.268284182	-0.232059203	-0.434507621
7:53:04	-0.267998691	-0.20774406	-0.434380116	**7:53:08**	-0.267713199	-0.18459055	-0.434252611
7:53:12	-0.267427708	-0.164921938	-0.434125105	**7:53:16**	-0.267142217	-0.145253325	-0.4339976
7:53:20	-0.266856726	-0.131880609	-0.433870095	**7:53:24**	-0.266571235	-0.120606525	-0.43374259
7:53:28	-0.266285743	-0.110859659	-0.433615085	**7:53:32**	-0.266000252	-0.105694452	-0.433487579
7:53:36	-0.265714761	-0.100529241	-0.433360074	**7:53:40**	-0.26542927	-0.098505473	-0.433232569
7:53:44	-0.265143779	-0.097528845	-0.433105064	**7:53:48**	-0.264858287	-0.09670975	-0.432977559
7:53:52	-0.26531453	-0.096805377	-0.43385504	**7:53:56**	-0.265978102	-0.097024589	-0.435013435
7:54:00	-0.266641674	-0.096337495	-0.436171829	**7:54:04**	-0.267279307	-0.095332843	-0.437330224
7:54:08	-0.267916941	-0.09432819	-0.438488619	**7:54:12**	-0.268554575	-0.093323532	-0.439647013
7:54:16	-0.269192208	-0.09231888	-0.440805408	**7:54:20**	-0.269829842	-0.093502669	-0.441963802
7:54:24	-0.270467476	-0.095415944	-0.443122197	**7:54:28**	-0.271105109	-0.098229823	-0.444280592
7:54:32	-0.271742743	-0.103745522	-0.445438986	**7:54:36**	-0.272380377	-0.109261217	-0.446597381
7:54:40	-0.27301801	-0.116417748	-0.447755776	**7:54:44**	-0.273655644	-0.124121224	-0.44891417
7:54:48	-0.274293277	-0.12881499	-0.450072565	**7:54:52**	-0.274930911	-0.12447962	-0.45123096
7:54:56	-0.275568545	-0.12014425	-0.452389354	**7:55:00**	-0.276206178	-0.11580888	-0.453547749
7:55:04	-0.277005268	-0.111569751	-0.454706144	**7:55:08**	-0.277804358	-0.10896231	-0.455864538

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
7:55:12	-0.278603448	-0.111249915	-0.457022933	**7:55:16**	-0.279402537	-0.113537521	-0.458181328
7:55:20	-0.280201627	-0.11806966	-0.459339722	**7:55:24**	-0.281000717	-0.123349974	-0.460498117
7:55:28	-0.281799807	-0.130612553	-0.461656512	**7:55:32**	-0.282598896	-0.14382193	-0.462814906
7:55:36	-0.283397986	-0.157031306	-0.463973301	**7:55:40**	-0.284197076	-0.169554512	-0.465131695
7:55:44	-0.284996166	-0.181848996	-0.46629009	**7:55:48**	-0.285795255	-0.19333622	-0.467448485
7:55:52	-0.286594345	-0.202401667	-0.468606879	**7:55:56**	-0.287393435	-0.211467113	-0.469765274
7:56:00	-0.288192525	-0.216500954	-0.470923669	**7:56:04**	-0.289311581	-0.220381655	-0.472082063
7:56:08	-0.290430638	-0.222999205	-0.473240458	**7:56:12**	-0.291549695	-0.221827304	-0.474398853
7:56:16	-0.292668751	-0.220655408	-0.475557247	**7:56:20**	-0.293787808	-0.218887417	-0.476715642
7:56:24	-0.294906865	-0.216920723	-0.477874037	**7:56:28**	-0.296025921	-0.215252463	-0.479032431
7:56:32	-0.297144978	-0.214479487	-0.480190826	**7:56:36**	-0.298264035	-0.213706512	-0.481349221
7:56:40	-0.299207863	-0.212329215	-0.482270196	**7:56:44**	-0.300133551	-0.210774482	-0.483166592
7:56:48	-0.301059239	-0.209049804	-0.484062989	**7:56:52**	-0.301984927	-0.206815292	-0.484959385
7:56:56	-0.302910615	-0.20458078	-0.485855781	**7:57:00**	-0.303836302	-0.202918388	-0.486752178
7:57:04	-0.304494422	-0.20128721	-0.487648574	**7:57:08**	-0.305152542	-0.199355813	-0.488544971
7:57:12	-0.305810662	-0.19652375	-0.489441367	**7:57:16**	-0.306468782	-0.193691687	-0.490337763
7:57:20	-0.307126902	-0.190859624	-0.49123416	**7:57:24**	-0.307785022	-0.188027562	-0.492130556
7:57:28	-0.308443142	-0.185679215	-0.493026952	**7:57:32**	-0.309101262	-0.184782012	-0.493923349
7:57:36	-0.309759382	-0.18388481	-0.494819745	**7:57:40**	-0.310417502	-0.185934987	-0.495716141
7:57:44	-0.311075622	-0.188967622	-0.496612538	**7:57:48**	-0.311733742	-0.195746313	-0.497508934
7:57:52	-0.312391862	-0.21376317	-0.49840533	**7:57:56**	-0.313049983	-0.231780026	-0.499301727
7:58:00	-0.313708103	-0.293429497	-0.500198123	**7:58:04**	-0.313604567	-0.369169153	-0.50109452
7:58:08	-0.313501031	-0.438896283	-0.501990916	**7:58:12**	-0.313397494	-0.490585809	-0.502887312
7:58:16	-0.313293958	-0.542275336	-0.503783709	**7:58:20**	-0.313190422	-0.57375158	-0.504680105
7:58:24	-0.313086886	-0.598490063	-0.505576501	**7:58:28**	-0.31298335	-0.618840239	-0.506472898
7:58:32	-0.312879814	-0.626025562	-0.507369294	**7:58:36**	-0.312776278	-0.633210885	-0.50826569
7:58:40	-0.312672742	-0.632738236	-0.509162087	**7:58:44**	-0.312569206	-0.629712905	-0.510058483
7:58:48	-0.31246567	-0.625241137	-0.510954879	**7:58:52**	-0.312362134	-0.616430021	-0.511851276
7:58:56	-0.312258598	-0.607618904	-0.512747672	**7:59:00**	-0.312155062	-0.595670257	-0.513644069
7:59:04	-0.312875069	-0.583166668	-0.514540465	**7:59:08**	-0.313595075	-0.569087207	-0.515436861
7:59:12	-0.314315082	-0.550280061	-0.516333258	**7:59:16**	-0.315035089	-0.531472916	-0.517229654
7:59:20	-0.315755095	-0.510734996	-0.51812605	**7:59:24**	-0.32645725	-0.495303665	-0.532547411
7:59:28	-0.338870333	-0.482739773	-0.549286933	**7:59:32**	-0.351283416	-0.475718647	-0.566026456
7:59:36	-0.351663364	-0.461524773	-0.566462102	**7:59:40**	-0.342440205	-0.445102445	-0.553886353
7:59:44	-0.333217046	-0.429845375	-0.541310604	**7:59:48**	-0.323993888	-0.415009311	-0.528734855
7:59:52	-0.314770729	-0.401436228	-0.516159106	**7:59:56**	-0.305547571	-0.387863146	-0.503583357
8:00:00	0.203675588	0.409351425	0.008992392	**8:00:04**	0.212545953	0.405934404	0.021568141
8:00:08	0.221416317	0.415016138	0.03414389	**8:00:12**	-0.269713318	-0.075902128	-0.453280361
8:00:16	-0.260842953	-0.066820385	-0.440704612	**8:00:20**	-0.251972588	-0.057738651	-0.428128863
8:00:24	-0.255388032	-0.055980297	-0.432199343	**8:00:28**	-0.263267305	-0.067508984	-0.442317931
8:00:32	-0.271146577	-0.079037663	-0.452436519	**8:00:36**	-0.279025849	-0.098652071	-0.462555107
8:00:40	-0.286905121	-0.120961717	-0.472673695	**8:00:44**	-0.289766034	-0.140279999	-0.475992832
8:00:48	-0.290097914	-0.153775922	-0.475885344	**8:00:52**	-0.290429794	-0.167271847	-0.475777856
8:00:56	-0.290761674	-0.176307002	-0.475670367	**8:01:00**	-0.291093554	-0.180881388	-0.475562879
8:01:04	-0.291137236	-0.185283985	-0.475455391	**8:01:08**	-0.291180919	-0.176931979	-0.475347902
8:01:12	-0.291224602	-0.168579974	-0.475240414	**8:01:16**	-0.291268285	-0.1640025	-0.475132926
8:01:20	-0.291311968	-0.163199559	-0.475025438	**8:01:24**	-0.291355651	-0.162396616	-0.474917949
8:01:28	-0.291399333	-0.169238035	-0.474810461	**8:01:32**	-0.291443016	-0.176079453	-0.474702973
8:01:36	-0.291486699	-0.183846636	-0.474595485	**8:01:40**	-0.291530382	-0.191922408	-0.474487996
8:01:44	-0.291574065	-0.199998179	-0.474380508	**8:01:48**	-0.291617748	-0.213086422	-0.47427302
8:01:52	-0.29166143	-0.226174664	-0.474165531	**8:01:56**	-0.291705113	-0.235087646	-0.474058043
8:02:00	-0.291748796	-0.242608879	-0.473950555	**8:02:04**	-0.291029382	-0.249675237	-0.473843067
8:02:08	-0.290363842	-0.254319396	-0.473735578	**8:02:12**	-0.289698768	-0.258963832	-0.47362809
8:02:16	-0.289033695	-0.272488106	-0.473520602	**8:02:20**	-0.288368621	-0.294892226	-0.473413113
8:02:24	-0.287703548	-0.317296338	-0.473305625	**8:02:28**	-0.287038474	-0.341663742	-0.473198137
8:02:32	-0.286373401	-0.366031155	-0.473090649	**8:02:36**	-0.285708327	-0.391912582	-0.47298316
8:02:40	-0.285043254	-0.419308024	-0.472875672	**8:02:44**	-0.28437818	-0.446454441	-0.472768184

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:02:48	-0.283713106	-0.472853745	-0.472660696	**8:02:52**	-0.283048033	-0.499253049	-0.472553207
8:02:56	-0.282382959	-0.527717961	-0.472445719	**8:03:00**	-0.281717886	-0.558248483	-0.472338231
8:03:04	-0.281763509	-0.589202639	-0.472230742	**8:03:08**	-0.281809132	-0.597705694	-0.472123254
8:03:12	-0.281854756	-0.606208748	-0.472015766	**8:03:16**	-0.281900379	-0.607763921	-0.471908278
8:03:20	-0.281946002	-0.602371141	-0.471800789	**8:03:24**	-0.281991626	-0.596978362	-0.471693301
8:03:28	-0.282037249	-0.583787837	-0.471585813	**8:03:32**	-0.282082872	-0.562799531	-0.471478324
8:03:36	-0.282128495	-0.535420943	-0.471370836	**8:03:40**	-0.282174119	-0.501652106	-0.471263348
8:03:44	-0.282219742	-0.467883234	-0.47115586	**8:03:48**	-0.282265365	-0.427452563	-0.471048371
8:03:52	-0.282310988	-0.38702191	-0.470940883	**8:03:56**	-0.282356612	-0.346957086	-0.470833395
8:04:00	-0.282402235	-0.307258108	-0.470725907	**8:04:04**	-0.281302573	-0.266876443	-0.470618418
8:04:08	-0.280202912	-0.242669522	-0.47051093	**8:04:12**	-0.279383355	-0.218629576	-0.47078296
8:04:16	-0.278765815	-0.203573503	-0.471328705	**8:04:20**	-0.278148275	-0.197380892	-0.471874451
8:04:24	-0.277530735	-0.191188282	-0.472420196	**8:04:28**	-0.276913195	-0.183764936	-0.472965941
8:04:32	-0.276295655	-0.176341591	-0.473511687	**8:04:36**	-0.275678114	-0.165199132	-0.474057432
8:04:40	-0.275060574	-0.150337559	-0.474603178	**8:04:44**	-0.274443034	-0.135475988	-0.475148923
8:04:48	-0.273825494	-0.128987178	-0.475694669	**8:04:52**	-0.273207954	-0.122498366	-0.476240414
8:04:56	-0.272590414	-0.114365961	-0.476786159	**8:05:00**	-0.271972874	-0.104589966	-0.477331905
8:05:04	-0.27247164	-0.09547938	-0.47787765	**8:05:08**	-0.273986467	-0.078787544	-0.478423396
8:05:12	-0.275501294	-0.062095717	-0.478969141	**8:05:16**	-0.277016121	-0.050597089	-0.479514886
8:05:20	-0.278530947	-0.040829535	-0.480060632	**8:05:24**	-0.280045774	-0.03106198	-0.480606377
8:05:28	-0.281560601	-0.017521895	-0.481152123	**8:05:32**	-0.283746405	-0.004381796	-0.481697868
8:05:36	-0.286245663	0.005899984	-0.482243614	**8:05:40**	-0.288744921	0.013510272	-0.482789359
8:05:44	-0.29124418	0.021120543	-0.483335104	**8:05:48**	-0.293743438	0.025390339	-0.48388085
8:05:52	-0.296242696	0.029660135	-0.484426595	**8:05:56**	-0.298294666	0.033304978	-0.484972341
8:06:00	-0.299126343	0.037380015	-0.485518086	**8:06:04**	-0.299749417	0.041579397	-0.486063831
8:06:08	-0.300372491	0.048791922	-0.486609577	**8:06:12**	-0.300995565	0.056004464	-0.487155322
8:06:16	-0.301618639	0.066787338	-0.487701068	**8:06:20**	-0.302241713	0.08114058	-0.488246813
8:06:24	-0.302864787	0.095493804	-0.488792559	**8:06:28**	-0.303487861	0.112020575	-0.489338304
8:06:32	-0.304110935	0.128547346	-0.489884049	**8:06:36**	-0.304734009	0.1376004	-0.490429795
8:06:40	-0.305357083	0.139179666	-0.49097554	**8:06:44**	-0.305980157	0.140758968	-0.491521286
8:06:48	-0.306578779	0.130721442	-0.492033901	**8:06:52**	-0.307061453	0.120752995	-0.492389415
8:06:56	-0.307544126	0.105848999	-0.49274493	**8:07:00**	-0.3080268	0.086009435	-0.493100445
8:07:04	-0.30899905	0.065878043	-0.493455959	**8:07:08**	-0.3099713	0.053044479	-0.493811474
8:07:12	-0.310943551	0.040210933	-0.494166989	**8:07:16**	-0.311915801	0.029071287	-0.494522503
8:07:20	-0.312888051	0.01962554	-0.494878018	**8:07:24**	-0.313860301	0.010179794	-0.495233533
8:07:28	-0.314832552	-0.00198095	-0.495589047	**8:07:32**	-0.315804802	-0.014141711	-0.495944562
8:07:36	-0.316777052	-0.031452282	-0.496300077	**8:07:40**	-0.31756463	-0.053802609	-0.496655591
8:07:44	-0.318237932	-0.076084809	-0.497011106	**8:07:48**	-0.318911234	-0.099703359	-0.497366621
8:07:52	-0.319584537	-0.123321904	-0.497722135	**8:07:56**	-0.320257839	-0.148752182	-0.49807765
8:08:00	-0.320931141	-0.175994193	-0.498433165	**8:08:04**	-0.320367557	-0.202498914	-0.498788679
8:08:08	-0.319803973	-0.230453466	-0.499144194	**8:08:12**	-0.319240389	-0.258408015	-0.499499708
8:08:16	-0.318676805	-0.278808569	-0.499855223	**8:08:20**	-0.318113221	-0.296691118	-0.500210738
8:08:24	-0.317549637	-0.314573667	-0.500566252	**8:08:28**	-0.316986053	-0.324019307	-0.500921767
8:08:32	-0.31642247	-0.333464954	-0.501277282	**8:08:36**	-0.315858886	-0.343350901	-0.501632796
8:08:40	-0.315295302	-0.353677136	-0.501988311	**8:08:44**	-0.314731718	-0.364003371	-0.502343826
8:08:48	-0.313197349	-0.392813173	-0.501384009	**8:08:52**	-0.31101546	-0.421237016	-0.499546858
8:08:56	-0.308833571	-0.432346633	-0.497709706	**8:09:00**	-0.306651682	-0.437684872	-0.495872554
8:09:04	-0.305835421	-0.443837123	-0.494035403	**8:09:08**	-0.30501916	-0.470846396	-0.492198251
8:09:12	-0.304202899	-0.497855668	-0.490361099	**8:09:16**	-0.303386638	-0.517221376	-0.488523948
8:09:20	-0.302570376	-0.528943501	-0.486686796	**8:09:24**	-0.301754115	-0.540665625	-0.484849645
8:09:28	-0.300937854	-0.55238775	-0.483012493	**8:09:32**	-0.300121593	-0.564109874	-0.481175341
8:09:36	-0.299305332	-0.568165357	-0.47933819	**8:09:40**	-0.298489071	-0.564554234	-0.477501038
8:09:44	-0.29767281	-0.560943111	-0.475663886	**8:09:48**	-0.296856549	-0.545679409	-0.473826735
8:09:52	-0.296040288	-0.530415672	-0.471989583	**8:09:56**	-0.295224026	-0.521381731	-0.470152431
8:10:00	-0.294407765	-0.514424342	-0.46831528	**8:10:04**	-0.293013005	-0.507122119	-0.466478128
8:10:08	-0.291618245	-0.492171267	-0.464640976	**8:10:12**	-0.290223485	-0.477220416	-0.462803825
8:10:16	-0.288828725	-0.461170995	-0.460966673	**8:10:20**	-0.287433965	-0.444022988	-0.459129521

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:10:24	-0.286039204	-0.426874962	-0.45729237	**8:10:28**	-0.284644444	-0.412046403	-0.455455218
8:10:32	-0.283490455	-0.397361346	-0.453944291	**8:10:36**	-0.282834425	-0.380665213	-0.453108056
8:10:40	-0.282178395	-0.361661161	-0.45227182	**8:10:44**	-0.281563585	-0.34268168	-0.451435585
8:10:48	-0.281239631	-0.31654838	-0.450599349	**8:10:52**	-0.280915678	-0.290415072	-0.449763114
8:10:56	-0.280591724	-0.264744418	-0.448926879	**8:11:00**	-0.280267771	-0.239227985	-0.448090643
8:11:04	-0.280076011	-0.213790345	-0.447254408	**8:11:08**	-0.279884251	-0.185690074	-0.446418172
8:11:12	-0.27969249	-0.157589801	-0.445581937	**8:11:16**	-0.27950073	-0.145239375	-0.444745701
8:11:20	-0.27930897	-0.138138896	-0.443909466	**8:11:24**	-0.27911721	-0.131038417	-0.443073231
8:11:28	-0.27892545	-0.117623648	-0.442236995	**8:11:32**	-0.278733689	-0.104208879	-0.44140076
8:11:36	-0.278541929	-0.086617744	-0.440564524	**8:11:40**	-0.278350169	-0.064850247	-0.439728289
8:11:44	-0.278158409	-0.04308275	-0.438892054	**8:11:48**	-0.277966649	-0.016687806	-0.438055818
8:11:52	-0.277774889	0.009707138	-0.437219583	**8:11:56**	-0.277583128	0.032637272	-0.436383347
8:12:00	-0.277391368	0.052102597	-0.435547112	**8:12:04**	-0.276947152	0.071718406	-0.434710877
8:12:08	-0.276502935	0.087663585	-0.433874641	**8:12:12**	-0.276058719	0.103608763	-0.433038406
8:12:16	-0.275614502	0.114956756	-0.43220217	**8:12:20**	-0.274997854	0.121810312	-0.431365935
8:12:24	-0.272033575	0.130063272	-0.4305297	**8:12:28**	-0.269069295	0.142901587	-0.429693464
8:12:32	-0.266105016	0.155739865	-0.428857229	**8:12:36**	-0.263140736	0.16857818	-0.428020993
8:12:40	-0.260176457	0.181416459	-0.427184758	**8:12:44**	-0.257212177	0.192742677	-0.426348523
8:12:48	-0.254247898	0.199532643	-0.425512287	**8:12:52**	-0.251283619	0.206322574	-0.424676052
8:12:56	-0.248319339	0.212399252	-0.423839816	**8:13:00**	-0.24535506	0.217762677	-0.423003581
8:13:04	-0.242662661	0.222964038	-0.422167346	**8:13:08**	-0.239970262	0.228165399	-0.42133111
8:13:12	-0.237277863	0.23336676	-0.420494875	**8:13:16**	-0.234585465	0.244975388	-0.419658639
8:13:20	-0.230576981	0.263775779	-0.416127205	**8:13:24**	-0.230360824	0.280315659	-0.410843582
8:13:28	-0.230144667	0.295513451	-0.40555996	**8:13:32**	-0.22992851	0.310711208	-0.400276337
8:13:36	-0.229712354	0.318319741	-0.394992714	**8:13:40**	-0.225158256	0.320924795	-0.389709092
8:13:44	-0.219709696	0.324063025	-0.384425469	**8:13:48**	-0.216913491	0.312790097	-0.382735562
8:13:52	-0.215181842	0.300882603	-0.382488039	**8:13:56**	-0.213450194	0.286020022	-0.382240515
8:14:00	-0.211718545	0.268202318	-0.381992992	**8:14:04**	-0.210185353	0.250266318	-0.381745469
8:14:08	-0.208652162	0.234009863	-0.381497946	**8:14:12**	-0.20711897	0.217753373	-0.381250423
8:14:16	-0.205585779	0.210610281	-0.3810029	**8:14:20**	-0.204052587	0.212580589	-0.380755376
8:14:24	-0.202519395	0.214550861	-0.380507853	**8:14:28**	-0.200986204	0.204534862	-0.38026033
8:14:32	-0.199453012	0.194518863	-0.380012807	**8:14:36**	-0.19791982	0.189755638	-0.379765284
8:14:40	-0.196386629	0.190245151	-0.379517761	**8:14:44**	-0.194853437	0.190734664	-0.379270237
8:14:48	-0.193320246	0.192687526	-0.379022714	**8:14:52**	-0.191787054	0.194640424	-0.378775191
8:14:56	-0.191067141	0.194531461	-0.378527668	**8:15:00**	-0.690901954	-0.307485175	-0.878280145
8:15:04	-0.690540569	-0.309384895	-0.878032622	**8:15:08**	-0.690179183	-0.319704339	-0.877785098
8:15:12	-0.189817798	0.169976236	-0.377537575	**8:15:16**	-0.189456413	0.159656793	-0.377290052
8:15:20	-0.189095028	0.149337367	-0.377042529	**8:15:24**	-0.188733643	0.139017924	-0.376795006
8:15:28	-0.188372258	0.12634313	-0.376547483	**8:15:32**	-0.188010872	0.113668336	-0.376299959
8:15:36	-0.187649487	0.101275663	-0.376052436	**8:15:40**	-0.187288102	0.089165129	-0.375804913
8:15:44	-0.186926717	0.077054595	-0.37555739	**8:15:48**	-0.186565332	0.04988892	-0.375309867
8:15:52	-0.186203947	0.022723263	-0.375062344	**8:15:56**	-0.185842561	-0.003010843	-0.37481482
8:16:00	-0.185481176	-0.028267763	-0.374567297	**8:16:04**	-0.18524487	-0.053599245	-0.374319774
8:16:08	-0.185008563	-0.076866104	-0.374072251	**8:16:12**	-0.184772256	-0.100132964	-0.373824728
8:16:16	-0.18453595	-0.119333157	-0.373577205	**8:16:20**	-0.184299643	-0.134466683	-0.373329681
8:16:24	-0.184063337	-0.149600209	-0.373082158	**8:16:28**	-0.18382703	-0.150044182	-0.372834635
8:16:32	-0.183590723	-0.15048815	-0.372587112	**8:16:36**	-0.183354417	-0.155553011	-0.372339589
8:16:40	-0.18311811	-0.165238764	-0.372092066	**8:16:44**	-0.182881803	-0.174924517	-0.371844542
8:16:48	-0.182645497	-0.190519414	-0.371597019	**8:16:52**	-0.18240919	-0.206114298	-0.371349496
8:16:56	-0.182172884	-0.219192687	-0.371101973	**8:17:00**	-0.181936577	-0.229754564	-0.37085445
8:17:04	-0.182197934	-0.240613091	-0.371786093	**8:17:08**	-0.182786261	-0.260856466	-0.373160753
8:17:12	-0.183374587	-0.281099842	-0.374535413	**8:17:16**	-0.183962914	-0.293471126	-0.375910073
8:17:20	-0.184551241	-0.297970303	-0.377284733	**8:17:24**	-0.185139568	-0.30246948	-0.378659393
8:17:28	-0.185727894	-0.315589636	-0.380034053	**8:17:32**	-0.186316221	-0.328709792	-0.381408713
8:17:36	-0.186904548	-0.346834193	-0.382783373	**8:17:40**	-0.187492875	-0.369962805	-0.384158033
8:17:44	-0.188081201	-0.393091434	-0.385532693	**8:17:48**	-0.188669528	-0.413016875	-0.386907352
8:17:52	-0.189257855	-0.432942315	-0.388282012	**8:17:56**	-0.189846182	-0.451007081	-0.389656672

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:18:00	-0.190434508	-0.467211207	-0.391031332	**8:18:04**	-0.191971339	-0.483980721	-0.392405992
8:18:08	-0.193508169	-0.494059267	-0.393780652	**8:18:12**	-0.195045	-0.504137777	-0.395155312
8:18:16	-0.19658183	-0.519404149	-0.396529972	**8:18:20**	-0.198118661	-0.539858347	-0.397904632
8:18:24	-0.199655491	-0.560312545	-0.399279292	**8:18:28**	-0.201192322	-0.548390608	-0.400653952
8:18:32	-0.202729152	-0.536468672	-0.402028611	**8:18:36**	-0.204265983	-0.538564364	-0.403403271
8:18:40	-0.205802813	-0.554677686	-0.404777931	**8:18:44**	-0.207254858	-0.570740504	-0.406037714
8:18:48	-0.208223099	-0.576403123	-0.406641983	**8:18:52**	-0.209191339	-0.582065742	-0.407246252
8:18:56	-0.21015958	-0.586039578	-0.407850521	**8:19:00**	-0.211127821	-0.589450485	-0.40845479
8:19:04	-0.211347221	-0.592415056	-0.409059059	**8:19:08**	-0.211566621	-0.583551213	-0.409663328
8:19:12	-0.211786021	-0.574687334	-0.410267597	**8:19:16**	-0.212005421	-0.561275869	-0.410871866
8:19:20	-0.212224821	-0.543316747	-0.411476135	**8:19:24**	-0.212444221	-0.525357625	-0.412080404
8:19:28	-0.212663621	-0.499768741	-0.412684673	**8:19:32**	-0.212883021	-0.474179893	-0.413288942
8:19:36	-0.213102421	-0.454569186	-0.413893211	**8:19:40**	-0.213321822	-0.440936657	-0.41449748
8:19:44	-0.213550718	-0.427309789	-0.415101749	**8:19:48**	-0.213813626	-0.411483442	-0.415706018
8:19:52	-0.214076533	-0.395657094	-0.416310287	**8:19:56**	-0.214339441	-0.376154377	-0.416914556
8:20:00	-0.214602349	-0.352975291	-0.417518825	**8:20:04**	-0.215538997	-0.330197828	-0.418123094
8:20:08	-0.216475646	-0.304205044	-0.418727363	**8:20:12**	-0.217412295	-0.278212277	-0.419331632
8:20:16	-0.218348943	-0.258508383	-0.419935901	**8:20:20**	-0.219285592	-0.245093372	-0.42054017
8:20:24	-0.220222241	-0.23167837	-0.421144439	**8:20:28**	-0.22115889	-0.230177079	-0.421748708
8:20:32	-0.222095538	-0.228675787	-0.422352977	**8:20:36**	-0.223032187	-0.228233788	-0.422957246
8:20:40	-0.223968836	-0.228851097	-0.423561515	**8:20:44**	-0.224905484	-0.229468407	-0.424165784
8:20:48	-0.225842133	-0.222820219	-0.424770053	**8:20:52**	-0.226778782	-0.216172041	-0.425374322
8:20:56	-0.227715431	-0.209523858	-0.425978591	**8:21:00**	-0.228652079	-0.202875675	-0.42658286
8:21:04	-0.228638079	-0.195660825	-0.427187129	**8:21:08**	-0.228624078	-0.183577926	-0.427791398
8:21:12	-0.228610077	-0.171495026	-0.428395667	**8:21:16**	-0.228596076	-0.161408332	-0.428999935
8:21:20	-0.228582076	-0.153317842	-0.429604204	**8:21:24**	-0.228568075	-0.145227352	-0.430208473
8:21:28	-0.228554074	-0.146876546	-0.430812742	**8:21:32**	-0.228540073	-0.148525738	-0.431417011
8:21:36	-0.228526073	-0.150174931	-0.43202128	**8:21:40**	-0.228512072	-0.151824123	-0.432625549
8:21:44	-0.228498071	-0.153473316	-0.433229818	**8:21:48**	-0.228484071	-0.160139156	-0.433834087
8:21:52	-0.227456284	-0.166200696	-0.433064763	**8:21:56**	-0.22636179	-0.171191807	-0.432205055
8:22:00	-0.225267296	-0.175152254	-0.431345347	**8:22:04**	-0.224854136	-0.179518834	-0.430485638
8:22:08	-0.224440976	-0.179944661	-0.42962593	**8:22:12**	-0.224027816	-0.180370488	-0.428766222
8:22:16	-0.223614657	-0.181172106	-0.427906514	**8:22:20**	-0.223201497	-0.182349504	-0.427046806
8:22:24	-0.222788337	-0.183526903	-0.426187097	**8:22:28**	-0.222375178	-0.181734949	-0.425327389
8:22:32	-0.221962018	-0.179942995	-0.424467681	**8:22:36**	-0.221548858	-0.178151041	-0.423607973
8:22:40	-0.221135698	-0.176359087	-0.422748265	**8:22:44**	-0.220722539	-0.174567134	-0.421888556
8:22:48	-0.220309379	-0.165603985	-0.421028848	**8:22:52**	-0.219896219	-0.156640836	-0.42016914
8:22:56	-0.219483059	-0.155379662	-0.419309432	**8:23:00**	-0.2190699	-0.161820465	-0.418449723
8:23:04	-0.218686874	-0.168279232	-0.417590015	**8:23:08**	-0.218303849	-0.165664728	-0.416730307
8:23:12	-0.217920824	-0.163050225	-0.415870599	**8:23:16**	-0.217537799	-0.161729283	-0.415010891
8:23:20	-0.217154774	-0.161701902	-0.414151182	**8:23:24**	-0.216771749	-0.161674521	-0.413291474
8:23:28	-0.216388724	-0.160416261	-0.412431766	**8:23:32**	-0.216005699	-0.159158004	-0.411572058
8:23:36	-0.215622674	-0.160260316	-0.41071235	**8:23:40**	-0.215239649	-0.163723197	-0.409852641
8:23:44	-0.214856624	-0.167186079	-0.408992933	**8:23:48**	-0.214473599	-0.181476171	-0.408133225
8:23:52	-0.214090574	-0.195766263	-0.407273517	**8:23:56**	-0.213707549	-0.205495938	-0.406413809
8:24:00	-0.213324524	-0.210665188	-0.4055541	**8:24:04**	-0.212993443	-0.215865409	-0.404694392
8:24:08	-0.212662361	-0.211970014	-0.403834684	**8:24:12**	-0.21233128	-0.208074619	-0.402974976
8:24:16	-0.212000199	-0.20924133	-0.402115267	**8:24:20**	-0.211669118	-0.215470137	-0.401255559
8:24:24	-0.211338037	-0.221698952	-0.400395851	**8:24:28**	-0.211006956	-0.230715032	-0.399536143
8:24:32	-0.210675875	-0.239731112	-0.398676435	**8:24:36**	-0.210344794	-0.248259408	-0.397816726
8:24:40	-0.210013713	-0.256299913	-0.396957018	**8:24:44**	-0.209682632	-0.264340426	-0.39609731
8:24:48	-0.209351551	-0.259796735	-0.395237602	**8:24:52**	-0.20902047	-0.255253044	-0.394377894
8:24:56	-0.208689389	-0.249752466	-0.393518185	**8:25:00**	-0.208358308	-0.243294984	-0.392658477
8:25:04	-0.208471185	-0.237102138	-0.392659186	**8:25:08**	-0.208622437	-0.225507208	-0.39271189
8:25:12	-0.208773689	-0.213912288	-0.392764594	**8:25:16**	-0.208924941	-0.199616565	-0.392817297
8:25:20	-0.209076194	-0.182620042	-0.392870001	**8:25:24**	-0.209227446	-0.16562352	-0.392922705
8:25:28	-0.209378698	-0.168684932	-0.392975409	**8:25:32**	-0.20952995	-0.17174634	-0.393028113

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:25:36	-0.209701681	-0.168509719	-0.393080816	**8:25:40**	-0.209931006	-0.158997191	-0.39313352
8:25:44	-0.210160331	-0.149484662	-0.393186224	**8:25:48**	-0.210389656	-0.134131913	-0.393238928
8:25:52	-0.210618981	-0.118779164	-0.393291632	**8:25:56**	-0.210848307	-0.104491554	-0.393344335
8:26:00	-0.211077632	-0.091269079	-0.393397039	**8:26:04**	-0.211972025	-0.078443044	-0.393449743
8:26:08	-0.212866418	-0.087817008	-0.393502447	**8:26:12**	-0.213760811	-0.097190973	-0.393555151
8:26:16	-0.214655204	-0.10897537	-0.393607855	**8:26:20**	-0.215549597	-0.123170197	-0.393660558
8:26:24	-0.21644399	-0.137365025	-0.393713262	**8:26:28**	-0.217338383	-0.131236132	-0.393765966
8:26:32	-0.218232776	-0.12510724	-0.39381867	**8:26:36**	-0.219127169	-0.116951193	-0.393871374
8:26:40	-0.220021562	-0.106767992	-0.393924077	**8:26:44**	-0.220915955	-0.096584791	-0.393976781
8:26:48	-0.221810349	-0.091239139	-0.394029485	**8:26:52**	-0.222704742	-0.085893484	-0.394082189
8:26:56	-0.223599135	-0.086002414	-0.394134893	**8:27:00**	-0.224493528	-0.087929535	-0.394187597
8:27:04	-0.224675422	-0.089431951	-0.3942403	**8:27:08**	-0.224857315	-0.089056434	-0.394293004
8:27:12	-0.225039209	-0.088680916	-0.394345708	**8:27:16**	-0.225221103	-0.090162792	-0.394398412
8:27:20	-0.225402997	-0.092263803	-0.394451116	**8:27:24**	-0.225584891	-0.094364813	-0.394503819
8:27:28	-0.225766785	-0.082239544	-0.394556523	**8:27:32**	-0.225948679	-0.070114275	-0.394609227
8:27:36	-0.226130572	-0.067780483	-0.394661931	**8:27:40**	-0.226312466	-0.07523816	-0.394714635
8:27:44	-0.22649436	-0.082695837	-0.394767338	**8:27:48**	-0.226676254	-0.094203285	-0.394820042
8:27:52	-0.226858148	-0.105710728	-0.394872746	**8:27:56**	-0.227040042	-0.125948559	-0.39492545
8:28:00	-0.227221936	-0.154916774	-0.394978154	**8:28:04**	-0.227376441	-0.18102477	-0.395030858
8:28:08	-0.227530947	-0.19860108	-0.395083561	**8:28:12**	-0.228802808	-0.216843423	-0.395136265
8:28:16	-0.230396358	-0.226725228	-0.395188969	**8:28:20**	-0.231989908	-0.228054742	-0.395241673
8:28:24	-0.233583458	-0.229384246	-0.395294377	**8:28:28**	-0.235177009	-0.23524017	-0.39534708
8:28:32	-0.236770559	-0.241096094	-0.395399784	**8:28:36**	-0.250546225	-0.246869394	-0.395452488
8:28:40	-0.257120034	-0.241005576	-0.395505192	**8:28:44**	-0.263918905	-0.235275913	-0.395557896
8:28:48	-0.271473388	-0.229996663	-0.395610599	**8:28:52**	-0.278678045	-0.224508884	-0.395663303
8:28:56	-0.28367009	-0.2153224	-0.397493584	**8:29:00**	-0.288938532	-0.205507408	-0.399698359
8:29:04	-0.293937126	-0.195531564	-0.401903135	**8:29:08**	-0.29893572	-0.189256898	-0.40410791
8:29:12	-0.305321595	-0.18380917	-0.406312686	**8:29:16**	-0.313882389	-0.17754691	-0.408517461
8:29:20	-0.322443182	-0.169173682	-0.410722237	**8:29:24**	-0.331003976	-0.160800455	-0.412927012
8:29:28	-0.326770981	-0.154044346	-0.415131787	**8:29:32**	-0.331767187	-0.152789613	-0.417336563
8:29:36	-0.336763392	-0.15259741	-0.419541338	**8:29:40**	-0.341759598	-0.153467722	-0.421746114
8:29:44	-0.346755803	-0.154338034	-0.423950889	**8:29:48**	-0.351082359	-0.158512417	-0.425248345
8:29:52	-0.353260616	-0.161406232	-0.424193038	**8:29:56**	-0.35268785	-0.162660206	-0.42313773
8:30:00	0.147884916	0.336085821	0.077917577	**8:30:04**	0.147334206	0.334162161	0.078972885
8:30:08	0.146783496	0.334770682	0.080028192	**8:30:12**	-0.353767214	-0.164620797	-0.4189165
8:30:16	-0.354317923	-0.160274849	-0.417861193	**8:30:20**	-0.354868633	-0.152191465	-0.416805885
8:30:24	-0.355419343	-0.144108086	-0.415750577	**8:30:28**	-0.355970053	-0.143990812	-0.41469527
8:30:32	-0.356520762	-0.143873539	-0.413639962	**8:30:36**	-0.357071472	-0.147450271	-0.412584655
8:30:40	-0.357622182	-0.154720999	-0.411529347	**8:30:44**	-0.358172892	-0.163127003	-0.41047404
8:30:48	-0.358723601	-0.174938825	-0.409418732	**8:30:52**	-0.359274311	-0.186750642	-0.408363425
8:30:56	-0.359825021	-0.19686653	-0.407308117	**8:31:00**	-0.360375731	-0.205286484	-0.40625281
8:31:04	-0.359910476	-0.213100837	-0.405197502	**8:31:08**	-0.359445221	-0.227515258	-0.404142195
8:31:12	-0.358979966	-0.241929681	-0.403086887	**8:31:16**	-0.358514711	-0.258002506	-0.40203158
8:31:20	-0.358049457	-0.275733743	-0.400976272	**8:31:24**	-0.357584202	-0.293464974	-0.399920965
8:31:28	-0.357118947	-0.307308885	-0.398865657	**8:31:32**	-0.356653692	-0.321152796	-0.39781035
8:31:36	-0.356188437	-0.333713731	-0.396755042	**8:31:40**	-0.355723182	-0.34499169	-0.395699735
8:31:44	-0.355257928	-0.35626964	-0.394644427	**8:31:48**	-0.354792673	-0.358539368	-0.393589119
8:31:52	-0.354327418	-0.360809086	-0.392533812	**8:31:56**	-0.353862163	-0.363078805	-0.391478504
8:32:00	-0.353333252	-0.365310596	-0.390423197	**8:32:04**	-0.352826455	-0.367555553	-0.389367889
8:32:08	-0.352319659	-0.369800509	-0.388312582	**8:32:12**	-0.351812863	-0.372045465	-0.387257274
8:32:16	-0.351306066	-0.370681345	-0.386201967	**8:32:20**	-0.35079927	-0.365708129	-0.385146659
8:32:24	-0.350292474	-0.360734914	-0.384091352	**8:32:28**	-0.349785677	-0.348567989	-0.383036044
8:32:32	-0.349278881	-0.336401073	-0.381980737	**8:32:36**	-0.348772084	-0.328473943	-0.380925429
8:32:40	-0.348265288	-0.324786616	-0.379870122	**8:32:44**	-0.347758492	-0.321099281	-0.378814814
8:32:48	-0.347251695	-0.310555206	-0.377759507	**8:32:52**	-0.346744899	-0.300011131	-0.376704199
8:32:56	-0.346574319	-0.294431527	-0.376104436	**8:33:00**	-0.346473988	-0.293657874	-0.375599855
8:33:04	-0.346605994	-0.290629096	-0.375095274	**8:33:08**	-0.346737999	-0.280419471	-0.374590693

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:33:12	-0.346870005	-0.270209841	-0.374086112	**8:33:16**	-0.347002011	-0.261570585	-0.37358153
8:33:20	-0.347134017	-0.254501696	-0.373076949	**8:33:24**	-0.347266022	-0.247432808	-0.372572368
8:33:28	-0.347398028	-0.252319019	-0.372067787	**8:33:32**	-0.347530034	-0.257205229	-0.371563206
8:33:36	-0.34766204	-0.258775427	-0.371058625	**8:33:40**	-0.347794045	-0.257029621	-0.370554044
8:33:44	-0.347926051	-0.255283814	-0.370049463	**8:33:48**	-0.348058057	-0.258817962	-0.369544882
8:33:52	-0.348190063	-0.26235211	-0.369040301	**8:33:56**	-0.348322068	-0.259448387	-0.36853572
8:34:00	-0.348454074	-0.250106794	-0.368031139	**8:34:04**	-0.348526	-0.240729388	-0.367526558
8:34:08	-0.348597926	-0.242390167	-0.367021977	**8:34:12**	-0.348669853	-0.244050946	-0.366517396
8:34:16	-0.348741779	-0.239644064	-0.366012814	**8:34:20**	-0.348813705	-0.229169521	-0.365508233
8:34:24	-0.348885631	-0.218694978	-0.365003652	**8:34:28**	-0.348957557	-0.200220393	-0.364499071
8:34:32	-0.349029483	-0.181745808	-0.36399449	**8:34:36**	-0.349101409	-0.166204211	-0.363489909
8:34:40	-0.349173336	-0.153595605	-0.362985328	**8:34:44**	-0.349245262	-0.140987	-0.362480747
8:34:48	-0.349298066	-0.139480564	-0.361976166	**8:34:52**	-0.348058702	-0.137203885	-0.361471585
8:34:56	-0.346819337	-0.136496896	-0.360967004	**8:35:00**	-0.345579973	-0.1373596	-0.360462423
8:35:04	-0.344023496	-0.137877327	-0.359957842	**8:35:08**	-0.34246702	-0.137927198	-0.359453261
8:35:12	-0.340910543	-0.137977074	-0.35894868	**8:35:16**	-0.339354067	-0.138026945	-0.358444099
8:35:20	-0.337797591	-0.129639164	-0.357939517	**8:35:24**	-0.336241114	-0.121251388	-0.357434936
8:35:28	-0.334684638	-0.118692975	-0.356930355	**8:35:32**	-0.333128161	-0.116134552	-0.356425774
8:35:36	-0.331571685	-0.116790377	-0.355921193	**8:35:40**	-0.330015209	-0.118517627	-0.355416612
8:35:44	-0.328458732	-0.121219076	-0.354912031	**8:35:48**	-0.326902256	-0.126843173	-0.35440745
8:35:52	-0.325345779	-0.132467261	-0.353902869	**8:35:56**	-0.323789303	-0.141070992	-0.353398288
8:36:00	-0.322232826	-0.150667938	-0.352893707	**8:36:04**	-0.320365576	-0.15697077	-0.352389126
8:36:08	-0.319801273	-0.154723675	-0.353649929	**8:36:12**	-0.318749371	-0.15218593	-0.355722686
8:36:16	-0.313543009	-0.151413576	-0.357795444	**8:36:20**	-0.308336647	-0.152055155	-0.359868201
8:36:24	-0.303130285	-0.151833411	-0.361940959	**8:36:28**	-0.297923924	-0.149021703	-0.364013716
8:36:32	-0.292717562	-0.146209992	-0.366086473	**8:36:36**	-0.2875112	-0.1403109	-0.368159231
8:36:40	-0.282304838	-0.133382679	-0.370231988	**8:36:44**	-0.276952087	-0.124184773	-0.372304746
8:36:48	-0.326269635	-0.141027697	-0.374377503	**8:36:52**	-0.341443984	-0.13751839	-0.376450261
8:36:56	-0.299924989	-0.102465767	-0.378523018	**8:37:00**	-0.270121112	-0.075146583	-0.380595775
8:37:04	-0.277867978	-0.072718622	-0.382668533	**8:37:08**	-0.285614844	-0.077814093	-0.38474129
8:37:12	-0.29336171	-0.082909564	-0.386814048	**8:37:16**	-0.301108576	-0.078808434	-0.388886805
8:37:20	-0.308855442	-0.071641775	-0.390959563	**8:37:24**	-0.315540841	-0.069595286	-0.39303232
8:37:28	-0.31904746	-0.082912632	-0.395105077	**8:37:32**	-0.322554078	-0.096229978	-0.397177835
8:37:36	-0.326060697	-0.110657539	-0.399250592	**8:37:40**	-0.351758839	-0.138683197	-0.431390982
8:37:44	-0.330166993	-0.144801416	-0.399457449	**8:37:48**	-0.308575147	-0.169763798	-0.367523916
8:37:52	-0.286983301	-0.194726183	-0.335590384	**8:37:56**	-0.26768002	-0.210005057	-0.306757662
8:38:00	-0.270607243	-0.238535183	-0.308047871	**8:38:04**	-0.272767004	-0.266146612	-0.30933808
8:38:08	-0.274926765	-0.29237434	-0.310628289	**8:38:12**	-0.277086526	-0.318602067	-0.311918498
8:38:16	-0.279246287	-0.323649811	-0.313208707	**8:38:20**	-0.281406048	-0.321637577	-0.314498916
8:38:24	-0.283565809	-0.319625344	-0.315789126	**8:38:28**	-0.28572557	-0.317613101	-0.317079335
8:38:32	-0.287885331	-0.315600868	-0.318369544	**8:38:36**	-0.290045092	-0.318360064	-0.319659753
8:38:40	-0.292204853	-0.322709744	-0.320949962	**8:38:44**	-0.294364614	-0.32838062	-0.322240171
8:38:48	-0.296524375	-0.338015049	-0.32353038	**8:38:52**	-0.298684136	-0.347649479	-0.324820589
8:38:56	-0.300843897	-0.350064742	-0.326110798	**8:39:00**	-0.303003658	-0.350073581	-0.327401007
8:39:04	-0.305562397	-0.3528415	-0.328691216	**8:39:08**	-0.308121136	-0.36317315	-0.329981425
8:39:12	-0.310679876	-0.3735048	-0.331271635	**8:39:16**	-0.313238615	-0.379185046	-0.332561844
8:39:20	-0.315797355	-0.383314808	-0.333852053	**8:39:24**	-0.318356094	-0.382894407	-0.335142262
8:39:28	-0.320914833	-0.377923879	-0.336432471	**8:39:32**	-0.323473573	-0.372953334	-0.33772268
8:39:36	-0.326032312	-0.364665888	-0.339012889	**8:39:40**	-0.328591052	-0.355272803	-0.340303098
8:39:44	-0.331149791	-0.346393321	-0.341593307	**8:39:48**	-0.33370853	-0.338027418	-0.342883516
8:39:52	-0.333523467	-0.328025975	-0.340456105	**8:39:56**	-0.331831116	-0.309475738	-0.335986447
8:40:00	-0.330138765	-0.288375386	-0.33151679	**8:40:04**	-0.328746347	-0.278812251	-0.327047132
8:40:08	-0.341390756	-0.288974664	-0.322577475	**8:40:12**	-0.339169299	-0.290275773	-0.318107817
8:40:16	-0.336947843	-0.296824443	-0.31363816	**8:40:20**	-0.334726386	-0.305122314	-0.309168502
8:40:24	-0.33250493	-0.304539725	-0.304698845	**8:40:28**	-0.330283473	-0.295076687	-0.300229187
8:40:32	-0.328062016	-0.285613648	-0.29575953	**8:40:36**	-0.32584056	-0.26758264	-0.291289872
8:40:40	-0.323619103	-0.246695645	-0.286820215	**8:40:44**	-0.321397647	-0.225310995	-0.282350557

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:40:48	-0.31917619	-0.202433385	-0.2778809	**8:40:52**	-0.316954733	-0.179555776	-0.273411242
8:40:56	-0.314733277	-0.162433736	-0.268941585	**8:41:00**	-0.308425459	-0.144794402	-0.264471927
8:41:04	-0.295099061	-0.123687489	-0.26000227	**8:41:08**	-0.281772663	-0.104728839	-0.255532612
8:41:12	-0.268446265	-0.085770189	-0.251062955	**8:41:16**	-0.255119867	-0.069090254	-0.246593297
8:41:20	-0.269291068	-0.069560771	-0.279380554	**8:41:24**	-0.274879181	-0.066366002	-0.300538454
8:41:28	-0.271236419	-0.062021683	-0.309189302	**8:41:32**	-0.267593657	-0.057677364	-0.31784015
8:41:36	-0.263950895	-0.04101993	-0.326490998	**8:41:40**	-0.260308133	-0.020258121	-0.335141845
8:41:44	-0.256665371	-0.005268775	-0.343792693	**8:41:48**	-0.253022609	-0.007596825	-0.352443541
8:41:52	-0.257668554	-0.014865644	-0.361094388	**8:41:56**	-0.268727515	-0.028501637	-0.369745236
8:42:00	-0.279786475	-0.042985797	-0.378396084	**8:42:04**	-0.290434745	-0.058857512	-0.387046932
8:42:08	-0.301083014	-0.079626326	-0.395697779	**8:42:12**	-0.311731283	-0.100395148	-0.404348627
8:42:16	-0.322379552	-0.116710244	-0.412999475	**8:42:20**	-0.333027821	-0.131540753	-0.421650322
8:42:24	-0.34367609	-0.145823478	-0.43030117	**8:42:28**	-0.354324359	-0.158462844	-0.438952018
8:42:32	-0.364972628	-0.17110221	-0.447602865	**8:42:36**	-0.37443523	-0.185015768	-0.454647234
8:42:40	-0.375595431	-0.194640715	-0.450442554	**8:42:44**	-0.346599764	-0.187334515	-0.446237874
8:42:48	-0.352652898	-0.204053262	-0.442033194	**8:42:52**	-0.358706033	-0.220772009	-0.437828514
8:42:56	-0.364759168	-0.232810597	-0.433623833	**8:43:00**	-0.370812302	-0.243289132	-0.429419153
8:43:04	-0.377117121	-0.254087562	-0.425214473	**8:43:08**	-0.369708228	-0.257221061	-0.421009793
8:43:12	-0.324101045	-0.237585156	-0.416805113	**8:43:16**	-0.317790753	-0.242127341	-0.412600433
8:43:20	-0.31148046	-0.246920804	-0.408395752	**8:43:24**	-0.305170168	-0.251273422	-0.404191072
8:43:28	-0.298859875	-0.254303497	-0.399986392	**8:43:32**	-0.292549583	-0.257333582	-0.395781712
8:43:36	-0.314439628	-0.278829939	-0.421038932	**8:43:40**	-0.306304664	-0.282981006	-0.40476674
8:43:44	-0.2981697	-0.286374951	-0.388494549	**8:43:48**	-0.290034736	-0.28749751	-0.372222357
8:43:52	-0.281899772	-0.288620059	-0.355950165	**8:43:56**	-0.284463247	-0.281049	-0.354173451
8:44:00	-0.287367313	-0.273680953	-0.352858208	**8:44:04**	-0.290357063	-0.264639489	-0.351542966
8:44:08	-0.293346813	-0.2504245	-0.350227723	**8:44:12**	-0.296336562	-0.236209516	-0.348912481
8:44:16	-0.299326312	-0.226261871	-0.347597238	**8:44:20**	-0.302316061	-0.217736676	-0.346281996
8:44:24	-0.304605042	-0.210820994	-0.344966753	**8:44:28**	-0.299328738	-0.205477453	-0.343651511
8:44:32	-0.294052434	-0.200133913	-0.342336268	**8:44:36**	-0.28877613	-0.191327774	-0.341021025
8:44:40	-0.283499826	-0.181367435	-0.339705783	**8:44:44**	-0.278223522	-0.17193542	-0.33839054
8:44:48	-0.272947218	-0.164088378	-0.337075298	**8:44:52**	-0.267670914	-0.156241337	-0.335760055
8:44:56	-0.26239461	-0.142356246	-0.334444813	**8:45:00**	-0.757118306	-0.626458473	-0.83312957
8:45:04	-0.752150675	-0.612609088	-0.831814328	**8:45:08**	-0.747183045	-0.604352881	-0.830499085
8:45:12	-0.242215415	-0.096096673	-0.329183843	**8:45:16**	-0.237247785	-0.086879701	-0.3278686
8:45:20	-0.232280155	-0.077342481	-0.326553358	**8:45:24**	-0.227312524	-0.068831181	-0.325238115
8:45:28	-0.222344894	-0.063397633	-0.323922873	**8:45:32**	-0.217377264	-0.057964085	-0.32260763
8:45:36	-0.215376924	-0.053227096	-0.325312814	**8:45:40**	-0.214233938	-0.047928973	-0.32917964
8:45:44	-0.217418599	-0.045210494	-0.333046466	**8:45:48**	-0.221397444	-0.048507284	-0.336913291
8:45:52	-0.22537629	-0.051804064	-0.340780117	**8:45:56**	-0.229355135	-0.05090078	-0.344646943
8:46:00	-0.23333398	-0.045797423	-0.348513768	**8:46:04**	-0.237003781	-0.04050985	-0.352380594
8:46:08	-0.240673582	-0.033753687	-0.356247419	**8:46:12**	-0.244343383	-0.026997523	-0.360114245
8:46:16	-0.248013184	-0.025407779	-0.363981071	**8:46:20**	-0.251682984	-0.028984446	-0.367847896
8:46:24	-0.255352785	-0.032561113	-0.371714722	**8:46:28**	-0.259022586	-0.051378624	-0.375581547
8:46:32	-0.262692387	-0.070196135	-0.379448373	**8:46:36**	-0.266362188	-0.089925797	-0.383315199
8:46:40	-0.270031989	-0.110567606	-0.387182024	**8:46:44**	-0.27370179	-0.131209416	-0.39104885
8:46:48	-0.277371591	-0.154470538	-0.394915676	**8:46:52**	-0.281041392	-0.17773166	-0.398782501
8:46:56	-0.284711193	-0.194826395	-0.402649327	**8:47:00**	-0.288380994	-0.205754744	-0.406516152
8:47:04	-0.291302799	-0.216237224	-0.410382978	**8:47:08**	-0.289604783	-0.214105802	-0.407990338
8:47:12	-0.286660197	-0.211231319	-0.403908701	**8:47:16**	-0.28371561	-0.210073027	-0.399827064
8:47:20	-0.280771024	-0.210630933	-0.395745427	**8:47:24**	-0.277826437	-0.211188835	-0.391663789
8:47:28	-0.274881851	-0.215503274	-0.387582152	**8:47:32**	-0.271937264	-0.219817713	-0.383500515
8:47:36	-0.268992678	-0.218420627	-0.379418878	**8:47:40**	-0.266048091	-0.211312016	-0.375337241
8:47:44	-0.263103505	-0.204203405	-0.371255603	**8:47:48**	-0.260158918	-0.197094794	-0.367173966
8:47:52	-0.257936717	-0.190416783	-0.3640711	**8:47:56**	-0.257488232	-0.180165985	-0.363371468
8:48:00	-0.257039747	-0.165285109	-0.362671836	**8:48:04**	-0.257599411	-0.151005177	-0.361972204
8:48:08	-0.258159075	-0.149611516	-0.361272572	**8:48:12**	-0.258718739	-0.148217854	-0.36057294
8:48:16	-0.269486994	-0.151227729	-0.359873307	**8:48:20**	-0.268370034	-0.145471366	-0.359173675

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:48:24	-0.267253073	-0.139715002	-0.358474043	**8:48:28**	-0.266136113	-0.13395864	-0.357774411
8:48:32	-0.265019153	-0.128202277	-0.357074779	**8:48:36**	-0.263902193	-0.120510777	-0.356375147
8:48:40	-0.262785233	-0.110884136	-0.355675515	**8:48:44**	-0.261668272	-0.101257498	-0.354975883
8:48:48	-0.260551312	-0.106462023	-0.354276251	**8:48:52**	-0.259434352	-0.111666553	-0.353576619
8:48:56	-0.258317392	-0.112257404	-0.352876987	**8:49:00**	-0.257200432	-0.108234578	-0.352177355
8:49:04	-0.255618749	-0.103934739	-0.351477723	**8:49:08**	-0.254037066	-0.089444179	-0.350778091
8:49:12	-0.252455383	-0.074953623	-0.350078459	**8:49:16**	-0.2508737	-0.069522421	-0.349378826
8:49:20	-0.249292017	-0.067111014	-0.348679194	**8:49:24**	-0.247710334	-0.064699607	-0.347979562
8:49:28	-0.246128652	-0.063460733	-0.34727993	**8:49:32**	-0.244546969	-0.062221858	-0.346580298
8:49:36	-0.242965286	-0.061570649	-0.345880666	**8:49:40**	-0.241383603	-0.061507123	-0.345181034
8:49:44	-0.23980192	-0.061443588	-0.344481402	**8:49:48**	-0.238220237	-0.0586299	-0.34378177
8:49:52	-0.236638554	-0.055816202	-0.343082138	**8:49:56**	-0.234213591	-0.045530471	-0.342382506
8:50:00	-0.231773656	-0.028266428	-0.341682874	**8:50:04**	-0.229649215	-0.011190456	-0.340983242
8:50:08	-0.227524774	0.001567148	-0.34028361	**8:50:12**	-0.225400333	0.014324751	-0.339583978
8:50:16	-0.223275893	0.028008598	-0.338884345	**8:50:20**	-0.221151452	0.042618687	-0.338184713
8:50:24	-0.219027011	0.057228776	-0.337485081	**8:50:28**	-0.216902571	0.06261529	-0.336785449
8:50:32	-0.21477813	0.068001803	-0.336085817	**8:50:36**	-0.212653689	0.076618615	-0.335386185
8:50:40	-0.210529249	0.088465742	-0.334686553	**8:50:44**	-0.208404808	0.10031287	-0.333986921
8:50:48	-0.206280367	0.119513678	-0.333287289	**8:50:52**	-0.204155927	0.138714503	-0.332587657
8:50:56	-0.202031486	0.160481831	-0.331888025	**8:51:00**	-0.207867995	0.180070298	-0.341974805
8:51:04	-0.21706915	0.197653134	-0.3523296	**8:51:08**	-0.227918808	0.203644881	-0.362684394
8:51:12	-0.238768466	0.209636629	-0.373039189	**8:51:16**	-0.249618124	0.209444733	-0.383393984
8:51:20	-0.260467783	0.203069192	-0.393748779	**8:51:24**	-0.271317441	0.196693652	-0.404103574
8:51:28	-0.282167099	0.193776295	-0.414458369	**8:51:32**	-0.293016757	0.190858902	-0.424813164
8:51:36	-0.303866415	0.185434342	-0.435167959	**8:51:40**	-0.314716073	0.177502613	-0.445522754
8:51:44	-0.298906408	0.185462094	-0.419756428	**8:51:48**	-0.276701874	0.19385493	-0.385325597
8:51:52	-0.266996211	0.194797348	-0.367829675	**8:51:56**	-0.272036234	0.179625562	-0.370312908
8:52:00	-0.277076258	0.157129211	-0.37279614	**8:52:04**	-0.28286448	0.13418687	-0.375279373
8:52:08	-0.288652703	0.09586465	-0.377762606	**8:52:12**	-0.294440925	0.057542429	-0.380245839
8:52:16	-0.300229148	0.02663182	-0.382729072	**8:52:20**	-0.30601737	-0.001808234	-0.385212304
8:52:24	-0.311805593	-0.030248306	-0.387695537	**8:52:28**	-0.317593816	-0.061920142	-0.39017877
8:52:32	-0.328793596	-0.096817723	-0.392662003	**8:52:36**	-0.340319702	-0.124543741	-0.395145235
8:52:40	-0.351845808	-0.144903679	-0.397628468	**8:52:44**	-0.363371914	-0.165263617	-0.400111701
8:52:48	-0.373295236	-0.187162178	-0.400423296	**8:52:52**	-0.380625346	-0.207514965	-0.39722131
8:52:56	-0.387955456	-0.226150236	-0.394019324	**8:53:00**	-0.395285566	-0.244213	-0.390817337
8:53:04	-0.401897742	-0.261847815	-0.387615351	**8:53:08**	-0.40355476	-0.280044625	-0.384413365
8:53:12	-0.39010393	-0.289235883	-0.381211378	**8:53:16**	-0.303511645	-0.245723448	-0.378009392
8:53:20	-0.313604124	-0.250738098	-0.374807406	**8:53:24**	-0.332550612	-0.261030485	-0.371605419
8:53:28	-0.282882291	-0.228758388	-0.368403433	**8:53:32**	-0.290794972	-0.22581666	-0.365201447
8:53:36	-0.304678054	-0.229555458	-0.36199946	**8:53:40**	-0.287251758	-0.217752879	-0.358797474
8:53:44	-0.269825461	-0.2059503	-0.355595488	**8:53:48**	-0.252399165	-0.186736882	-0.352393501
8:53:52	-0.269189464	-0.187919446	-0.349191515	**8:53:56**	-0.286715865	-0.190273217	-0.345989529
8:54:00	-0.304242266	-0.193359415	-0.342787542	**8:54:04**	-0.322587692	-0.196933822	-0.339585556
8:54:08	-0.324691307	-0.198871387	-0.33638357	**8:54:12**	-0.32018229	-0.196867267	-0.333181583
8:54:16	-0.315673274	-0.198863936	-0.329979597	**8:54:20**	-0.311164258	-0.204861397	-0.326777611
8:54:24	-0.306655242	-0.210858856	-0.323575624	**8:54:28**	-0.302146226	-0.225472365	-0.320373638
8:54:32	-0.29763721	-0.240085876	-0.317171652	**8:54:36**	-0.293128194	-0.257388688	-0.313969665
8:54:40	-0.299400719	-0.282014652	-0.310767679	**8:54:44**	-0.293650431	-0.299473994	-0.307565693
8:54:48	-0.287900143	-0.310700697	-0.304363706	**8:54:52**	-0.282149854	-0.321927408	-0.30116172
8:54:56	-0.285477041	-0.334779369	-0.310258943	**8:55:00**	-0.293902165	-0.346884437	-0.326263437
8:55:04	-0.301688954	-0.358609003	-0.342267932	**8:55:08**	-0.234973903	-0.329610229	-0.257328753
8:55:12	-0.23569817	-0.340810987	-0.26376413	**8:55:16**	-0.236422438	-0.357811814	-0.270199507
8:55:20	-0.237146705	-0.380612692	-0.276634883	**8:55:24**	-0.237870972	-0.403413588	-0.28307026
8:55:28	-0.238595239	-0.427372031	-0.289505636	**8:55:32**	-0.239319507	-0.451330457	-0.295941013
8:55:36	-0.240043774	-0.468578391	-0.30237639	**8:55:40**	-0.240768041	-0.483589536	-0.308811766
8:55:44	-0.241492308	-0.495893198	-0.315247143	**8:55:48**	-0.242216576	-0.500074589	-0.32168252
8:55:52	-0.242940843	-0.504256016	-0.328117896	**8:55:56**	-0.24366511	-0.511693357	-0.334553273

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
8:56:00	-0.244389377	-0.52021598	-0.34098865	**8:56:04**	-0.243851923	-0.526300746	-0.347424026
8:56:08	-0.243314468	-0.527328079	-0.353859403	**8:56:12**	-0.242777013	-0.528355412	-0.360294779
8:56:16	-0.242239559	-0.531647176	-0.366730156	**8:56:20**	-0.240737595	-0.535118833	-0.371858705
8:56:24	-0.241024274	-0.54221614	-0.370979582	**8:56:28**	-0.247261741	-0.560539128	-0.37010046
8:56:32	-0.253499207	-0.578862115	-0.369221337	**8:56:36**	-0.259736674	-0.586572896	-0.368342215
8:56:40	-0.265974141	-0.590746262	-0.367463092	**8:56:44**	-0.272211608	-0.593371506	-0.36658397
8:56:48	-0.278449074	-0.591352204	-0.365704847	**8:56:52**	-0.284686541	-0.589332938	-0.364825725
8:56:56	-0.290924008	-0.58108629	-0.363946602	**8:57:00**	-0.292129177	-0.567764163	-0.363067479
8:57:04	-0.295598434	-0.551987703	-0.362188357	**8:57:08**	-0.299067691	-0.524799553	-0.361309234
8:57:12	-0.302536948	-0.497611404	-0.360430112	**8:57:16**	-0.239291308	-0.429464983	-0.359550989
8:57:20	-0.248001584	-0.403813488	-0.358671867	**8:57:24**	-0.25671186	-0.384917429	-0.357792744
8:57:28	-0.265422136	-0.372776789	-0.356913622	**8:57:32**	-0.274132413	-0.360636149	-0.356034499
8:57:36	-0.287588674	-0.339583062	-0.355155377	**8:57:40**	-0.322696863	-0.32752255	-0.354276254
8:57:44	-0.317364744	-0.294434633	-0.353397132	**8:57:48**	-0.312032625	-0.270582043	-0.352518009
8:57:52	-0.306700506	-0.246729457	-0.351638887	**8:57:56**	-0.301368387	-0.228460979	-0.350759764
8:58:00	-0.296036268	-0.210192499	-0.349880642	**8:58:04**	-0.288966863	-0.190216124	-0.349001519
8:58:08	-0.281897458	-0.168222763	-0.348122397	**8:58:12**	-0.274828053	-0.146229402	-0.347243274
8:58:16	-0.267758648	-0.124617728	-0.346364151	**8:58:20**	-0.260689243	-0.103133281	-0.345485029
8:58:24	-0.253619838	-0.083783828	-0.344605906	**8:58:28**	-0.246550433	-0.070839349	-0.343726784
8:58:32	-0.244403636	-0.06082916	-0.342847661	**8:58:36**	-0.248416493	-0.048985986	-0.341968539
8:58:40	-0.252429349	-0.035307922	-0.341089416	**8:58:44**	-0.256442205	-0.018293212	-0.340210294
8:58:48	-0.260455062	0.008731464	-0.339331171	**8:58:52**	-0.264467918	0.03575614	-0.338452049
8:58:56	-0.268480775	0.051269199	-0.337572926	**8:59:00**	-0.272493631	0.062945084	-0.336693804
8:59:04	-0.276479067	0.071977741	-0.335142293	**8:59:08**	-0.278760653	0.074047412	-0.33128221
8:59:12	-0.281042238	0.076117084	-0.327422127	**8:59:16**	-0.283323823	0.076228552	-0.323562043
8:59:20	-0.285605409	0.075687256	-0.31970196	**8:59:24**	-0.287886994	0.078213	-0.315841877
8:59:28	-0.29016858	0.089939812	-0.311981793	**8:59:32**	-0.292450165	0.101666625	-0.30812171
8:59:36	-0.294731751	0.110077104	-0.304261626	**8:59:40**	-0.292776808	0.119907451	-0.300401543
8:59:44	-0.287039739	0.131731461	-0.29654146	**8:59:48**	-0.27745739	0.145065118	-0.287471349
8:59:52	-0.267634627	0.158542083	-0.278075495	**8:59:56**	-0.257811863	0.187088775	-0.268679642
9:00:00	0.252010901	0.720658684	0.240716211	**9:00:04**	0.247221277	0.740864734	0.230985655
9:00:08	0.242347725	0.747059689	0.221141383	**9:00:12**	-0.262525828	0.253254644	-0.28870289
9:00:16	-0.267399381	0.257043264	-0.298547163	**9:00:20**	-0.272272934	0.260029772	-0.308391435
9:00:24	-0.277146487	0.260161563	-0.318235708	**9:00:28**	-0.282020039	0.251729133	-0.328079981
9:00:32	-0.286893592	0.243296703	-0.337924254	**9:00:36**	-0.291767145	0.226690449	-0.347768526
9:00:40	-0.296640698	0.207359552	-0.357612799	**9:00:44**	-0.301514251	0.188867682	-0.367457072
9:00:48	-0.294215631	0.1801485	-0.360809084	**9:00:52**	-0.285579913	0.172226342	-0.35234944
9:00:56	-0.276944195	0.164703073	-0.343889797	**9:01:00**	-0.268308476	0.157312826	-0.335430153
9:01:04	-0.259694816	0.153351981	-0.32697051	**9:01:08**	-0.251081156	0.159718859	-0.318510866
9:01:12	-0.242467495	0.166085772	-0.310051223	**9:01:16**	-0.233853835	0.17296573	-0.301591579
9:01:20	-0.224314052	0.180568738	-0.293131936	**9:01:24**	-0.213377232	0.187429658	-0.284672292
9:01:28	-0.202440412	0.189565984	-0.276212649	**9:01:32**	-0.206477128	0.182776817	-0.267753005
9:01:36	-0.223276825	0.160746929	-0.259293362	**9:01:40**	-0.240076523	0.136172726	-0.250833718
9:01:44	-0.256876221	0.110805685	-0.242374075	**9:01:48**	-0.273675918	0.083060128	-0.233914431
9:01:52	-0.290475616	0.05531457	-0.225454788	**9:01:56**	-0.282039054	0.047774467	-0.216995145
9:02:00	-0.276303232	0.040345345	-0.215702562	**9:02:04**	-0.277120999	0.027533926	-0.223999602
9:02:08	-0.277938766	0.010295117	-0.232296642	**9:02:12**	-0.278756533	-0.006943691	-0.240593682
9:02:16	-0.2795743	-0.030634498	-0.248890722	**9:02:20**	-0.280392067	-0.056475979	-0.257187762
9:02:24	-0.274836196	-0.076311565	-0.265484803	**9:02:28**	-0.266763118	-0.088026701	-0.273781843
9:02:32	-0.258690039	-0.099741837	-0.282078883	**9:02:36**	-0.250616961	-0.111456969	-0.290375923
9:02:40	-0.258556622	-0.132717051	-0.298672963	**9:02:44**	-0.286475799	-0.164565389	-0.306970003
9:02:48	-0.295414106	-0.18113586	-0.315267043	**9:02:52**	-0.297109361	-0.19338886	-0.323564083
9:02:56	-0.298804615	-0.198617098	-0.331861124	**9:03:00**	-0.295138159	-0.198307715	-0.332893502
9:03:04	-0.288154397	-0.197724777	-0.330068883	**9:03:08**	-0.281170635	-0.202253361	-0.327244264
9:03:12	-0.274186873	-0.206781944	-0.324419645	**9:03:16**	-0.267203111	-0.193864649	-0.321595026
9:03:20	-0.260219348	-0.175132058	-0.318770407	**9:03:24**	-0.253235586	-0.156399467	-0.315945788
9:03:28	-0.246251824	-0.142619352	-0.313121169	**9:03:32**	-0.239268062	-0.133791714	-0.31029655

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:03:36	-0.2322843	-0.130707203	-0.307471931	**9:03:40**	-0.225300538	-0.129537069	-0.304647312
9:03:44	-0.218316776	-0.128219135	-0.301822693	**9:03:48**	-0.211333014	-0.126457798	-0.298998074
9:03:52	-0.204349251	-0.124696462	-0.296173455	**9:03:56**	-0.195066698	-0.109302394	-0.290234169
9:04:00	-0.185368371	-0.089573001	-0.283731544	**9:04:04**	-0.176997443	-0.068459559	-0.27722892
9:04:08	-0.17071756	-0.042066673	-0.270726295	**9:04:12**	-0.164437677	-0.015673786	-0.264223671
9:04:16	-0.158157795	0.000633268	-0.257721046	**9:04:20**	-0.156878372	0.01059769	-0.257993621
9:04:24	-0.15593059	0.018225814	-0.258715541	**9:04:28**	-0.154982808	0.019438109	-0.25943746
9:04:32	-0.156219558	0.019348238	-0.260159379	**9:04:36**	-0.158651	0.003377324	-0.260881299
9:04:40	-0.161082442	-0.017649895	-0.261603218	**9:04:44**	-0.163513884	-0.039496498	-0.262325138
9:04:48	-0.165945327	-0.063801266	-0.263047057	**9:04:52**	-0.168376769	-0.088106035	-0.263768977
9:04:56	-0.170808211	-0.112006516	-0.264490896	**9:05:00**	-0.173239653	-0.135772234	-0.265212816
9:05:04	-0.174774318	-0.155192804	-0.265934735	**9:05:08**	-0.176308984	-0.163181583	-0.266656655
9:05:12	-0.17784365	-0.171170362	-0.267378574	**9:05:16**	-0.179378315	-0.172933542	-0.268100493
9:05:20	-0.180912981	-0.172621524	-0.268822413	**9:05:24**	-0.182447646	-0.17147675	-0.269544332
9:05:28	-0.183982312	-0.167833722	-0.270266252	**9:05:32**	-0.185516977	-0.164190689	-0.270988171
9:05:36	-0.187051643	-0.155352094	-0.271710091	**9:05:40**	-0.188586309	-0.141317929	-0.27243201
9:05:44	-0.190120974	-0.127283766	-0.27315393	**9:05:48**	-0.19165564	-0.119932821	-0.273875849
9:05:52	-0.193190305	-0.112581875	-0.274597769	**9:05:56**	-0.194724971	-0.114710093	-0.275319688
9:06:00	-0.196259637	-0.126317474	-0.276041607	**9:06:04**	-0.198425188	-0.138300917	-0.276763527
9:06:08	-0.200590739	-0.179405007	-0.277485446	**9:06:12**	-0.202782914	-0.220524967	-0.278207366
9:06:16	-0.211958249	-0.264539684	-0.278929285	**9:06:20**	-0.215729166	-0.304065099	-0.279651205
9:06:24	-0.217349082	-0.342308352	-0.280373124	**9:06:28**	-0.218968997	-0.358245535	-0.281095044
9:06:32	-0.220588913	-0.374182717	-0.281816963	**9:06:36**	-0.222208828	-0.392760107	-0.282538883
9:06:40	-0.223828743	-0.41397767	-0.283260802	**9:06:44**	-0.225448659	-0.435195232	-0.283982721
9:06:48	-0.227068574	-0.442404457	-0.284704641	**9:06:52**	-0.22868849	-0.449613681	-0.28542656
9:06:56	-0.230308405	-0.459247503	-0.28614848	**9:07:00**	-0.23192832	-0.471305923	-0.286870399
9:07:04	-0.232902443	-0.482979431	-0.287592319	**9:07:08**	-0.233876566	-0.481643705	-0.288314238
9:07:12	-0.234850688	-0.480307944	-0.289036158	**9:07:16**	-0.235824811	-0.48056557	-0.289758077
9:07:20	-0.236798934	-0.482416548	-0.290479997	**9:07:24**	-0.237773056	-0.484267525	-0.291201916
9:07:28	-0.238747179	-0.484740033	-0.291923835	**9:07:32**	-0.239721302	-0.485212506	-0.292645755
9:07:36	-0.240695424	-0.482013831	-0.293367674	**9:07:40**	-0.241669547	-0.475143939	-0.294089594
9:07:44	-0.240227749	-0.466833954	-0.291538145	**9:07:48**	-0.237744296	-0.459800218	-0.287575343
9:07:52	-0.235260843	-0.452766517	-0.283612541	**9:07:56**	-0.232777389	-0.444821665	-0.279649738
9:08:00	-0.230293936	-0.435965697	-0.275686936	**9:08:04**	-0.22881384	-0.427707797	-0.271724134
9:08:08	-0.227333744	-0.412882144	-0.267761331	**9:08:12**	-0.225853648	-0.398056491	-0.263798529
9:08:16	-0.228854115	-0.385200957	-0.26590651	**9:08:20**	-0.232895319	-0.372732237	-0.269424601
9:08:24	-0.236936523	-0.3602635	-0.272942692	**9:08:28**	-0.240977727	-0.340080992	-0.276460783
9:08:32	-0.245018931	-0.319898483	-0.279978874	**9:08:36**	-0.249060135	-0.299340855	-0.283496965
9:08:40	-0.253101339	-0.278408099	-0.287015056	**9:08:44**	-0.257142543	-0.257475351	-0.290533147
9:08:48	-0.261183747	-0.224123851	-0.294051238	**9:08:52**	-0.265224951	-0.190772349	-0.297569329
9:08:56	-0.269266155	-0.156579091	-0.30108742	**9:09:00**	-0.273307359	-0.122105245	-0.304605511
9:09:04	-0.276823132	-0.087318202	-0.308123602	**9:09:08**	-0.280338906	-0.062128019	-0.311641693
9:09:12	-0.283325013	-0.036622109	-0.315159784	**9:09:16**	-0.281598557	-0.008612339	-0.318677875
9:09:20	-0.2798721	0.019092217	-0.322195966	**9:09:24**	-0.278145644	0.046796772	-0.325714057
9:09:28	-0.276419188	0.071143781	-0.329232148	**9:09:32**	-0.274692731	0.09549079	-0.332750239
9:09:36	-0.272799487	0.110188767	-0.336268329	**9:09:40**	-0.270902963	0.115140212	-0.33978642
9:09:44	-0.271437015	0.118642829	-0.346597736	**9:09:48**	-0.294417773	0.094161838	-0.371689856
9:09:52	-0.320511176	0.067825448	-0.391578545	**9:09:56**	-0.329915138	0.058939622	-0.388854458
9:10:00	-0.3393191	0.057556043	-0.38613037	**9:10:04**	-0.360737104	0.049011062	-0.383406283
9:10:08	-0.337323908	0.065055475	-0.380682196	**9:10:12**	-0.325497846	0.074192994	-0.377958109
9:10:16	-0.327880537	0.071078507	-0.375234021	**9:10:20**	-0.330263229	0.064181666	-0.372509934
9:10:24	-0.33264592	0.057284825	-0.369785847	**9:10:28**	-0.335028612	0.053736399	-0.36706176
9:10:32	-0.337411303	0.050187956	-0.364337673	**9:10:36**	-0.339793994	0.051124407	-0.361613585
9:10:40	-0.342176686	0.056545717	-0.358889498	**9:10:44**	-0.344559377	0.061967027	-0.356165411
9:10:48	-0.346942069	0.05644512	-0.353441324	**9:10:52**	-0.34932476	0.050923214	-0.350717236
9:10:56	-0.35137855	0.046418658	-0.347993149	**9:11:00**	-0.353043498	0.042967183	-0.345269062
9:11:04	-0.355526731	0.03902794	-0.342544975	**9:11:08**	-0.358009965	0.02554248	-0.339820887

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:11:12	-0.360493198	0.012057019	-0.3370968	**9:11:16**	-0.362976431	0.000951602	-0.334372713
9:11:20	-0.365202082	-0.00762023	-0.331648626	**9:11:24**	-0.361376229	-0.011625454	-0.328924538
9:11:28	-0.357550377	-0.012752513	-0.326200451	**9:11:32**	-0.353724525	-0.013879554	-0.323476364
9:11:36	-0.349898673	-0.020013078	-0.320752277	**9:11:40**	-0.346072821	-0.031153087	-0.318028189
9:11:44	-0.342246969	-0.042293078	-0.315304102	**9:11:48**	-0.39271699	-0.083511485	-0.312580015
9:11:52	-0.392739849	-0.09465912	-0.309855928	**9:11:56**	-0.38966783	-0.10670407	-0.302938543
9:12:00	-0.374912103	-0.114526677	-0.280190726	**9:12:04**	-0.347978671	-0.115090342	-0.241217276
9:12:08	-0.345706961	-0.110815453	-0.235658368	**9:12:12**	-0.347531011	-0.108981984	-0.235648867
9:12:16	-0.349355061	-0.107732112	-0.235639365	**9:12:20**	-0.351179111	-0.107065838	-0.235629864
9:12:24	-0.35300316	-0.106399554	-0.235620363	**9:12:28**	-0.350453511	-0.108434837	-0.235610862
9:12:32	-0.340346014	-0.105965005	-0.235601361	**9:12:36**	-0.330238516	-0.10073539	-0.23559186
9:12:40	-0.320196868	-0.092785254	-0.235582359	**9:12:44**	-0.323602383	-0.092850764	-0.235572857
9:12:48	-0.327007898	-0.100486675	-0.235563356	**9:12:52**	-0.330413414	-0.108122595	-0.235553855
9:12:56	-0.333818929	-0.12170373	-0.235544354	**9:13:00**	-0.337224444	-0.14123008	-0.235534853
9:13:04	-0.339996133	-0.16037862	-0.235525352	**9:13:08**	-0.342767821	-0.164497295	-0.235515851
9:13:12	-0.34553951	-0.168615964	-0.235506349	**9:13:16**	-0.348311199	-0.175140896	-0.235496848
9:13:20	-0.351082888	-0.184072088	-0.235487347	**9:13:24**	-0.353854576	-0.19300328	-0.235477846
9:13:28	-0.356626265	-0.201934472	-0.235468345	**9:13:32**	-0.359397954	-0.218689887	-0.235458844
9:13:36	-0.362169642	-0.23403411	-0.235449342	**9:13:40**	-0.364941331	-0.245144765	-0.235439841
9:13:44	-0.36771302	-0.256255419	-0.23543034	**9:13:48**	-0.370484708	-0.270119885	-0.235420839
9:13:52	-0.373256397	-0.28398435	-0.235411338	**9:13:56**	-0.373893679	-0.29629828	-0.235401837
9:14:00	-0.37284192	-0.307327155	-0.235392336	**9:14:04**	-0.372699504	-0.318898066	-0.235382834
9:14:08	-0.372557089	-0.326969438	-0.235373333	**9:14:12**	-0.372414673	-0.335040809	-0.235363832
9:14:16	-0.372272257	-0.347713958	-0.235354331	**9:14:20**	-0.372129842	-0.364988885	-0.23534483
9:14:24	-0.371987426	-0.382263811	-0.235335329	**9:14:28**	-0.371845011	-0.394426438	-0.235325828
9:14:32	-0.371702595	-0.406589065	-0.235316326	**9:14:36**	-0.371560179	-0.414676576	-0.235306825
9:14:40	-0.371417764	-0.418688989	-0.235297324	**9:14:44**	-0.371275348	-0.422701383	-0.235287823
9:14:48	-0.371132932	-0.424252905	-0.235278322	**9:14:52**	-0.370990517	-0.425804444	-0.235268821
9:14:56	-0.370848101	-0.426306978	-0.23525932	**9:15:00**	-0.870705685	-0.925760542	-0.735249818
9:15:04	-0.869813386	-0.924767111	-0.735240317	**9:15:08**	-0.868921086	-0.934140361	-0.735230816
9:15:12	-0.35629088	-0.436516809	-0.235221315	**9:15:16**	-0.352423703	-0.444116781	-0.235211814
9:15:20	-0.348556525	-0.451716735	-0.235202313	**9:15:24**	-0.344689348	-0.459316707	-0.235192811
9:15:28	-0.340822171	-0.452440365	-0.23518331	**9:15:32**	-0.336954993	-0.44556404	-0.235173809
9:15:36	-0.333087816	-0.436040846	-0.235164308	**9:15:40**	-0.340834966	-0.430793903	-0.235154807
9:15:44	-0.337854581	-0.419152442	-0.235145306	**9:15:48**	-0.334874196	-0.396839352	-0.235135805
9:15:52	-0.331893811	-0.374526244	-0.235126303	**9:15:56**	-0.328913426	-0.363459987	-0.235116802
9:16:00	-0.32593304	-0.363640545	-0.235107301	**9:16:04**	-0.322868901	-0.363771196	-0.2350978
9:16:08	-0.324075522	-0.355550713	-0.240874817	**9:16:12**	-0.328610036	-0.349313936	-0.251160848
9:16:16	-0.333144551	-0.339319453	-0.261446878	**9:16:20**	-0.32732791	-0.319397075	-0.271732909
9:16:24	-0.321443377	-0.299434228	-0.282018939	**9:16:28**	-0.316802355	-0.277830825	-0.29230497
9:16:32	-0.325139514	-0.263963514	-0.302591	**9:16:36**	-0.333476672	-0.260913574	-0.312877031
9:16:40	-0.33391169	-0.256759077	-0.312456331	**9:16:44**	-0.320385672	-0.244282627	-0.293119612
9:16:48	-0.306859653	-0.2263402	-0.273782892	**9:16:52**	-0.293333635	-0.208397772	-0.254446172
9:16:56	-0.279807616	-0.191403849	-0.235109453	**9:17:00**	-0.266281597	-0.175358428	-0.215772733
9:17:04	-0.25348982	-0.159750679	-0.196436013	**9:17:08**	-0.255189084	-0.146648863	-0.196733427
9:17:12	-0.260806552	-0.135882628	-0.202339673	**9:17:16**	-0.26642402	-0.118893653	-0.20794592
9:17:20	-0.255131273	-0.08560202	-0.213552166	**9:17:24**	-0.233832269	-0.046345816	-0.219158413
9:17:28	-0.246242615	-0.040785537	-0.224764659	**9:17:32**	-0.258652961	-0.035225268	-0.230370906
9:17:36	-0.271063307	-0.033388444	-0.235977153	**9:17:40**	-0.283473654	-0.035275075	-0.241583399
9:17:44	-0.295884	-0.036381658	-0.247189646	**9:17:48**	-0.308294346	-0.035148062	-0.252795892
9:17:52	-0.320704692	-0.033914465	-0.258402139	**9:17:56**	-0.321807052	-0.021432738	-0.264008385
9:18:00	-0.318022193	-0.004535294	-0.269614632	**9:18:04**	-0.310405369	0.014646325	-0.270351761
9:18:08	-0.301315725	0.031602535	-0.269093343	**9:18:12**	-0.284569571	0.053122672	-0.267834925
9:18:16	-0.282835763	0.059910848	-0.266576507	**9:18:20**	-0.281101954	0.06091569	-0.26531809
9:18:24	-0.279368146	0.06192055	-0.264059672	**9:18:28**	-0.277634338	0.056109857	-0.262801254
9:18:32	-0.275900529	0.050299164	-0.261542836	**9:18:36**	-0.274166721	0.044933886	-0.260284418
9:18:40	-0.272432913	0.040014057	-0.259026	**9:18:44**	-0.270699104	0.035094228	-0.257767582

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:18:48	-0.268965296	0.032104819	-0.256509164	**9:18:52**	-0.267231488	0.02911541	-0.255250746
9:18:56	-0.265497679	0.026126	-0.253992329	**9:19:00**	-0.263763871	0.023136591	-0.252733911
9:19:04	-0.261624647	0.021503347	-0.251475493	**9:19:08**	-0.259485423	0.023213616	-0.250217075
9:19:12	-0.257346199	0.024923885	-0.248958657	**9:19:16**	-0.255206976	0.03021781	-0.247700239
9:19:20	-0.253067752	0.039095408	-0.246441821	**9:19:24**	-0.250928528	0.047973006	-0.245183403
9:19:28	-0.248789304	0.059900271	-0.243924985	**9:19:32**	-0.24665008	0.071827518	-0.242666567
9:19:36	-0.244510856	0.073272879	-0.24140815	**9:19:40**	-0.242371632	0.064236321	-0.240149732
9:19:44	-0.240232409	0.055199762	-0.238891314	**9:19:48**	-0.238093185	0.052485643	-0.237632896
9:19:52	-0.235953961	0.049771524	-0.236374478	**9:19:56**	-0.233814737	0.053439783	-0.23511606
9:20:00	-0.231675513	0.059235525	-0.233857642	**9:20:04**	-0.22991344	0.064806436	-0.232599224
9:20:08	-0.228151367	0.071096443	-0.231340806	**9:20:12**	-0.226389295	0.077386469	-0.230082388
9:20:16	-0.224627222	0.077862498	-0.228823971	**9:20:20**	-0.222908237	0.072498847	-0.227565553
9:20:24	-0.221266833	0.067088951	-0.226307135	**9:20:28**	-0.219625428	0.062266321	-0.225048717
9:20:32	-0.217984023	0.057443691	-0.223790299	**9:20:36**	-0.216342619	0.047656555	-0.222531881
9:20:40	-0.214701214	0.032904896	-0.221273463	**9:20:44**	-0.209512552	0.02026771	-0.215208812
9:20:48	-0.201848552	0.016669464	-0.205790289	**9:20:52**	-0.194184553	0.013071217	-0.196371766
9:20:56	-0.186520553	0.007964054	-0.186953243	**9:21:00**	-0.184173291	-0.001821249	-0.184271505
9:21:04	-0.187188157	-0.014802843	-0.185275787	**9:21:08**	-0.190203022	-0.017156845	-0.186280068
9:21:12	-0.193217887	-0.019510838	-0.18728435	**9:21:16**	-0.196232752	-0.025237496	-0.188288631
9:21:20	-0.199247617	-0.034336809	-0.189292913	**9:21:24**	-0.202262482	-0.043436122	-0.190297194
9:21:28	-0.205277348	-0.047696588	-0.191301476	**9:21:32**	-0.208292213	-0.051957045	-0.192305758
9:21:36	-0.211307078	-0.052563929	-0.193310039	**9:21:40**	-0.214321943	-0.049517226	-0.194314321
9:21:44	-0.217336808	-0.046470528	-0.195318602	**9:21:48**	-0.220351673	-0.052685129	-0.196322884
9:21:52	-0.224990174	-0.059867553	-0.197327165	**9:21:56**	-0.229792887	-0.069773086	-0.198331447
9:22:00	-0.2345956	-0.082303837	-0.199335729	**9:22:04**	-0.239521607	-0.094908082	-0.20034001
9:22:08	-0.244447614	-0.113430271	-0.201344292	**9:22:12**	-0.249373621	-0.13195246	-0.202348573
9:22:16	-0.254299628	-0.148897142	-0.203352855	**9:22:20**	-0.259225635	-0.164264316	-0.204357137
9:22:24	-0.264151642	-0.179631491	-0.205361418	**9:22:28**	-0.269077649	-0.183378513	-0.2063657
9:22:32	-0.273640276	-0.186908929	-0.207369981	**9:22:36**	-0.259201969	-0.181103348	-0.208374263
9:22:40	-0.252431516	-0.18185862	-0.209378544	**9:22:44**	-0.245661063	-0.182613891	-0.210382826
9:22:48	-0.248193171	-0.184910675	-0.211387108	**9:22:52**	-0.254340757	-0.18936259	-0.212391389
9:22:56	-0.260982966	-0.190827455	-0.213395671	**9:23:00**	-0.267419724	-0.18888796	-0.214036017
9:23:04	-0.271173741	-0.185349326	-0.211214651	**9:23:08**	-0.274927758	-0.181810692	-0.208393284
9:23:12	-0.278681775	-0.178272058	-0.205571918	**9:23:16**	-0.282435792	-0.175826439	-0.202750551
9:23:20	-0.283012182	-0.172579702	-0.199929185	**9:23:24**	-0.27994772	-0.167162708	-0.197107818
9:23:28	-0.276883257	-0.161745715	-0.194286452	**9:23:32**	-0.273818794	-0.146131395	-0.191465086
9:23:36	-0.270754331	-0.128158183	-0.188643719	**9:23:40**	-0.267689868	-0.103108291	-0.185822353
9:23:44	-0.264625405	-0.078058398	-0.183000986	**9:23:48**	-0.261560942	-0.062685663	-0.18017962
9:23:52	-0.25849648	-0.047312928	-0.177358253	**9:23:56**	-0.255432017	-0.030273331	-0.174536887
9:24:00	-0.252367554	-0.011566863	-0.17171552	**9:24:04**	-0.248995393	0.007323019	-0.168894154
9:24:08	-0.245623232	0.024743281	-0.166072787	**9:24:12**	-0.242251071	0.042163525	-0.163251421
9:24:16	-0.23887891	0.052466571	-0.160430055	**9:24:20**	-0.23550675	0.055652385	-0.157608688
9:24:24	-0.232134589	0.058838199	-0.154787322	**9:24:28**	-0.228762428	0.068791566	-0.151965955
9:24:32	-0.225390267	0.078744914	-0.149144589	**9:24:36**	-0.222018106	0.087192243	-0.146323222
9:24:40	-0.218645945	0.094133515	-0.143501856	**9:24:44**	-0.189960347	0.116163752	-0.106382929
9:24:48	-0.189704688	0.123943315	-0.107784159	**9:24:52**	-0.18944903	0.131722895	-0.109185388
9:24:56	-0.189193371	0.142254246	-0.110586618	**9:25:00**	-0.188937712	0.155537402	-0.111987848
9:25:04	-0.189015952	0.168621509	-0.113389077	**9:25:08**	-0.189094191	0.179810157	-0.114790307
9:25:12	-0.189172431	0.190998806	-0.116191537	**9:25:16**	-0.18925067	0.201443469	-0.117592767
9:25:20	-0.18932891	0.211144217	-0.118993996	**9:25:24**	-0.189407149	0.22084493	-0.120395226
9:25:28	-0.189485389	0.23435006	-0.121796456	**9:25:32**	-0.189563628	0.247855191	-0.123197685
9:25:36	-0.189641868	0.258703787	-0.124598915	**9:25:40**	-0.189720107	0.26689585	-0.126000145
9:25:44	-0.189798347	0.275087913	-0.127401374	**9:25:48**	-0.189876587	0.279511053	-0.128802604
9:25:52	-0.189954826	0.283934192	-0.130203834	**9:25:56**	-0.190033066	0.291975788	-0.131605063
9:26:00	-0.190111305	0.303635841	-0.133006293	**9:26:04**	-0.190511309	0.315104095	-0.134407523
9:26:08	-0.190911314	0.322344847	-0.135808752	**9:26:12**	-0.191311318	0.329585599	-0.137209982
9:26:16	-0.191711322	0.33308411	-0.138611212	**9:26:20**	-0.192111327	0.332840415	-0.140012441

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:26:24	-0.192511331	0.33259672	-0.141413671	**9:26:28**	-0.192911335	0.325608514	-0.142814901
9:26:32	-0.19331134	0.318620308	-0.14421613	**9:26:36**	-0.193711344	0.307673736	-0.14561736
9:26:40	-0.194111348	0.292768832	-0.14701859	**9:26:44**	-0.194511353	0.277863928	-0.148419819
9:26:48	-0.194911357	0.270972114	-0.149821049	**9:26:52**	-0.195311361	0.264080334	-0.151222279
9:26:56	-0.195711366	0.250912428	-0.152623508	**9:27:00**	-0.194328688	0.232531058	-0.151609355
9:27:04	-0.192506507	0.214411671	-0.150542173	**9:27:08**	-0.190684325	0.193564193	-0.14947499
9:27:12	-0.188862143	0.172716716	-0.148407807	**9:27:16**	-0.187039962	0.153900401	-0.147340624
9:27:20	-0.18521778	0.137115232	-0.146273441	**9:27:24**	-0.183395598	0.120330062	-0.145206258
9:27:28	-0.181573417	0.117675825	-0.144139075	**9:27:32**	-0.179751235	0.115021588	-0.143071892
9:27:36	-0.188254394	0.109285247	-0.142004709	**9:27:40**	-0.186269228	0.112873505	-0.140937526
9:27:44	-0.184284063	0.116461782	-0.139870344	**9:27:48**	-0.182298898	0.10817359	-0.138803161
9:27:52	-0.180313732	0.099885399	-0.137735978	**9:27:56**	-0.178328567	0.089062824	-0.136668795
9:28:00	-0.176343401	0.075705902	-0.135601612	**9:28:04**	-0.174551272	0.062233913	-0.134534429
9:28:08	-0.172759143	0.046480919	-0.133467246	**9:28:12**	-0.170967014	0.030727925	-0.132400063
9:28:16	-0.169174885	0.015444896	-0.13133288	**9:28:20**	-0.167382756	0.000318534	-0.130265697
9:28:24	-0.165590626	-0.013631787	-0.129198514	**9:28:28**	-0.164471191	-0.024454918	-0.128131332
9:28:32	-0.163991366	-0.035659312	-0.127064149	**9:28:36**	-0.163511541	-0.045370701	-0.125996966
9:28:40	-0.163031716	-0.053589088	-0.124929783	**9:28:44**	-0.162551891	-0.061807474	-0.1238626
9:28:48	-0.162072066	-0.06008694	-0.122795417	**9:28:52**	-0.161592241	-0.058366407	-0.121728234
9:28:56	-0.161739179	-0.057353462	-0.121510262	**9:29:00**	-0.16274478	-0.057186343	-0.122455705
9:29:04	-0.163626458	-0.056945355	-0.123401148	**9:29:08**	-0.164508137	-0.053061147	-0.124346591
9:29:12	-0.165389815	-0.049176938	-0.125292033	**9:29:16**	-0.166271493	-0.045028889	-0.126237476
9:29:20	-0.167153172	-0.040616998	-0.127182919	**9:29:24**	-0.16803485	-0.036205107	-0.128128362
9:29:28	-0.168916529	-0.047423085	-0.129073805	**9:29:32**	-0.169798207	-0.058641063	-0.130019248
9:29:36	-0.170679886	-0.072347115	-0.13096469	**9:29:40**	-0.171561564	-0.088541241	-0.131910133
9:29:44	-0.172443243	-0.104735368	-0.132855576	**9:29:48**	-0.173324921	-0.113170561	-0.133801019
9:29:52	-0.1742066	-0.121605755	-0.134746462	**9:29:56**	-0.175088278	-0.126122665	-0.135691904
9:30:00	0.324030043	0.373278708	0.363362653	**9:30:04**	0.323963433	0.373165932	0.36241721
9:30:08	0.323896823	0.375992381	0.361471767	**9:30:12**	-0.176169787	-0.12118117	-0.139473676
9:30:16	-0.176236397	-0.127993545	-0.140419118	**9:30:20**	-0.176303008	-0.144444747	-0.141364561
9:30:24	-0.176369618	-0.160895946	-0.142310004	**9:30:28**	-0.176436228	-0.182206564	-0.143255447
9:30:32	-0.176502838	-0.203517182	-0.14420089	**9:30:36**	-0.176569449	-0.219311736	-0.145146332
9:30:40	-0.176636059	-0.229590243	-0.146091775	**9:30:44**	-0.176702669	-0.239868741	-0.147037218
9:30:48	-0.175763983	-0.238947116	-0.146620569	**9:30:52**	-0.174607771	-0.237895827	-0.145909192
9:30:56	-0.173451559	-0.233949007	-0.145197814	**9:31:00**	-0.17235457	-0.22714194	-0.144486437
9:31:04	-0.174327349	-0.222164714	-0.143775059	**9:31:08**	-0.176300127	-0.207046534	-0.143063681
9:31:12	-0.178272906	-0.191928363	-0.142352304	**9:31:16**	-0.180245685	-0.179218175	-0.141640926
9:31:20	-0.182218463	-0.168915984	-0.140929549	**9:31:24**	-0.184191242	-0.158613789	-0.140218171
9:31:28	-0.186164021	-0.17046757	-0.139506794	**9:31:32**	-0.188136799	-0.182321356	-0.138795416
9:31:36	-0.190109578	-0.19285136	-0.138084039	**9:31:40**	-0.192082357	-0.202057597	-0.137372661
9:31:44	-0.189422984	-0.208502671	-0.136661283	**9:31:48**	-0.18649043	-0.214784906	-0.135949906
9:31:52	-0.183557875	-0.221067149	-0.135238528	**9:31:56**	-0.18062532	-0.229722118	-0.134527151
9:32:00	-0.177692766	-0.240749811	-0.133815773	**9:32:04**	-0.174904872	-0.251863734	-0.133104396
9:32:08	-0.172116978	-0.261410854	-0.132393018	**9:32:12**	-0.169329084	-0.270957975	-0.13168164
9:32:16	-0.166541191	-0.278002813	-0.130970263	**9:32:20**	-0.163753297	-0.282545369	-0.130258885
9:32:24	-0.160965403	-0.287087924	-0.129547508	**9:32:28**	-0.15817751	-0.293581594	-0.12883613
9:32:32	-0.122059291	-0.280207593	-0.08296499	**9:32:36**	-0.121742719	-0.290151094	-0.085602044
9:32:40	-0.121426147	-0.302071309	-0.088239098	**9:32:44**	-0.121781182	-0.314391858	-0.090876152
9:32:48	-0.123246736	-0.324768075	-0.093513206	**9:32:52**	-0.12471229	-0.335144275	-0.09615026
9:32:56	-0.126177844	-0.343798453	-0.098787313	**9:33:00**	-0.127643398	-0.350730593	-0.101424367
9:33:04	-0.129054185	-0.357630086	-0.104061421	**9:33:08**	-0.130464972	-0.358160631	-0.106698475
9:33:12	-0.131875758	-0.358691177	-0.109335529	**9:33:16**	-0.133286545	-0.355539064	-0.111972583
9:33:20	-0.134697332	-0.351159375	-0.114609636	**9:33:24**	-0.136108119	-0.346779703	-0.11724669
9:33:28	-0.137518906	-0.33428206	-0.119883744	**9:33:32**	-0.138929692	-0.321784399	-0.122520798
9:33:36	-0.140340479	-0.31357416	-0.125157852	**9:33:40**	-0.141751266	-0.318226152	-0.127794906
9:33:44	-0.143162053	-0.322878144	-0.13043196	**9:33:48**	-0.144572839	-0.338738278	-0.133069013
9:33:52	-0.145983626	-0.354598411	-0.135706067	**9:33:56**	-0.147394413	-0.362581356	-0.138343121

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:34:00	-0.1488052	-0.362687112	-0.140980175	**9:34:04**	-0.149776199	-0.362530718	-0.143617229
9:34:08	-0.150747199	-0.356606977	-0.146254283	**9:34:12**	-0.151718198	-0.350683236	-0.148891337
9:34:16	-0.152689197	-0.343311193	-0.15152839	**9:34:20**	-0.153661789	-0.334491778	-0.154165444
9:34:24	-0.1564384	-0.32674771	-0.156802498	**9:34:28**	-0.15921501	-0.336504184	-0.159439552
9:34:32	-0.161991621	-0.34626064	-0.162076606	**9:34:36**	-0.164768231	-0.355432602	-0.16471366
9:34:40	-0.168079174	-0.364338559	-0.168074689	**9:34:44**	-0.171641458	-0.373394337	-0.171776264
9:34:48	-0.175203742	-0.373924976	-0.175477839	**9:34:52**	-0.178766027	-0.374455597	-0.179179414
9:34:56	-0.182328311	-0.370904423	-0.18288099	**9:35:00**	-0.185890595	-0.363271453	-0.186582565
9:35:04	-0.189955457	-0.355938062	-0.19028414	**9:35:08**	-0.194020319	-0.35717479	-0.193985716
9:35:12	-0.198085181	-0.358411517	-0.197687291	**9:35:16**	-0.202150042	-0.367121837	-0.201388866
9:35:20	-0.206214904	-0.383305732	-0.205090442	**9:35:24**	-0.2091961	-0.39884367	-0.207323741
9:35:28	-0.209410783	-0.413504285	-0.205808651	**9:35:32**	-0.209625466	-0.428164882	-0.204293561
9:35:36	-0.209840149	-0.439594364	-0.202778471	**9:35:40**	-0.210054832	-0.449946773	-0.201263381
9:35:44	-0.210269515	-0.460299181	-0.199748291	**9:35:48**	-0.210484198	-0.466469707	-0.1982332
9:35:52	-0.210698881	-0.472640233	-0.19671811	**9:35:56**	-0.210913564	-0.475729863	-0.19520302
9:36:00	-0.211128247	-0.47573856	-0.19368793	**9:36:04**	-0.211250245	-0.475692008	-0.19217284
9:36:08	-0.211372243	-0.484407506	-0.19065775	**9:36:12**	-0.211494241	-0.493123003	-0.18914266
9:36:16	-0.211616238	-0.496567856	-0.187627569	**9:36:20**	-0.211738236	-0.494742063	-0.186112479
9:36:24	-0.211860234	-0.49291627	-0.184597389	**9:36:28**	-0.211982232	-0.497355733	-0.183082299
9:36:32	-0.21210423	-0.501795195	-0.181567209	**9:36:36**	-0.212226227	-0.504155299	-0.180052119
9:36:40	-0.212348225	-0.504436045	-0.178537029	**9:36:44**	-0.212470223	-0.507588135	-0.177021938
9:36:48	-0.201465514	-0.512721836	-0.175506848	**9:36:52**	-0.187825105	-0.516284437	-0.173991758
9:36:56	-0.174184695	-0.519847038	-0.172476668	**9:37:00**	-0.160544286	-0.523409639	-0.170961578
9:37:04	-0.151201874	-0.52953421	-0.169446488	**9:37:08**	-0.150403368	-0.542350317	-0.167931398
9:37:12	-0.149604862	-0.555166423	-0.166416308	**9:37:16**	-0.148806357	-0.561817431	-0.164901217
9:37:20	-0.148007851	-0.562303413	-0.163386127	**9:37:24**	-0.147209345	-0.562789395	-0.161871037
9:37:28	-0.146410839	-0.571599845	-0.160355947	**9:37:32**	-0.145612333	-0.580410295	-0.158840857
9:37:36	-0.144813827	-0.586216734	-0.157325767	**9:37:40**	-0.144015321	-0.589019161	-0.155810677
9:37:44	-0.143216815	-0.591821589	-0.154295586	**9:37:48**	-0.142418309	-0.576642692	-0.152780496
9:37:52	-0.141619803	-0.561463759	-0.151265406	**9:37:56**	-0.140821297	-0.548606779	-0.149750316
9:38:00	-0.140022791	-0.538071682	-0.148235226	**9:38:04**	-0.139132011	-0.527481616	-0.146720136
9:38:08	-0.138241231	-0.516891515	-0.145205046	**9:38:12**	-0.137350451	-0.506301415	-0.143689955
9:38:16	-0.136459671	-0.496210431	-0.142174865	**9:38:20**	-0.135568891	-0.486618529	-0.140659775
9:38:24	-0.134678111	-0.477026591	-0.139144685	**9:38:28**	-0.13378733	-0.467434689	-0.137629595
9:38:32	-0.13289655	-0.457842786	-0.136114505	**9:38:36**	-0.145425329	-0.461442058	-0.152781779
9:38:40	-0.154028916	-0.464432257	-0.16413075	**9:38:44**	-0.118545467	-0.441142857	-0.115745528
9:38:48	-0.105917765	-0.426182075	-0.098327905	**9:38:52**	-0.108078155	-0.42003621	-0.100946891
9:38:56	-0.110238544	-0.420091968	-0.103565877	**9:39:00**	-0.112398934	-0.426349276	-0.106184863
9:39:04	-0.114671926	-0.43267374	-0.108803849	**9:39:08**	-0.116944917	-0.443731822	-0.111422836
9:39:12	-0.119217909	-0.454789904	-0.114041822	**9:39:16**	-0.121490901	-0.458078274	-0.116660808
9:39:20	-0.123763892	-0.453596931	-0.119279794	**9:39:24**	-0.126036884	-0.447646625	-0.12189878
9:39:28	-0.128309875	-0.437289359	-0.124517767	**9:39:32**	-0.130582867	-0.426932092	-0.127136753
9:39:36	-0.132855859	-0.415434402	-0.129755739	**9:39:40**	-0.13512885	-0.402796361	-0.132374725
9:39:44	-0.137401842	-0.39015832	-0.134993711	**9:39:48**	-0.139674834	-0.382519692	-0.137612698
9:39:52	-0.137923783	-0.37248236	-0.140231684	**9:39:56**	-0.135817343	-0.359753713	-0.14285067
9:40:00	-0.133710904	-0.34454554	-0.145469656	**9:40:04**	-0.131155868	-0.329069983	-0.148088642
9:40:08	-0.128600832	-0.306494319	-0.150707629	**9:40:12**	-0.126045796	-0.283918655	-0.153326615
9:40:16	-0.13165257	-0.264650865	-0.155945601	**9:40:20**	-0.214774232	-0.290031245	-0.158564587
9:40:24	-0.233985257	-0.277315467	-0.161183573	**9:40:28**	-0.229170043	-0.256207949	-0.163802559
9:40:32	-0.234344861	-0.241055326	-0.166421546	**9:40:36**	-0.239519679	-0.226686507	-0.169040532
9:40:40	-0.244694497	-0.213101481	-0.171659518	**9:40:44**	-0.249869315	-0.199516459	-0.174278504
9:40:48	-0.255044132	-0.175038448	-0.17689749	**9:40:52**	-0.255464445	-0.14772635	-0.179516477
9:40:56	-0.25144754	-0.121427716	-0.182135463	**9:41:00**	-0.247430635	-0.098787501	-0.184754449
9:41:04	-0.243831157	-0.076396112	-0.187373435	**9:41:08**	-0.24023168	-0.061856473	-0.189992421
9:41:12	-0.236632202	-0.047316829	-0.192611408	**9:41:16**	-0.233032724	-0.029676996	-0.195230394
9:41:20	-0.229433246	-0.008936956	-0.19784938	**9:41:24**	-0.225833768	0.011803076	-0.200468366
9:41:28	-0.205660724	0.041032079	-0.203087352	**9:41:32**	-0.170232085	0.079354696	-0.205706338

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:41:36	-0.17543318	0.099138059	-0.208325325	**9:41:40**	-0.180634274	0.124600904	-0.210944311
9:41:44	-0.184585432	0.144130159	-0.211869739	**9:41:48**	-0.185060186	0.145695671	-0.208084935
9:41:52	-0.18553494	0.147261184	-0.204300131	**9:41:56**	-0.186009694	0.156887057	-0.200515328
9:42:00	-0.186484449	0.174573273	-0.196730524	**9:42:04**	-0.187466036	0.191957374	-0.19294572
9:42:08	-0.222643824	0.184333	-0.189160917	**9:42:12**	-0.342246806	0.126384041	-0.185376113
9:42:16	-0.326276523	0.150712015	-0.181591309	**9:42:20**	-0.310306241	0.176503765	-0.177806505
9:42:24	-0.294335958	0.202295515	-0.174021702	**9:42:28**	-0.276466854	0.222224022	-0.167664156
9:42:32	-0.256084392	0.243650704	-0.157901223	**9:42:36**	-0.152423932	0.314718109	-0.148138289
9:42:40	-0.149612907	0.325670729	-0.138375356	**9:42:44**	-0.151723637	0.333689568	-0.135280982
9:42:48	-0.159167369	0.336797002	-0.139412374	**9:42:52**	-0.1666111	0.3399044	-0.143543765
9:42:56	-0.174054832	0.334500232	-0.147675157	**9:43:00**	-0.213745438	0.301362565	-0.151806549
9:43:04	-0.291663234	0.245438298	-0.15593794	**9:43:08**	-0.33654086	0.199210399	-0.160069332
9:43:12	-0.310944154	0.194991156	-0.164200724	**9:43:16**	-0.285347449	0.193482132	-0.168332115
9:43:20	-0.259750743	0.194683398	-0.172463507	**9:43:24**	-0.250710764	0.186015419	-0.176594898
9:43:28	-0.268135513	0.159233113	-0.18072629	**9:43:32**	-0.285560263	0.132450807	-0.184857682
9:43:36	-0.302985012	0.110066863	-0.188989073	**9:43:40**	-0.312326779	0.105696166	-0.193120465
9:43:44	-0.320000361	0.102319848	-0.197251857	**9:43:48**	-0.327673943	0.096766767	-0.201383248
9:43:52	-0.362523964	0.07501425	-0.20551464	**9:43:56**	-0.413612744	0.044932196	-0.209646032
9:44:00	-0.438941643	0.031555379	-0.213777423	**9:44:04**	-0.438452086	0.032825285	-0.217908815
9:44:08	-0.437962528	0.031865473	-0.222040207	**9:44:12**	-0.437472971	0.03090566	-0.226171598
9:44:16	-0.408023317	0.049905728	-0.23030299	**9:44:20**	-0.391620915	0.063825745	-0.234434382
9:44:24	-0.360174494	0.086713268	-0.218182404	**9:44:28**	-0.342877391	0.095374919	-0.198060218
9:44:32	-0.334540015	0.098695816	-0.177938031	**9:44:36**	-0.326202638	0.096597359	-0.157815845
9:44:40	-0.317865261	0.089079532	-0.137693658	**9:44:44**	-0.309527884	0.081561686	-0.117571472
9:44:48	-0.301190508	0.066649514	-0.097449285	**9:44:52**	-0.294093343	0.050998071	-0.079007481
9:44:56	-0.29706971	0.03170885	-0.074214457	**9:45:00**	-0.800046077	-0.485213473	-0.569421434
9:45:04	-0.802851208	-0.502033743	-0.564628411	**9:45:08**	-0.805656339	-0.517427082	-0.559835387
9:45:12	-0.30846147	-0.032820438	-0.055042364	**9:45:16**	-0.311266602	-0.044866666	-0.05024934
9:45:20	-0.314071733	-0.053565793	-0.045456317	**9:45:24**	-0.316876864	-0.062264921	-0.040663293
9:45:28	-0.319681995	-0.07732907	-0.03587027	**9:45:32**	-0.322487126	-0.09239322	-0.031077247
9:45:36	-0.31966298	-0.105409495	-0.026284223	**9:45:40**	-0.321282559	-0.122382275	-0.027666308
9:45:44	-0.34990685	-0.155452144	-0.065637486	**9:45:48**	-0.37853114	-0.194933534	-0.103608665
9:45:52	-0.407155431	-0.234414925	-0.141579843	**9:45:56**	-0.435779722	-0.274429358	-0.179551022
9:46:00	-0.455559001	-0.309704462	-0.205537961	**9:46:04**	-0.441515114	-0.324818099	-0.186605251
9:46:08	-0.427471226	-0.331534907	-0.167672541	**9:46:12**	-0.413427338	-0.338251712	-0.148739832
9:46:16	-0.399383451	-0.338403828	-0.129807122	**9:46:20**	-0.407701895	-0.345321095	-0.141173474
9:46:24	-0.416378149	-0.352451647	-0.15302463	**9:46:28**	-0.425054403	-0.367964501	-0.164875785
9:46:32	-0.399414104	-0.36302178	-0.130230921	**9:46:36**	-0.366318211	-0.356199391	-0.085484361
9:46:40	-0.34825141	-0.359190438	-0.061100945	**9:46:44**	-0.35757048	-0.380746627	-0.07382306
9:46:48	-0.36688955	-0.40902537	-0.086545176	**9:46:52**	-0.37620862	-0.437304113	-0.099267292
9:46:56	-0.385527689	-0.453224202	-0.111989408	**9:47:00**	-0.394846759	-0.456785618	-0.124711524
9:47:04	-0.404767226	-0.460705535	-0.13743364	**9:47:08**	-0.414883665	-0.466751207	-0.150155756
9:47:12	-0.425229757	-0.472933771	-0.162877871	**9:47:16**	-0.435575849	-0.477169343	-0.175599987
9:47:20	-0.44592194	-0.479457902	-0.188322103	**9:47:24**	-0.456268032	-0.48174648	-0.201044219
9:47:28	-0.466614124	-0.491211944	-0.213766335	**9:47:32**	-0.476960216	-0.500677408	-0.226488451
9:47:36	-0.487306308	-0.519602469	-0.239210567	**9:47:40**	-0.4976524	-0.547987128	-0.251932682
9:47:44	-0.507998491	-0.576371787	-0.264654798	**9:47:48**	-0.512205829	-0.608329062	-0.269059423
9:47:52	-0.512448892	-0.637923348	-0.268092792	**9:47:56**	-0.512691955	-0.661556013	-0.26712616
9:48:00	-0.512935017	-0.679227128	-0.266159529	**9:48:04**	-0.514283319	-0.697557058	-0.265192897
9:48:08	-0.508892265	-0.711869764	-0.264226265	**9:48:12**	-0.496513872	-0.722017424	-0.263259634
9:48:16	-0.484135478	-0.72998834	-0.262293002	**9:48:20**	-0.471757085	-0.735782512	-0.261326371
9:48:24	-0.459378691	-0.741576683	-0.260359739	**9:48:28**	-0.447000298	-0.737333834	-0.259393107
9:48:32	-0.434621904	-0.733090984	-0.258426476	**9:48:36**	-0.422243511	-0.728848099	-0.257459844
9:48:40	-0.409865117	-0.724605249	-0.256493212	**9:48:44**	-0.397486724	-0.720362399	-0.255526581
9:48:48	-0.38510833	-0.708225981	-0.254559949	**9:48:52**	-0.372729937	-0.696089564	-0.253593318
9:48:56	-0.360351543	-0.681740979	-0.252626686	**9:49:00**	-0.34797315	-0.665180191	-0.251660054
9:49:04	-0.335160912	-0.648360866	-0.250693423	**9:49:08**	-0.339717434	-0.641894719	-0.249726791

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:49:12	-0.344273956	-0.635428643	-0.24876016	**9:49:16**	-0.348830479	-0.627321464	-0.247793528
9:49:20	-0.353387001	-0.617573217	-0.246826896	**9:49:24**	-0.357943523	-0.60782497	-0.245860265
9:49:28	-0.362500045	-0.587096574	-0.244893633	**9:49:32**	-0.367056568	-0.566368177	-0.243927002
9:49:36	-0.370126799	-0.543533107	-0.241960145	**9:49:40**	-0.336555911	-0.497636114	-0.190796375
9:49:44	-0.333055002	-0.469663351	-0.180374874	**9:49:48**	-0.307558088	-0.43919734	-0.169953373
9:49:52	-0.277855313	-0.406224298	-0.159531873	**9:49:56**	-0.26325638	-0.379732546	-0.149110372
9:50:00	-0.248657448	-0.350718952	-0.138688871	**9:50:04**	-0.234767658	-0.322128066	-0.12826737
9:50:08	-0.220877868	-0.294863565	-0.11784587	**9:50:12**	-0.206988078	-0.267599072	-0.107424369
9:50:16	-0.195772548	-0.250429226	-0.100626264	**9:50:20**	-0.198808923	-0.25025528	-0.113138281
9:50:24	-0.201845299	-0.250081343	-0.125650298	**9:50:28**	-0.204881674	-0.244716346	-0.138162314
9:50:32	-0.18949616	-0.228370357	-0.125714235	**9:50:36**	-0.163924129	-0.20778788	-0.099464288
9:50:40	-0.138352097	-0.189040958	-0.07321434	**9:50:44**	-0.112780065	-0.170294028	-0.046964393
9:50:48	-0.087208034	-0.15282747	-0.020714446	**9:50:52**	-0.061636002	-0.135360913	0.005535501
9:50:56	-0.0726897	-0.137167131	-0.017839307	**9:51:00**	-0.083612232	-0.1363359	-0.041036398
9:51:04	-0.094621563	-0.135556418	-0.064233488	**9:51:08**	-0.105630894	-0.134161034	-0.087430578
9:51:12	-0.116640225	-0.132765654	-0.110627669	**9:51:16**	-0.127649556	-0.131963308	-0.133824759
9:51:20	-0.138658888	-0.131753998	-0.15702185	**9:51:24**	-0.162027482	-0.138911852	-0.18021894
9:51:28	-0.210153478	-0.164850875	-0.20341603	**9:51:32**	-0.200643865	-0.156434205	-0.226613121
9:51:36	-0.229537731	-0.171250622	-0.249810211	**9:51:40**	-0.258430759	-0.18640791	-0.273007302
9:51:44	-0.231043789	-0.168017565	-0.2199707	**9:51:48**	-0.190554178	-0.132825433	-0.149181131
9:51:52	-0.150064567	-0.097633303	-0.078391562	**9:51:56**	-0.347036794	-0.197624206	-0.329342638
9:52:00	-0.425518987	-0.220620748	-0.30571753	**9:52:04**	-0.488629184	-0.234454283	-0.282092423
9:52:08	-0.326952488	-0.106911737	-0.258467315	**9:52:12**	-0.327461795	-0.076045762	-0.234842208
9:52:16	-0.327971102	-0.044573664	-0.2112171	**9:52:20**	-0.328480409	-0.012495435	-0.187591993
9:52:24	-0.342897668	0.011292462	-0.18281098	**9:52:28**	-0.357933842	0.028735086	-0.178868545
9:52:32	-0.367492755	0.049442601	-0.174926109	**9:52:36**	-0.358735898	0.072951865	-0.170983674
9:52:40	-0.34997904	0.088345093	-0.167041238	**9:52:44**	-0.341222182	0.103738321	-0.163098802
9:52:48	-0.332465324	0.124578722	-0.159156367	**9:52:52**	-0.323708466	0.145419158	-0.155213931
9:52:56	-0.314951609	0.161957659	-0.151271496	**9:53:00**	-0.306194751	0.174194295	-0.14732906
9:53:04	-0.297042185	0.186666771	-0.143386625	**9:53:08**	-0.287889619	0.190485136	-0.139444189
9:53:12	-0.278737053	0.194303537	-0.135501754	**9:53:16**	-0.269584488	0.199026517	-0.131559318
9:53:20	-0.260431922	0.204654111	-0.127616883	**9:53:24**	-0.251279356	0.210281705	-0.123674447
9:53:28	-0.242126791	0.21532285	-0.119732011	**9:53:32**	-0.24213268	0.214904818	-0.115789576
9:53:36	-0.248104937	0.211492544	-0.114264956	**9:53:40**	-0.254286115	0.209642565	-0.113023408
9:53:44	-0.260467294	0.207792585	-0.11178186	**9:53:48**	-0.266648472	0.205125643	-0.110540311
9:53:52	-0.27282965	0.202458736	-0.109298763	**9:53:56**	-0.279010828	0.194020894	-0.108057214
9:54:00	-0.285192007	0.179812118	-0.106815666	**9:54:04**	-0.292221487	0.165097683	-0.105574118
9:54:08	-0.299250967	0.153256652	-0.104332569	**9:54:12**	-0.306280447	0.141415621	-0.103091021
9:54:16	-0.313309927	0.13252982	-0.101849473	**9:54:20**	-0.320339407	0.126599319	-0.100607924
9:54:24	-0.327368887	0.120668818	-0.099366376	**9:54:28**	-0.334398367	0.115996591	-0.098124828
9:54:32	-0.341427847	0.111324329	-0.096883279	**9:54:36**	-0.348457327	0.109121289	-0.095641731
9:54:40	-0.355486807	0.109387471	-0.094400183	**9:54:44**	-0.362516287	0.109653618	-0.093158634
9:54:48	-0.369545767	0.105391258	-0.091917086	**9:54:52**	-0.360640897	0.110627118	-0.090675537
9:54:56	-0.274516022	0.159752227	-0.089433989	**9:55:00**	-0.25697614	0.165854487	-0.088192441
9:55:04	-0.259110861	0.160229022	-0.086950892	**9:55:08**	-0.261245582	0.152174055	-0.085709344
9:55:12	-0.263380303	0.144119089	-0.084467796	**9:55:16**	-0.265515024	0.125907136	-0.083226247
9:55:20	-0.267649745	0.09753825	-0.081984699	**9:55:24**	-0.269784466	0.069169346	-0.080743151
9:55:28	-0.271919187	0.041383018	-0.079501602	**9:55:32**	-0.274053909	0.013596673	-0.078260054
9:55:36	-0.27618863	-0.011821514	-0.077018505	**9:55:40**	-0.278827092	-0.03517184	-0.075610605
9:55:44	-0.282688289	-0.059251011	-0.072428231	**9:55:48**	-0.286549485	-0.071277612	-0.069245857
9:55:52	-0.290410682	-0.083304214	-0.066063483	**9:55:56**	-0.294271878	-0.097570243	-0.062881109
9:56:00	-0.298133075	-0.114075699	-0.059698735	**9:56:04**	-0.302004516	-0.130587262	-0.056516361
9:56:08	-0.305875958	-0.143587356	-0.053333987	**9:56:12**	-0.3097474	-0.156587448	-0.050151613
9:56:16	-0.313618841	-0.166868963	-0.046969239	**9:56:20**	-0.317490283	-0.174431897	-0.043786865
9:56:24	-0.321361725	-0.181994831	-0.040604491	**9:56:28**	-0.325233166	-0.184580979	-0.037422118
9:56:32	-0.329104608	-0.187167127	-0.034239744	**9:56:36**	-0.33297605	-0.179260123	-0.03105737
9:56:40	-0.336847492	-0.160859966	-0.027874996	**9:56:44**	-0.340718933	-0.142459808	-0.024692622

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
9:56:48	-0.344590375	-0.137319059	-0.021510248	**9:56:52**	-0.340498454	-0.127431472	-0.018327874
9:56:56	-0.327741131	-0.111488874	-0.0151455	**9:57:00**	-0.314983809	-0.094656566	-0.011963126
9:57:04	-0.302891121	-0.078220445	-0.008780752	**9:57:08**	-0.290798432	-0.061784324	-0.005598378
9:57:12	-0.278705744	-0.045348195	-0.002416004	**9:57:16**	-0.266613056	-0.025024473	0.00076637
9:57:20	-0.254520368	-0.00081315	0.003948744	**9:57:24**	-0.242427679	0.023398172	0.007131118
9:57:28	-0.230334991	0.040197564	0.010313492	**9:57:32**	-0.224869896	0.053046367	0.013495866
9:57:36	-0.228974425	0.050646016	0.01667824	**9:57:40**	-0.232420404	0.039093401	0.019860614
9:57:44	-0.234022314	0.028640008	0.023042987	**9:57:48**	-0.235624223	0.015107725	0.026225361
9:57:52	-0.237226133	0.001575451	0.029407735	**9:57:56**	-0.238828043	-0.01116052	0.032590109
9:58:00	-0.232318889	-0.0182653	0.035772483	**9:58:04**	-0.225472478	-0.025169047	0.038954857
9:58:08	-0.218626068	-0.030862893	0.042137231	**9:58:12**	-0.211779657	-0.036556739	0.045319605
9:58:16	-0.204933247	-0.041705387	0.048501979	**9:58:20**	-0.198086836	-0.046308836	0.051684353
9:58:24	-0.191240426	-0.050912284	0.054866727	**9:58:28**	-0.184394015	-0.058737095	0.058049101
9:58:32	-0.186183555	-0.071709663	0.049530495	**9:58:36**	-0.188130622	-0.077876998	0.040798452
9:58:40	-0.190077689	-0.077145206	0.03206641	**9:58:44**	-0.192024756	-0.076413413	0.023334368
9:58:48	-0.257822586	-0.128288947	-0.060608352	**9:58:52**	-0.328441311	-0.183038144	-0.183690771
9:58:56	-0.319698244	-0.189303218	-0.199244694	**9:59:00**	-0.318538267	-0.198910667	-0.192759627
9:59:04	-0.332935006	-0.217791234	-0.186274561	**9:59:08**	-0.347331745	-0.221679488	-0.179789495
9:59:12	-0.361728484	-0.225567744	-0.173304428	**9:59:16**	-0.375658727	-0.231308996	-0.166187301
9:59:20	-0.387123709	-0.237711811	-0.155729951	**9:59:24**	-0.39858869	-0.244114627	-0.145272602
9:59:28	-0.409243763	-0.245443023	-0.133717896	**9:59:32**	-0.416611706	-0.244812011	-0.117709407
9:59:36	-0.423979649	-0.237077323	-0.101700919	**9:59:40**	-0.441678683	-0.228397161	-0.099989592
9:59:44	-0.427244381	-0.200562816	-0.103439694	**9:59:48**	-0.41281008	-0.173407709	-0.106889795
9:59:52	-0.369247109	-0.128889454	-0.110339896	**9:59:56**	-0.316898819	-0.07988114	-0.113789998
10:00:00	0.197634283	0.405750297	0.382759901	**10:00:04**	0.1188972	0.350111834	0.3793098
10:00:08	0.136413354	0.364347189	0.375859698	**10:00:12**	-0.35031081	-0.123945043	-0.127590403
10:00:16	-0.337034974	-0.112237267	-0.131040505	**10:00:20**	-0.323759137	-0.1005295	-0.134490606
10:00:24	-0.310483301	-0.088821732	-0.137940707	**10:00:28**	-0.297207465	-0.087740188	-0.141390809
10:00:32	-0.230210109	-0.054636069	-0.14484091	**10:00:36**	-0.283415451	-0.101268645	-0.148291011
10:00:40	-0.336620793	-0.150596458	-0.151741113	**10:00:44**	-0.389826135	-0.199924274	-0.155191214
10:00:48	-0.409114404	-0.224719807	-0.158641316	**10:00:52**	-0.318065913	-0.183745309	-0.162091417
10:00:56	-0.240634139	-0.146426756	-0.165541518	**10:01:00**	-0.2808047	-0.174748362	-0.16899162
10:01:04	-0.320253185	-0.20263955	-0.172441721	**10:01:08**	-0.35970167	-0.217776136	-0.175891822
10:01:12	-0.399150155	-0.232912723	-0.179341924	**10:01:16**	-0.43859864	-0.25182384	-0.182792025
10:01:20	-0.478047125	-0.274509491	-0.186242126	**10:01:24**	-0.471342626	-0.269684062	-0.189692228
10:01:28	-0.443884269	-0.260131941	-0.193142329	**10:01:32**	-0.416425912	-0.25057982	-0.196592431
10:01:36	-0.388967555	-0.241953464	-0.200042532	**10:01:40**	-0.349549257	-0.22650656	-0.187287928
10:01:44	-0.304743466	-0.207848255	-0.167233726	**10:01:48**	-0.266535142	-0.198135069	-0.147179525
10:01:52	-0.245618152	-0.198728979	-0.127125323	**10:01:56**	-0.224701162	-0.195147629	-0.107071122
10:02:00	-0.203784173	-0.190174531	-0.08701692	**10:02:04**	-0.183578846	-0.185625639	-0.066962719
10:02:08	-0.16337352	-0.178622433	-0.046908518	**10:02:12**	-0.149828687	-0.175589445	-0.035878719
10:02:16	-0.214507676	-0.228064302	-0.076644865	**10:02:20**	-0.275246747	-0.28707048	-0.117411011
10:02:24	-0.335985818	-0.34607665	-0.158177157	**10:02:28**	-0.369317617	-0.390709063	-0.161808775
10:02:32	-0.397968921	-0.432551514	-0.159098718	**10:02:36**	-0.426620224	-0.475907979	-0.156388661
10:02:40	-0.425647071	-0.50311978	-0.153678604	**10:02:44**	-0.364401998	-0.494155398	-0.150968546
10:02:48	-0.303156924	-0.484443903	-0.148258489	**10:02:52**	-0.26786053	-0.490200014	-0.145548432
10:02:56	-0.31586067	-0.547673506	-0.142838375	**10:03:00**	-0.36386081	-0.607212606	-0.140128318
10:03:04	-0.398728741	-0.6589238	-0.137262889	**10:03:08**	-0.383071274	-0.658066486	-0.123387322
10:03:12	-0.367413807	-0.657209172	-0.109511754	**10:03:16**	-0.35175634	-0.649403977	-0.095636187
10:03:20	-0.336098873	-0.634650828	-0.081760619	**10:03:24**	-0.321885489	-0.620758475	-0.069841661
10:03:28	-0.323901649	-0.608742557	-0.079912359	**10:03:32**	-0.324449341	-0.588053526	-0.089983057
10:03:36	-0.341653946	-0.570903141	-0.100053755	**10:03:40**	-0.354691788	-0.544878765	-0.104478843
10:03:44	-0.36440786	-0.516874297	-0.104403214	**10:03:48**	-0.374123932	-0.482208031	-0.104327585
10:03:52	-0.383840004	-0.447541783	-0.104251956	**10:03:56**	-0.38918332	-0.41063483	-0.104176327
10:04:00	-0.377817029	-0.364133387	-0.104100698	**10:04:04**	-0.366846478	-0.317867838	-0.104025068
10:04:08	-0.355875927	-0.287777033	-0.103949439	**10:04:12**	-0.344905376	-0.257686236	-0.10387381
10:04:16	-0.333934825	-0.236458894	-0.103798181	**10:04:20**	-0.322964273	-0.224095014	-0.103722552

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:04:24	-0.282498167	-0.194149291	-0.103646923	**10:04:28**	-0.285232362	-0.188723862	-0.103571293
10:04:32	-0.28131989	-0.17933646	-0.103495664	**10:04:36**	-0.277407418	-0.166229943	-0.103420035
10:04:40	-0.273494946	-0.149404313	-0.103344406	**10:04:44**	-0.269582474	-0.132578683	-0.103268777
10:04:48	-0.265670002	-0.124125815	-0.103193148	**10:04:52**	-0.26175753	-0.115672945	-0.103117518
10:04:56	-0.258247063	-0.105816112	-0.103041889	**10:05:00**	-0.25603592	-0.095090195	-0.10296626
10:05:04	-0.253414582	-0.084119763	-0.102890631	**10:05:08**	-0.250793244	-0.064962423	-0.102815002
10:05:12	-0.248171906	-0.045805092	-0.102739373	**10:05:16**	-0.245550568	-0.031840961	-0.102663743
10:05:20	-0.242929231	-0.019607903	-0.102588114	**10:05:24**	-0.240307893	-0.007374845	-0.102512485
10:05:28	-0.237686555	0.008630744	-0.102436856	**10:05:32**	-0.235065217	0.024636305	-0.102361227
10:05:36	-0.232443879	0.037970393	-0.102285598	**10:05:40**	-0.229822541	0.04863299	-0.102209968
10:05:44	-0.227201204	0.059295568	-0.102134339	**10:05:48**	-0.224579866	0.066617672	-0.10205871
10:05:52	-0.221958528	0.073939776	-0.101983081	**10:05:56**	-0.21933719	0.080370306	-0.101907452
10:06:00	-0.216715852	0.086503631	-0.101831823	**10:06:04**	-0.213619682	0.092919997	-0.101756194
10:06:08	-0.210523512	0.102349505	-0.101680564	**10:06:12**	-0.207427342	0.111779031	-0.101604935
10:06:16	-0.204331172	0.124778889	-0.101529306	**10:06:20**	-0.201235001	0.141349115	-0.101453677
10:06:24	-0.198138831	0.157919323	-0.101378048	**10:06:28**	-0.195042661	0.176663078	-0.101302419
10:06:32	-0.191946491	0.195406832	-0.101226789	**10:06:36**	-0.188850321	0.20667687	-0.10115116
10:06:40	-0.185754151	0.21047312	-0.101075531	**10:06:44**	-0.191318108	0.209107238	-0.100999902
10:06:48	-0.204821931	0.191377121	-0.100924273	**10:06:52**	-0.218325755	0.173646969	-0.100848644
10:06:56	-0.226465893	0.154178477	-0.100773014	**10:07:00**	-0.222689299	0.136877797	-0.100697385
10:07:04	-0.219579521	0.119179638	-0.100621756	**10:07:08**	-0.216469743	0.108779308	-0.100546127
10:07:12	-0.213359965	0.098378995	-0.100470498	**10:07:16**	-0.2112674	0.089066238	-0.101773106
10:07:20	-0.209246965	0.081404385	-0.103173443	**10:07:24**	-0.207603437	0.073517863	-0.104573781
10:07:28	-0.206003868	0.062890141	-0.105974118	**10:07:32**	-0.204404299	0.052262402	-0.107374455
10:07:36	-0.202804729	0.036484853	-0.108774792	**10:07:40**	-0.209575212	0.010568209	-0.110175129
10:07:44	-0.221486755	-0.018412932	-0.111575467	**10:07:48**	-0.229950179	-0.046675052	-0.112975804
10:07:52	-0.234791768	-0.072778249	-0.114376141	**10:07:56**	-0.239633357	-0.100693179	-0.115776478
10:08:00	-0.244474946	-0.13041984	-0.117176816	**10:08:04**	-0.24898518	-0.159948986	-0.118577153
10:08:08	-0.253495415	-0.190927963	-0.11997749	**10:08:12**	-0.194720638	-0.184183722	-0.121377827
10:08:16	-0.198677185	-0.207278655	-0.122778165	**10:08:20**	-0.202633731	-0.227855585	-0.124178502
10:08:24	-0.206590278	-0.248432514	-0.125578839	**10:08:28**	-0.210546825	-0.260572532	-0.126979176
10:08:32	-0.214503372	-0.27271256	-0.128379513	**10:08:36**	-0.218459919	-0.285292886	-0.129779851
10:08:40	-0.222416465	-0.298313501	-0.131180188	**10:08:44**	-0.226373012	-0.311334116	-0.132580525
10:08:48	-0.230329559	-0.343416968	-0.133980862	**10:08:52**	-0.234286106	-0.375499837	-0.1353812
10:08:56	-0.238242653	-0.390268481	-0.136781537	**10:09:00**	-0.2421992	-0.399265747	-0.138181874
10:09:04	-0.246286535	-0.408340955	-0.139582211	**10:09:08**	-0.25037387	-0.438273186	-0.140982549
10:09:12	-0.254461205	-0.468205416	-0.142382886	**10:09:16**	-0.25854854	-0.490494081	-0.143783223
10:09:20	-0.263350114	-0.50556491	-0.146151293	**10:09:24**	-0.269227022	-0.521276729	-0.14997635
10:09:28	-0.27510393	-0.536988548	-0.153801406	**10:09:32**	-0.280980838	-0.552700367	-0.157626463
10:09:36	-0.286857746	-0.560745544	-0.161451519	**10:09:40**	-0.292734654	-0.561124115	-0.165276576
10:09:44	-0.298611562	-0.561502687	-0.169101632	**10:09:48**	-0.30448847	-0.550228679	-0.172926689
10:09:52	-0.310365378	-0.538954636	-0.176751745	**10:09:56**	-0.316242286	-0.53391039	-0.180576802
10:10:00	-0.322119194	-0.530942695	-0.184401858	**10:10:04**	-0.328253504	-0.528128434	-0.188226915
10:10:08	-0.334387815	-0.517665545	-0.192051971	**10:10:12**	-0.340522126	-0.507202656	-0.195877027
10:10:16	-0.346656436	-0.495641198	-0.199702084	**10:10:20**	-0.352790747	-0.482981153	-0.20352714
10:10:24	-0.358925058	-0.47032109	-0.207352197	**10:10:28**	-0.365059369	-0.459980493	-0.211177253
10:10:32	-0.371193679	-0.449639879	-0.21500231	**10:10:36**	-0.37732799	-0.436991363	-0.218827366
10:10:40	-0.374977744	-0.416977415	-0.211156568	**10:10:44**	-0.368692119	-0.394617649	-0.198153666
10:10:48	-0.362406495	-0.36493069	-0.185150763	**10:10:52**	-0.35612087	-0.335243721	-0.172147861
10:10:56	-0.349835246	-0.306019408	-0.159144959	**10:11:00**	-0.343549621	-0.276949315	-0.146142057
10:11:04	-0.337159277	-0.247816795	-0.133139154	**10:11:08**	-0.330768933	-0.216021644	-0.120136252
10:11:12	-0.324378589	-0.184226492	-0.10713335	**10:11:16**	-0.317988245	-0.168181186	-0.094130447
10:11:20	-0.312254422	-0.157777169	-0.081127545	**10:11:24**	-0.332279763	-0.162727791	-0.08249748
10:11:28	-0.359326982	-0.165549755	-0.093381461	**10:11:32**	-0.386374201	-0.168371719	-0.104265443
10:11:36	-0.413421419	-0.167017317	-0.115149425	**10:11:40**	-0.364227204	-0.116040217	-0.027820287
10:11:44	-0.343006264	-0.081737552	-0.014989988	**10:11:48**	-0.321785323	-0.042807439	-0.002159689
10:11:52	-0.300564383	-0.003877327	0.01067061	**10:11:56**	-0.279343442	0.031587976	0.023500909

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:12:00	-0.29434859	0.041994659	-0.012752069	**10:12:04**	-0.283706981	0.067688977	-0.014833268
10:12:08	-0.273065371	0.089712663	-0.016914468	**10:12:12**	-0.262423761	0.11173635	-0.018995667
10:12:16	-0.251782151	0.129162851	-0.021076867	**10:12:20**	-0.241140541	0.141992131	-0.023158066
10:12:24	-0.230498931	0.154821429	-0.025239265	**10:12:28**	-0.219857321	0.172236081	-0.027320465
10:12:32	-0.222400279	0.181791582	-0.029401664	**10:12:36**	-0.202516495	0.204715351	-0.031482864
10:12:40	-0.18263271	0.227639084	-0.033564063	**10:12:44**	-0.233743231	0.206732152	-0.035645262
10:12:48	-0.265257559	0.192969955	-0.037726462	**10:12:52**	-0.225484628	0.221700952	-0.039807661
10:12:56	-0.133885637	0.280611408	-0.041888861	**10:13:00**	-0.131916272	0.28538178	-0.04397006
10:13:04	-0.130152619	0.29002953	-0.04605126	**10:13:08**	-0.128388965	0.29467728	-0.048132459
10:13:12	-0.126625312	0.299325031	-0.050213658	**10:13:16**	-0.124861659	0.310380047	-0.052294858
10:13:20	-0.124120915	0.32723259	-0.054376057	**10:13:24**	-0.132108006	0.338882641	-0.056457257
10:13:28	-0.140095098	0.349190603	-0.058538456	**10:13:32**	-0.14808219	0.359498531	-0.060619656
10:13:36	-0.156069281	0.362217235	-0.062700855	**10:13:40**	-0.164056373	0.357346681	-0.064782054
10:13:44	-0.172043464	0.352476127	-0.066863254	**10:13:48**	-0.174061795	0.338333328	-0.068944453
10:13:52	-0.17358767	0.325676244	-0.071025653	**10:13:56**	-0.173113544	0.310064073	-0.073106852
10:14:00	-0.172639419	0.29149678	-0.075188052	**10:14:04**	-0.172191873	0.272913642	-0.077269251
10:14:08	-0.171744327	0.256010051	-0.07935045	**10:14:12**	-0.197080959	0.223736876	-0.08143165
10:14:16	-0.20021222	0.213813376	-0.083512849	**10:14:20**	-0.203343481	0.213003276	-0.085594049
10:14:24	-0.206474742	0.21219314	-0.087675248	**10:14:28**	-0.209606002	0.199396733	-0.089756448
10:14:32	-0.212737263	0.186600327	-0.091837647	**10:14:36**	-0.215868524	0.179056694	-0.093918846
10:14:40	-0.218999785	0.176765799	-0.096000046	**10:14:44**	-0.222131046	0.174474904	-0.098081245
10:14:48	-0.225262307	0.173647359	-0.100162445	**10:14:52**	-0.228393568	0.172819849	-0.102243644
10:14:56	-0.231524828	0.17041526	-0.104324844	**10:15:00**	-0.734656089	-0.333566337	-0.606406043
10:15:04	-0.73799883	-0.337674029	-0.608487242	**10:15:08**	-0.741341572	-0.350201445	-0.610568442
10:15:12	-0.244684313	0.137271157	-0.112649641	**10:15:16**	-0.248027054	0.124743742	-0.114730841
10:15:20	-0.251369795	0.112216344	-0.11681204	**10:15:24**	-0.254712536	0.099688928	-0.118893239
10:15:28	-0.258235947	0.084698468	-0.120974439	**10:15:32**	-0.265887825	0.067247092	-0.123055638
10:15:36	-0.283000909	0.044438159	-0.13795597	**10:15:40**	-0.302689146	0.020376356	-0.156345415
10:15:44	-0.322377383	-0.003685447	-0.174734859	**10:15:48**	-0.34206562	-0.042802391	-0.193124304
10:15:52	-0.361753857	-0.081919317	-0.211513748	**10:15:56**	-0.362129036	-0.108092478	-0.203735638
10:16:00	-0.359049054	-0.131728884	-0.191276077	**10:16:04**	-0.355767204	-0.155244965	-0.178816516
10:16:08	-0.353658954	-0.177395988	-0.167947084	**10:16:12**	-0.35392972	-0.200965106	-0.160301017
10:16:16	-0.354200487	-0.220467557	-0.15265495	**10:16:20**	-0.354471253	-0.235903342	-0.145008883
10:16:24	-0.359421108	-0.254128258	-0.137362815	**10:16:28**	-0.375044987	-0.264026242	-0.129716748
10:16:32	-0.390668866	-0.273924221	-0.122070681	**10:16:36**	-0.406292744	-0.288443092	-0.114424614
10:16:40	-0.421916623	-0.307582856	-0.106778547	**10:16:44**	-0.437540502	-0.32672262	-0.09913248
10:16:48	-0.453164381	-0.351771528	-0.091486413	**10:16:52**	-0.46878826	-0.376820422	-0.083840346
10:16:56	-0.484412139	-0.399352822	-0.076194279	**10:17:00**	-0.502938559	-0.42109887	-0.072480909
10:17:04	-0.525235692	-0.445092581	-0.073842945	**10:17:08**	-0.547532824	-0.478276239	-0.075204981
10:17:12	-0.36272112	-0.388005529	-0.076567017	**10:17:16**	-0.353031052	-0.394250023	-0.077929053
10:17:20	-0.427115936	-0.442559358	-0.079291089	**10:17:24**	-0.499230147	-0.489694005	-0.080653125
10:17:28	-0.460395364	-0.479314657	-0.082015162	**10:17:32**	-0.465116569	-0.494898357	-0.083377198
10:17:36	-0.479784209	-0.52141522	-0.084739234	**10:17:40**	-0.460991872	-0.532991318	-0.08610127
10:17:44	-0.452562999	-0.550744934	-0.087463306	**10:17:48**	-0.444134127	-0.565295362	-0.088825342
10:17:52	-0.405831981	-0.562038794	-0.090187378	**10:17:56**	-0.358773204	-0.55170186	-0.091549414
10:18:00	-0.311714427	-0.539504286	-0.09291145	**10:18:04**	-0.228485962	-0.505746522	-0.094273486
10:18:08	-0.250770421	-0.528192407	-0.095635522	**10:18:12**	-0.241977805	-0.532113695	-0.096997558
10:18:16	-0.270026576	-0.563183424	-0.098359594	**10:18:20**	-0.320909812	-0.613052249	-0.09972163
10:18:24	-0.372582217	-0.663391486	-0.101083666	**10:18:28**	-0.312903222	-0.614979744	-0.102445702
10:18:32	-0.314614535	-0.603161814	-0.103807738	**10:18:36**	-0.316325849	-0.605361513	-0.105169774
10:18:40	-0.318037162	-0.621578842	-0.10653181	**10:18:44**	-0.319748476	-0.637796206	-0.107893846
10:18:48	-0.321459789	-0.643901759	-0.109255883	**10:18:52**	-0.323171102	-0.650007312	-0.110617919
10:18:56	-0.324882416	-0.654424082	-0.111979955	**10:19:00**	-0.326593729	-0.658277923	-0.113341991
10:19:04	-0.328226885	-0.662085212	-0.114704027	**10:19:08**	-0.329860041	-0.654064087	-0.116066063
10:19:12	-0.331493197	-0.646042926	-0.117428099	**10:19:16**	-0.333126352	-0.633474179	-0.118790135
10:19:20	-0.334824799	-0.616396693	-0.120240634	**10:19:24**	-0.336645341	-0.599391988	-0.121856563
10:19:28	-0.338465884	-0.57475752	-0.123472493	**10:19:32**	-0.340286426	-0.550123087	-0.125088422

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:19:36	-0.342106969	-0.531466797	-0.126704351	**10:19:40**	-0.343927511	-0.518788684	-0.12832028
10:19:44	-0.345748054	-0.506110572	-0.129936209	**10:19:48**	-0.347568596	-0.491212706	-0.131552138
10:19:52	-0.349389138	-0.476314841	-0.133168068	**10:19:56**	-0.351209681	-0.457740606	-0.134783997
10:20:00	-0.353030223	-0.435490001	-0.136399926	**10:20:04**	-0.354374723	-0.412955652	-0.138015855
10:20:08	-0.355719222	-0.387205981	-0.139631784	**10:20:12**	-0.357063722	-0.361456328	-0.141247713
10:20:16	-0.358408221	-0.341995548	-0.142863643	**10:20:20**	-0.359752721	-0.32882365	-0.144479572
10:20:24	-0.353765048	-0.311281167	-0.146095501	**10:20:28**	-0.329651198	-0.294847662	-0.14771143
10:20:32	-0.305537348	-0.278414157	-0.149327359	**10:20:36**	-0.284544796	-0.2649005	-0.150943288
10:20:40	-0.295177323	-0.271297373	-0.152559218	**10:20:44**	-0.30580985	-0.277694245	-0.154175147
10:20:48	-0.316442377	-0.27682562	-0.155791076	**10:20:52**	-0.371995518	-0.302733486	-0.218270626
10:20:56	-0.377058702	-0.298545067	-0.212340567	**10:21:00**	-0.382121885	-0.294356648	-0.206410508
10:21:04	-0.373361309	-0.281928099	-0.20048045	**10:21:08**	-0.373971874	-0.270217495	-0.194602523
10:21:12	-0.375973737	-0.259336219	-0.190609686	**10:21:16**	-0.3779756	-0.25045115	-0.18661685
10:21:20	-0.379977462	-0.243562286	-0.182624013	**10:21:24**	-0.381979325	-0.23667342	-0.178631176
10:21:28	-0.383981188	-0.239524238	-0.174638339	**10:21:32**	-0.38598305	-0.242375056	-0.170645503
10:21:36	-0.387984913	-0.245225874	-0.166652666	**10:21:40**	-0.389986776	-0.248076691	-0.162659829
10:21:44	-0.391988638	-0.250927509	-0.158666993	**10:21:48**	-0.393990501	-0.258794974	-0.154674156
10:21:52	-0.395992364	-0.266662441	-0.150681319	**10:21:56**	-0.397994226	-0.273499242	-0.146688482
10:22:00	-0.399996089	-0.279305379	-0.142695646	**10:22:04**	-0.401778765	-0.284980863	-0.138702809
10:22:08	-0.403561441	-0.286715594	-0.134709972	**10:22:12**	-0.405344117	-0.288450324	-0.130717135
10:22:16	-0.392731488	-0.281980027	-0.126724299	**10:22:20**	-0.352777214	-0.25958758	-0.122731462
10:22:24	-0.31282294	-0.237195133	-0.118738625	**10:22:28**	-0.282423242	-0.217528669	-0.114745789
10:22:32	-0.274793739	-0.211435165	-0.110752952	**10:22:36**	-0.267164235	-0.20534166	-0.106760115
10:22:40	-0.259534731	-0.199248156	-0.102767278	**10:22:44**	-0.251905228	-0.193154651	-0.098774442
10:22:48	-0.244275724	-0.179889952	-0.094781605	**10:22:52**	-0.236646221	-0.166625252	-0.090788768
10:22:56	-0.229016717	-0.161062528	-0.086795931	**10:23:00**	-0.221387213	-0.16320178	-0.082803095
10:23:04	-0.214775097	-0.165947482	-0.078810258	**10:23:08**	-0.227492449	-0.17114191	-0.10100721
10:23:12	-0.332125719	-0.231125992	-0.079279016	**10:23:16**	-0.321612475	-0.223766584	-0.057550822
10:23:20	-0.311099232	-0.217700737	-0.035822628	**10:23:24**	-0.300585988	-0.21163489	-0.014094434
10:23:28	-0.301185445	-0.210962272	-0.008077482	**10:23:32**	-0.291549029	-0.204188212	-0.015636024
10:23:36	-0.281912614	-0.199774722	-0.023194565	**10:23:40**	-0.272276199	-0.197721801	-0.030753107
10:23:44	-0.262639784	-0.195668879	-0.038311649	**10:23:48**	-0.253003369	-0.204443169	-0.045870191
10:23:52	-0.243366953	-0.213217459	-0.053428733	**10:23:56**	-0.233730538	-0.217431332	-0.060987274
10:24:00	-0.224094123	-0.217084779	-0.068545816	**10:24:04**	-0.239885019	-0.231895061	-0.076104358
10:24:08	-0.263196223	-0.242092466	-0.0836629	**10:24:12**	-0.286507426	-0.25228987	-0.091221442
10:24:16	-0.30981863	-0.26754938	-0.098779983	**10:24:20**	-0.333129834	-0.287870986	-0.106338525
10:24:24	-0.356441037	-0.308192601	-0.113897067	**10:24:28**	-0.379752241	-0.33130148	-0.121455609
10:24:32	-0.403063445	-0.354410359	-0.129014151	**10:24:36**	-0.419026484	-0.372651328	-0.136572692
10:24:40	-0.41092964	-0.376062782	-0.144131234	**10:24:44**	-0.402832797	-0.379474245	-0.151689776
10:24:48	-0.393069039	-0.369307881	-0.15698979	**10:24:52**	-0.382951847	-0.358930841	-0.16181093
10:24:56	-0.372834654	-0.347596914	-0.166632069	**10:25:00**	-0.362717462	-0.335306082	-0.171453209
10:25:04	-0.353528075	-0.323568301	-0.176274349	**10:25:08**	-0.344338688	-0.306405562	-0.181095489
10:25:12	-0.333463427	-0.288237908	-0.183632412	**10:25:16**	-0.317734275	-0.264476122	-0.179592726
10:25:20	-0.513148238	-0.363872674	-0.175553039	**10:25:24**	-0.503316342	-0.340925352	-0.171513352
10:25:28	-0.493484446	-0.338035964	-0.167473665	**10:25:32**	-0.48365255	-0.335146572	-0.163433978
10:25:36	-0.473820654	-0.325946945	-0.159394291	**10:25:40**	-0.463988758	-0.310437079	-0.155354605
10:25:44	-0.455412646	-0.295675765	-0.151314918	**10:25:48**	-0.455455719	-0.280211994	-0.147275231
10:25:52	-0.455498792	-0.264748223	-0.143235544	**10:25:56**	-0.455541865	-0.250349591	-0.139195857
10:26:00	-0.455584938	-0.237016094	-0.135156171	**10:26:04**	-0.455189271	-0.223421074	-0.131116484
10:26:08	-0.454793605	-0.232026054	-0.127076797	**10:26:12**	-0.454397938	-0.240631034	-0.12303711
10:26:16	-0.454002271	-0.251646446	-0.118997423	**10:26:20**	-0.453606605	-0.265072289	-0.114957736
10:26:24	-0.453210938	-0.278498132	-0.11091805	**10:26:28**	-0.452815272	-0.271600255	-0.106878363
10:26:32	-0.452419605	-0.264702378	-0.102838676	**10:26:36**	-0.453727082	-0.256792564	-0.098798989
10:26:40	-0.45896878	-0.249200724	-0.094759302	**10:26:44**	-0.474199238	-0.24756303	-0.090719615
10:26:48	-0.474442477	-0.241829234	-0.086679929	**10:26:52**	-0.474685715	-0.236095436	-0.082640242
10:26:56	-0.474928953	-0.235816223	-0.078600555	**10:27:00**	-0.475172192	-0.237355201	-0.074560868
10:27:04	-0.498945466	-0.252920073	-0.102875458	**10:27:08**	-0.49417113	-0.249590224	-0.092646537

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:27:12	-0.489396793	-0.246260374	-0.082417616	**10:27:16**	-0.484622456	-0.244787917	-0.072188695
10:27:20	-0.479848119	-0.243934596	-0.061959774	**10:27:24**	-0.475073782	-0.243081274	-0.051730853
10:27:28	-0.426587131	-0.201945439	-0.041501932	**10:27:32**	-0.488309466	-0.226503474	-0.031273011
10:27:36	-0.472819998	-0.214828226	-0.017495521	**10:27:40**	-0.455525063	-0.211868236	-0.001271776
10:27:44	-0.459028941	-0.221306096	0.014951969	**10:27:48**	-0.475401034	-0.24246427	0.031175713
10:27:52	-0.487726764	-0.261210466	0.047399458	**10:27:56**	-0.440948765	-0.253456233	0.063623203
10:28:00	-0.394170766	-0.254432384	0.079846948	**10:28:04**	-0.346998004	-0.252329329	0.096070692
10:28:08	-0.299825241	-0.241694588	0.112294437	**10:28:12**	-0.252652479	-0.231059842	0.128518182
10:28:16	-0.205479716	-0.211872804	0.144741927	**10:28:20**	-0.23229633	-0.228237395	0.160965671
10:28:24	-0.164245823	-0.188053156	0.054226426	**10:28:28**	-0.228343938	-0.231167083	-0.01642705
10:28:32	-0.292442054	-0.274281009	-0.087080527	**10:28:36**	-0.345545986	-0.303497279	-0.142837818
10:28:40	-0.376894953	-0.312401548	-0.169118976	**10:28:44**	-0.376341607	-0.302289343	-0.152175208
10:28:48	-0.362056653	-0.283991944	-0.116626275	**10:28:52**	-0.347771699	-0.26569454	-0.081077342
10:28:56	-0.333486746	-0.245017336	-0.045528409	**10:29:00**	-0.319201792	-0.223546868	-0.009979476
10:29:04	-0.251621329	-0.170307773	0.025569457	**10:29:08**	-0.214101006	-0.13868824	0.016596424
10:29:12	-0.243355022	-0.146871857	-0.023997082	**10:29:16**	-0.279540315	-0.157076132	-0.064590588
10:29:20	-0.304502503	-0.158479521	-0.105184094	**10:29:24**	-0.329464692	-0.159882912	-0.145777599
10:29:28	-0.354426881	-0.170529599	-0.186371105	**10:29:32**	-0.360626817	-0.169992391	-0.20154335
10:29:36	-0.50698147	-0.254061767	-0.175678868	**10:29:40**	-0.481170348	-0.236568309	-0.149814385
10:29:44	-0.455359227	-0.219074851	-0.123949902	**10:29:48**	-0.429548106	-0.205284632	-0.09808542
10:29:52	-0.403736985	-0.191494413	-0.072220937	**10:29:56**	-0.377925863	-0.177704194	-0.046356454
10:30:00	0.147885258	0.336086025	0.479508029	**10:30:04**	0.151454669	0.336618306	0.476393009
10:30:08	0.154840326	0.339573234	0.473029018	**10:30:12**	-0.341774017	-0.157471838	-0.030334973
10:30:16	-0.33838836	-0.150779483	-0.033698964	**10:30:20**	-0.335002702	-0.140349692	-0.037062955
10:30:24	-0.331617045	-0.129919905	-0.040426946	**10:30:28**	-0.328231388	-0.127456225	-0.043790937
10:30:32	-0.324845731	-0.124992544	-0.047154928	**10:30:36**	-0.321460074	-0.126222868	-0.050518919
10:30:40	-0.318074417	-0.13114719	-0.05388291	**10:30:44**	-0.31468876	-0.137206787	-0.057246901
10:30:48	-0.312491294	-0.147380463	-0.06222079	**10:30:52**	-0.399814811	-0.210916206	-0.074973005
10:30:56	-0.385965647	-0.212448552	-0.08772522	**10:31:00**	-0.370183054	-0.211132477	-0.098006499
10:31:04	-0.343061169	-0.203057226	-0.099439858	**10:31:08**	-0.315939283	-0.201582043	-0.100873216
10:31:12	-0.288817398	-0.200106861	-0.102306574	**10:31:16**	-0.261695512	-0.200290083	-0.103739933
10:31:20	-0.386151509	-0.29248494	-0.105173291	**10:31:24**	-0.379862835	-0.306744922	-0.106606649
10:31:28	-0.373574161	-0.317117583	-0.108040008	**10:31:32**	-0.367285488	-0.327490244	-0.109473366
10:31:36	-0.360996814	-0.336579929	-0.110906724	**10:31:40**	-0.35470814	-0.344386639	-0.112340083
10:31:44	-0.348419466	-0.35219334	-0.113773441	**10:31:48**	-0.342130793	-0.350991817	-0.115206799
10:31:52	-0.340636317	-0.352648033	-0.116640158	**10:31:56**	-0.357821492	-0.3654389	-0.118073516
10:32:00	-0.375006668	-0.378229784	-0.119506874	**10:32:04**	-0.39193707	-0.390868784	-0.120940233
10:32:08	-0.408867472	-0.403507784	-0.122373591	**10:32:12**	-0.397877955	-0.399504153	-0.123806949
10:32:16	-0.384800091	-0.390646614	-0.125240308	**10:32:20**	-0.371722227	-0.378179979	-0.126673666
10:32:24	-0.358644362	-0.365713345	-0.128107025	**10:32:28**	-0.345566498	-0.346053002	-0.129540383
10:32:32	-0.332525323	-0.326414537	-0.131023452	**10:32:36**	-0.319495238	-0.311022469	-0.132521548
10:32:40	-0.306465154	-0.299870204	-0.134019643	**10:32:44**	-0.293435069	-0.288717931	-0.135517739
10:32:48	-0.287404532	-0.27488124	-0.137015834	**10:32:52**	-0.296983858	-0.270349346	-0.13851393
10:32:56	-0.306563184	-0.27058151	-0.140012025	**10:33:00**	-0.299548411	-0.265686265	-0.141510121
10:33:04	-0.299511406	-0.262556743	-0.143008216	**10:33:08**	-0.299474401	-0.252246373	-0.144506312
10:33:12	-0.299437397	-0.241935999	-0.146004407	**10:33:16**	-0.299400392	-0.233195997	-0.147502503
10:33:20	-0.299363387	-0.226026365	-0.149000598	**10:33:24**	-0.299326382	-0.218856732	-0.150498694
10:33:28	-0.299289378	-0.223642198	-0.151996789	**10:33:32**	-0.299252373	-0.228427664	-0.153494885
10:33:36	-0.299215368	-0.229897117	-0.15499298	**10:33:40**	-0.299178363	-0.228050566	-0.156491076
10:33:44	-0.299141358	-0.226204015	-0.157989171	**10:33:48**	-0.299104354	-0.229637419	-0.159487267
10:33:52	-0.299067349	-0.233070822	-0.160985362	**10:33:56**	-0.299030344	-0.230066354	-0.162483458
10:34:00	-0.293524278	-0.217363994	-0.156571439	**10:34:04**	-0.287234546	-0.204194502	-0.149475815
10:34:08	-0.280944814	-0.202063195	-0.142380191	**10:34:12**	-0.274655082	-0.199931888	-0.135284567
10:34:16	-0.26836535	-0.191732921	-0.128188943	**10:34:20**	-0.262075617	-0.177466292	-0.12109332
10:34:24	-0.255785885	-0.163199663	-0.113997696	**10:34:28**	-0.249496153	-0.140932992	-0.106902072
10:34:32	-0.243206421	-0.118666321	-0.099806448	**10:34:36**	-0.236916689	-0.099332638	-0.092710824
10:34:40	-0.230626957	-0.082931947	-0.0856152	**10:34:44**	-0.224337225	-0.066531256	-0.078519576

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:34:48	-0.218047493	-0.061244132	-0.071423953	**10:34:52**	-0.214780112	-0.057758584	-0.068423359
10:34:56	-0.212639735	-0.056514515	-0.066949759	**10:35:00**	-0.210499358	-0.05684014	-0.065476159
10:35:04	-0.208395115	-0.057031351	-0.06400256	**10:35:08**	-0.206290872	-0.056754707	-0.06252896
10:35:12	-0.204186629	-0.056478068	-0.061055361	**10:35:16**	-0.202082385	-0.056201423	-0.059581761
10:35:20	-0.199978142	-0.047487127	-0.058108162	**10:35:24**	-0.197873899	-0.038772836	-0.056634562
10:35:28	-0.195769656	-0.035887907	-0.055160963	**10:35:32**	-0.193665412	-0.033002969	-0.053687363
10:35:36	-0.191561169	-0.033332279	-0.052213764	**10:35:40**	-0.189456926	-0.034733014	-0.050740164
10:35:44	-0.187352683	-0.037107947	-0.049266565	**10:35:48**	-0.185248439	-0.042405529	-0.047792965
10:35:52	-0.183144196	-0.047703102	-0.046319366	**10:35:56**	-0.181039953	-0.055980317	-0.044845766
10:36:00	-0.155409033	-0.051226861	-0.043372167	**10:36:04**	-0.167968509	-0.066129241	-0.041898567
10:36:08	-0.180527984	-0.071705027	-0.040424968	**10:36:12**	-0.183803013	-0.071746498	-0.038951368
10:36:16	-0.164589335	-0.0626246	-0.037477769	**10:36:20**	-0.158511304	-0.06274659	-0.036004169
10:36:24	-0.160283748	-0.066684805	-0.03453057	**10:36:28**	-0.162056192	-0.068033054	-0.03305697
10:36:32	-0.163828637	-0.069381302	-0.031583371	**10:36:36**	-0.176210368	-0.0739662	-0.044484455
10:36:40	-0.201110682	-0.084984101	-0.074347156	**10:36:44**	-0.226010995	-0.093819578	-0.104209858
10:36:48	-0.247043383	-0.093802157	-0.128831848	**10:36:52**	-0.248062365	-0.081855054	-0.126337371
10:36:56	-0.249081347	-0.07215866	-0.123842893	**10:37:00**	-0.250100328	-0.063212504	-0.121348416
10:37:04	-0.251389704	-0.056935334	-0.118853938	**10:37:08**	-0.252679081	-0.058181595	-0.116359461
10:37:12	-0.253968457	-0.059427856	-0.113864983	**10:37:16**	-0.255257833	-0.051477517	-0.111370506
10:37:20	-0.251133461	-0.037234596	-0.108876028	**10:37:24**	-0.246808084	-0.028624755	-0.106381551
10:37:28	-0.242482708	-0.037273571	-0.103887073	**10:37:32**	-0.238157332	-0.045922386	-0.101392596
10:37:36	-0.258805739	-0.070567901	-0.098898118	**10:37:40**	-0.290636396	-0.102249056	-0.096403641
10:37:44	-0.322467053	-0.1402116	-0.093909163	**10:37:48**	-0.354297709	-0.197018309	-0.091414686
10:37:52	-0.386128366	-0.253825019	-0.088920208	**10:37:56**	-0.417959023	-0.299584041	-0.086425731
10:38:00	-0.44978968	-0.345343056	-0.083931253	**10:38:04**	-0.481751229	-0.390718869	-0.081436776
10:38:08	-0.505937275	-0.430076124	-0.078942298	**10:38:12**	-0.481538553	-0.440472752	-0.076447821
10:38:16	-0.457139831	-0.429689395	-0.073953343	**10:38:20**	-0.435344234	-0.413397743	-0.074985879
10:38:24	-0.426137857	-0.404610331	-0.09307574	**10:38:28**	-0.416931479	-0.39582291	-0.111165601
10:38:32	-0.407725102	-0.387035498	-0.129255462	**10:38:36**	-0.383949564	-0.374335065	-0.127605346
10:38:40	-0.358472211	-0.362210689	-0.123649415	**10:38:44**	-0.332994859	-0.35140751	-0.119693485
10:38:48	-0.324116503	-0.354462289	-0.115737554	**10:38:52**	-0.40050528	-0.408343485	-0.111781624
10:38:56	-0.476894056	-0.455005513	-0.107825693	**10:39:00**	-0.55138506	-0.498129885	-0.103869763
10:39:04	-0.553853325	-0.500843874	-0.099913832	**10:39:08**	-0.556321591	-0.511121593	-0.095957902
10:39:12	-0.519266292	-0.497839929	-0.092001971	**10:39:16**	-0.469260559	-0.472187309	-0.088046041
10:39:20	-0.419254825	-0.444984202	-0.08409011	**10:39:24**	-0.369249092	-0.413230934	-0.08013418
10:39:28	-0.372350929	-0.408584139	-0.076178249	**10:39:32**	-0.260036716	-0.335139607	-0.072222319
10:39:36	-0.339957771	-0.372966639	-0.068266388	**10:39:40**	-0.381627573	-0.386887051	-0.064310458
10:39:44	-0.40147638	-0.388313911	-0.060354527	**10:39:48**	-0.378212512	-0.364555551	-0.056398597
10:39:52	-0.361389009	-0.344636193	-0.052442666	**10:39:56**	-0.373480282	-0.33430216	-0.048486736
10:40:00	-0.385571556	-0.321418014	-0.044530805	**10:40:04**	-0.398113485	-0.320160927	-0.040574875
10:40:08	-0.415409311	-0.333095977	-0.036618944	**10:40:12**	-0.346655384	-0.294738112	-0.032663014
10:40:16	-0.279042403	-0.262307908	-0.028707083	**10:40:20**	-0.22569703	-0.240131605	-0.024751153
10:40:24	-0.261937554	-0.262475607	-0.020795222	**10:40:28**	-0.206515402	-0.221300458	0.046823762
10:40:32	-0.132238537	-0.168886307	0.139989285	**10:40:36**	-0.170014884	-0.17469737	0.081332211
10:40:40	-0.199545949	-0.172737561	0.033846793	**10:40:44**	-0.214393796	-0.161527658	0.00625589
10:40:48	-0.229241644	-0.148824796	-0.021335012	**10:40:52**	-0.236838022	-0.131799447	-0.036623033
10:40:56	-0.231076344	-0.112567136	-0.033274822	**10:41:00**	-0.225314667	-0.095253347	-0.029926611
10:41:04	-0.218362405	-0.077945958	-0.0265784	**10:41:08**	-0.211410144	-0.062786832	-0.023230189
10:41:12	-0.204457883	-0.047627707	-0.019881978	**10:41:16**	-0.197505621	-0.034747295	-0.016533767
10:41:20	-0.19055336	-0.022626444	-0.013185556	**10:41:24**	-0.183601098	-0.011956552	-0.009837345
10:41:28	-0.176648837	-0.005639492	-0.006489134	**10:41:32**	-0.169696575	0.000677569	-0.003140923
10:41:36	-0.162744314	0.019307744	0.000207288	**10:41:40**	-0.155792053	0.042042294	0.003555499
10:41:44	-0.148839791	0.059004381	0.00690371	**10:41:48**	-0.14188753	0.058649073	0.010251921
10:41:52	-0.136870772	0.057140041	0.010977689	**10:41:56**	-0.133018386	0.05239247	0.010125831
10:42:00	-0.137879716	0.041602623	0.009273973	**10:42:04**	-0.155250245	0.021723872	0.008422114
10:42:08	-0.167371042	7.73076E-05	0.007570256	**10:42:12**	-0.179491839	-0.021569266	0.006718398
10:42:16	-0.191612636	-0.038762113	0.00586654	**10:42:20**	-0.203733433	-0.054470372	0.005014681

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:42:24	-0.34671176	-0.147632994	0.004162823	**10:42:28**	-0.347135481	-0.154177665	0.003310965
10:42:32	-0.339506968	-0.155922524	0.002459107	**10:42:36**	-0.331878455	-0.159648334	0.001607248
10:42:40	-0.324249941	-0.164034465	0.00075539	**10:42:44**	-0.316621428	-0.169464894	-9.64682E-05
10:42:48	-0.308992915	-0.178028223	-0.000948327	**10:42:52**	-0.301364402	-0.186591551	-0.001800185
10:42:56	-0.293735888	-0.190474721	-0.002652043	**10:43:00**	-0.286107375	-0.192797838	-0.003503901
10:43:04	-0.279036794	-0.195623399	-0.00435576	**10:43:08**	-0.271966212	-0.198958561	-0.005207618
10:43:12	-0.264895631	-0.202293726	-0.006059476	**10:43:16**	-0.25782505	-0.206382715	-0.006911334
10:43:20	-0.250754468	-0.210722981	-0.007763193	**10:43:24**	-0.243683887	-0.214622403	-0.008615051
10:43:28	-0.236613306	-0.217199282	-0.009466909	**10:43:32**	-0.229542725	-0.219776171	-0.010318767
10:43:36	-0.222472143	-0.224009547	-0.011170626	**10:43:40**	-0.215401562	-0.228795076	-0.012022484
10:43:44	-0.208330981	-0.232823483	-0.012874342	**10:43:48**	-0.201260399	-0.234580504	-0.0137262
10:43:52	-0.194189818	-0.236337515	-0.014578059	**10:43:56**	-0.187119237	-0.223023744	-0.015429917
10:44:00	-0.180048655	-0.209709964	-0.016281775	**10:44:04**	-0.171195259	-0.193608985	-0.017133633
10:44:08	-0.1740244	-0.17929826	-0.017985492	**10:44:12**	-0.171056202	-0.161531835	-0.01883735
10:44:16	-0.168088004	-0.14803275	-0.019689208	**10:44:20**	-0.165119805	-0.135956115	-0.020541066
10:44:24	-0.162151607	-0.12590671	-0.021392925	**10:44:28**	-0.159183409	-0.121938996	-0.022244783
10:44:32	-0.156215211	-0.117971281	-0.023096641	**10:44:36**	-0.153247013	-0.110540969	-0.0239485
10:44:40	-0.150278815	-0.101956456	-0.024800358	**10:44:44**	-0.147310616	-0.093900267	-0.025652216
10:44:48	-0.144342418	-0.087429051	-0.026504074	**10:44:52**	-0.141049513	-0.080764283	-0.027355933
10:44:56	-0.137244122	-0.06775598	-0.027740795	**10:45:00**	-0.623604512	-0.54687297	-0.514801124
10:45:04	-0.611516885	-0.528779466	-0.501861454	**10:45:08**	-0.602948623	-0.518376978	-0.493690225
10:45:12	-0.101517955	-0.012229098	0.005797153	**10:45:16**	-0.101654925	-0.006054899	0.005284531
10:45:20	-0.101791896	0.000439548	0.004771909	**10:45:24**	-0.101928866	0.005908074	0.004259287
10:45:28	-0.102065837	0.008298848	0.003746665	**10:45:32**	-0.102202808	0.010689623	0.003234043
10:45:36	-0.102339778	0.014152594	0.002721421	**10:45:40**	-0.102476749	0.018687755	0.002208799
10:45:44	-0.102613719	0.023222915	0.001696177	**10:45:48**	-0.10275069	0.022216208	0.001183555
10:45:52	-0.10288766	0.021209509	0.000670933	**10:45:56**	-0.103024631	0.024402875	0.000158311
10:46:00	-0.103161601	0.031796314	-0.000354311	**10:46:04**	-0.101913574	0.040015328	-0.000866933
10:46:08	-0.100665546	0.049702933	-0.001379555	**10:46:12**	-0.099152396	0.059548573	-0.001892177
10:46:16	-0.09743475	0.064349691	-0.002404799	**10:46:20**	-0.095717104	0.063984398	-0.002917421
10:46:24	-0.093999458	0.063619105	-0.003430043	**10:46:28**	-0.092281811	0.048012967	-0.003942666
10:46:32	-0.090564165	0.03240683	-0.004455288	**10:46:36**	-0.088846519	0.015888542	-0.00496791
10:46:40	-0.087128872	-0.001541893	-0.005480532	**10:46:44**	-0.085411226	-0.01897233	-0.005993154
10:46:48	-0.08369358	-0.039022078	-0.006505776	**10:46:52**	-0.081975934	-0.059071826	-0.007018398
10:46:56	-0.080258287	-0.072955187	-0.00753102	**10:47:00**	-0.078540641	-0.080672162	-0.008043642
10:47:04	-0.078048328	-0.08911954	-0.008556264	**10:47:08**	-0.077779482	-0.087840024	-0.009068886
10:47:12	-0.077510637	-0.086560509	-0.009581508	**10:47:16**	-0.077241791	-0.086997184	-0.01009413
10:47:20	-0.076972946	-0.089150058	-0.010606752	**10:47:24**	-0.0767041	-0.091302927	-0.011119374
10:47:28	-0.076435254	-0.097212334	-0.011631996	**10:47:32**	-0.076166409	-0.103121741	-0.012144618
10:47:36	-0.075897563	-0.103319622	-0.01265724	**10:47:40**	-0.075628718	-0.097805979	-0.013169862
10:47:44	-0.075359872	-0.092292336	-0.013682484	**10:47:48**	-0.075091027	-0.086778693	-0.014195106
10:47:52	-0.074822181	-0.081265047	-0.014707728	**10:47:56**	-0.074553336	-0.071121329	-0.01522035
10:48:00	-0.07428449	-0.056347534	-0.015732972	**10:48:04**	-0.074819447	-0.042052874	-0.016245594
10:48:08	-0.075354403	-0.040644485	-0.016758216	**10:48:12**	-0.07588936	-0.039236095	-0.017270838
10:48:16	-0.076424317	-0.03614606	-0.01778346	**10:48:20**	-0.076959273	-0.031374379	-0.018296082
10:48:24	-0.07749423	-0.026602697	-0.018808704	**10:48:28**	-0.078029186	-0.021831017	-0.019321326
10:48:32	-0.078564143	-0.017059336	-0.019833948	**10:48:36**	-0.0790991	-0.010352518	-0.02034657
10:48:40	-0.079634056	-0.001710559	-0.020859192	**10:48:44**	-0.080169013	0.006931397	-0.021371815
10:48:48	-0.08070397	0.00074219	-0.021884437	**10:48:52**	-0.081238926	-0.005447022	-0.022397059
10:48:56	-0.081293279	-0.006736074	-0.022258502	**10:49:00**	-0.081299199	-0.003382581	-0.022054326
10:49:04	-0.081188394	4.04914E-05	-0.021850149	**10:49:08**	-0.081010969	0.013693996	-0.021645972
10:49:12	-0.080604414	0.027484076	-0.021441795	**10:49:16**	-0.08019786	0.032214802	-0.021237618
10:49:20	-0.079791305	0.033925733	-0.021033441	**10:49:24**	-0.079384751	0.035636664	-0.020829264
10:49:28	-0.078978196	0.036175063	-0.020625087	**10:49:32**	-0.078571642	0.036713461	-0.020420911
10:49:36	-0.078165087	0.036664194	-0.020216734	**10:49:40**	-0.077758533	0.036027244	-0.020012557
10:49:44	-0.077351979	0.035390304	-0.01980838	**10:49:48**	-0.076945424	0.037503516	-0.019604203
10:49:52	-0.07653887	0.039616738	-0.019400026	**10:49:56**	-0.076132315	0.048699327	-0.019195849

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:50:00	-0.076208138	0.064463765	-0.018991672	**10:50:04**	-0.075703036	0.080574474	-0.018787496
10:50:08	-0.075197935	0.092366815	-0.018583319	**10:50:12**	-0.074692833	0.104159156	-0.018379142
10:50:16	-0.074187731	0.11687774	-0.018174965	**10:50:20**	-0.073682629	0.130522566	-0.017970788
10:50:24	-0.073177528	0.144167393	-0.017766611	**10:50:28**	-0.072672426	0.148588643	-0.017562434
10:50:32	-0.072167324	0.153009894	-0.017358257	**10:50:36**	-0.071662222	0.160661443	-0.01715408
10:50:40	-0.071157121	0.171543307	-0.016949904	**10:50:44**	-0.070652019	0.182425172	-0.016745727
10:50:48	-0.070146917	0.200660717	-0.01654155	**10:50:52**	-0.069641815	0.21889628	-0.016337373
10:50:56	-0.069136714	0.239698345	-0.016133196	**10:51:00**	-0.068631612	0.263066948	-0.015929019
10:51:04	-0.069274347	0.285751325	-0.015724842	**10:51:08**	-0.069917083	0.297827261	-0.015520665
10:51:12	-0.070559818	0.309903197	-0.015316489	**10:51:16**	-0.071202553	0.315795489	-0.015112312
10:51:20	-0.071845289	0.315504137	-0.014908135	**10:51:24**	-0.072488024	0.315212785	-0.014703958
10:51:28	-0.073130759	0.318379616	-0.014499781	**10:51:32**	-0.073773495	0.321546412	-0.014295604
10:51:36	-0.07441623	0.32220604	-0.014091427	**10:51:40**	-0.075058965	0.3203585	-0.01388725
10:51:44	-0.075701701	0.31851096	-0.013683074	**10:51:48**	-0.076344436	0.313284893	-0.013478897
10:51:52	-0.076987172	0.308058791	-0.01327472	**10:51:56**	-0.077629907	0.29550816	-0.013070543
10:52:00	-0.078272642	0.275632964	-0.012866366	**10:52:04**	-0.078734059	0.25586585	-0.012662189
10:52:08	-0.079195476	0.220718856	-0.012458012	**10:52:12**	-0.079656893	0.185571861	-0.012253835
10:52:16	-0.08011831	0.157836478	-0.012049658	**10:52:20**	-0.080579726	0.132571651	-0.011845482
10:52:24	-0.081041143	0.107306805	-0.011641305	**10:52:28**	-0.08150256	0.078810196	-0.011437128
10:52:32	-0.081963977	0.050313586	-0.011232951	**10:52:36**	-0.082425394	0.029183058	-0.011028774
10:52:40	-0.082886811	0.01541861	-0.010824597	**10:52:44**	-0.083348228	0.001654161	-0.01062042
10:52:48	-0.083938159	-0.01468091	-0.01059037	**10:52:52**	-0.088507457	-0.03338802	-0.013804912
10:52:56	-0.094568626	-0.051266894	-0.017019453	**10:53:00**	-0.100629794	-0.068573262	-0.020233994
10:53:04	-0.106304462	-0.085649243	-0.023448536	**10:53:08**	-0.111979129	-0.106240911	-0.026663077
10:53:12	-0.117653796	-0.126832581	-0.029877619	**10:53:16**	-0.123328463	-0.138319046	-0.03309216
10:53:20	-0.12900313	-0.140700307	-0.036306701	**10:53:24**	-0.134677797	-0.143081567	-0.039521243
10:53:28	-0.140352464	-0.143798568	-0.042735784	**10:53:32**	-0.121301466	-0.124784209	-0.045950326
10:53:36	-0.12729326	-0.123819133	-0.049164867	**10:53:40**	-0.131695798	-0.125028383	-0.0502261
10:53:44	-0.151544595	-0.135444909	-0.044836012	**10:53:48**	-0.180553128	-0.143910573	-0.039445924
10:53:52	-0.209561662	-0.152376238	-0.034055835	**10:53:56**	-0.238570195	-0.16157433	-0.028665747
10:54:00	-0.267578729	-0.171504849	-0.023275659	**10:54:04**	-0.297355016	-0.181893015	-0.017885571
10:54:08	-0.327131304	-0.200325832	-0.012495482	**10:54:12**	-0.356907592	-0.21875865	-0.007105394
10:54:16	-0.38668388	-0.241192257	-0.001715306	**10:54:20**	-0.416460168	-0.267626656	0.003674782
10:54:24	-0.137132381	-0.109808906	0.00906487	**10:54:28**	-0.161072375	-0.141380429	0.014454959
10:54:32	-0.18501237	-0.172951955	0.019845047	**10:54:36**	-0.208952365	-0.207212781	0.025235135
10:54:40	-0.232892359	-0.242370049	0.030625223	**10:54:44**	-0.256832354	-0.277527309	0.036015312
10:54:48	-0.366414056	-0.357501623	0.0414054	**10:54:52**	-0.354800296	-0.365233211	0.046795488
10:54:56	-0.343186537	-0.369179105	0.052185576	**10:55:00**	-0.331572777	-0.369339305	0.057575664
10:55:04	-0.319575231	-0.369270736	0.062965753	**10:55:08**	-0.294688406	-0.365205118	0.068355841
10:55:12	-0.253394831	-0.351359692	0.073745929	**10:55:16**	-0.366634045	-0.435428935	0.079136017
10:55:20	-0.370608236	-0.460167042	0.084526106	**10:55:24**	-0.387112147	-0.492373938	0.089916194
10:55:28	-0.340636726	-0.48819738	0.095306282	**10:55:32**	-0.343778943	-0.513597108	0.10069637
10:55:36	-0.34692116	-0.532286344	0.106086459	**10:55:40**	-0.359588954	-0.55441684	0.098570198
10:55:44	-0.376730955	-0.576506858	0.084991766	**10:55:48**	-0.393872956	-0.590474606	0.071413334
10:55:52	-0.411014957	-0.60444239	0.057834902	**10:55:56**	-0.428156959	-0.621666088	0.04425647
10:56:00	-0.441278039	-0.637578259	0.036126045	**10:56:04**	-0.453241021	-0.651114341	0.029783646
10:56:08	-0.460862241	-0.657004934	0.023441247	**10:56:12**	-0.467267124	-0.662170487	0.017098847
10:56:16	-0.473672006	-0.66960047	0.010756448	**10:56:20**	-0.474631179	-0.674539173	0.011792524
10:56:24	-0.47452341	-0.681401356	0.014274214	**10:56:28**	-0.474415641	-0.695942047	0.016755904
10:56:32	-0.475450282	-0.71116371	0.019237595	**10:56:36**	-0.47843699	-0.716936764	0.021719285
10:56:40	-0.481423698	-0.719172404	0.024200976	**10:56:44**	-0.484410407	-0.719859921	0.026682666
10:56:48	-0.487397115	-0.715902892	0.029164356	**10:56:52**	-0.501018116	-0.718284836	0.031646047
10:56:56	-0.517567657	-0.716185056	0.034127737	**10:57:00**	-0.515024751	-0.700628759	0.036609427
10:57:04	-0.511129039	-0.680462155	0.039091118	**10:57:08**	-0.507233328	-0.648883862	0.041572808
10:57:12	-0.503337616	-0.617305569	0.044054499	**10:57:16**	-0.499441904	-0.584536721	0.046536189
10:57:20	-0.495546192	-0.551370991	0.049017879	**10:57:24**	-0.491701798	-0.524991288	0.05149957
10:57:28	-0.48790041	-0.505392639	0.05398126	**10:57:32**	-0.484099022	-0.48579399	0.056462951

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
10:57:36	-0.480297634	-0.454453886	0.058944641	**10:57:40**	-0.476496246	-0.419199978	0.061426331
10:57:44	-0.472694858	-0.387024506	0.063908022	**10:57:48**	-0.468832471	-0.364048	0.066389712
10:57:52	-0.465049159	-0.341118635	0.068235044	**10:57:56**	-0.463431022	-0.325064004	0.067146747
10:58:00	-0.461812885	-0.309009371	0.066058449	**10:58:04**	-0.459729046	-0.292004814	0.064970152
10:58:08	-0.457645206	-0.272983271	0.063881855	**10:58:12**	-0.455561366	-0.253961728	0.062793558
10:58:16	-0.453477526	-0.235321872	0.06170526	**10:58:20**	-0.451393687	-0.216809244	0.060616963
10:58:24	-0.449309847	-0.200431609	0.059528666	**10:58:28**	-0.449894368	-0.192049516	0.058440369
10:58:32	-0.450565929	-0.183719307	0.057352071	**10:58:36**	-0.45123749	-0.169884438	0.056263774
10:58:40	-0.451909051	-0.15421468	0.055175477	**10:58:44**	-0.452580612	-0.135208276	0.05408718
10:58:48	-0.453252173	-0.106191905	0.052998883	**10:58:52**	-0.453923734	-0.077175535	0.051910585
10:58:56	-0.454595295	-0.059670781	0.050822288	**10:59:00**	-0.455266855	-0.046003202	0.049733991
10:59:04	-0.456452906	-0.035301874	0.048645694	**10:59:08**	-0.457638956	-0.032579171	0.047557396
10:59:12	-0.458825006	-0.029856469	0.046469099	**10:59:16**	-0.460011057	-0.029091969	0.045380802
10:59:20	-0.461197107	-0.028980233	0.044292505	**10:59:24**	-0.462383157	-0.025801457	0.043204207
10:59:28	-0.463569208	-0.013421614	0.04211591	**10:59:32**	-0.464755258	-0.00104177	0.041027613
10:59:36	-0.465941308	0.008021741	0.039939316	**10:59:40**	-0.467127358	0.015979791	0.038851018
10:59:44	-0.468313409	0.023677036	0.037762721	**10:59:48**	-0.469499459	0.030591818	0.036674424
10:59:52	-0.470685509	0.0375066	0.035586127	**10:59:56**	-0.47187156	0.059491108	0.03449783
11:00:00	0.02694239	0.586498834	0.533409532	**11:00:04**	0.025800446	0.608879209	0.532321235
11:00:08	0.024658503	0.617298519	0.531232938	**11:00:12**	-0.476483441	0.125717828	0.030144641
11:00:16	-0.477625385	0.131730802	0.029056343	**11:00:20**	-0.478767329	0.136941664	0.027968046
11:00:24	-0.479254542	0.139688084	0.026879749	**11:00:28**	-0.479391328	0.134079167	0.025791452
11:00:32	-0.479528115	0.12847025	0.024703154	**11:00:36**	-0.479664901	0.11468751	0.023614857
11:00:40	-0.479801688	0.098180125	0.02252656	**11:00:44**	-0.479938475	0.082511768	0.021438263
11:00:48	-0.480075261	0.069360456	0.020349965	**11:00:52**	-0.480212048	0.056209144	0.019261668
11:00:56	-0.480880048	0.043140072	0.017453622	**11:01:00**	-0.481635128	0.030152115	0.015527589
11:01:04	-0.48303737	0.020220947	0.013601557	**11:01:08**	-0.484439611	0.020617501	0.011675524
11:01:12	-0.485841853	0.02101409	0.009749492	**11:01:16**	-0.487244095	0.021923724	0.007823459
11:01:20	-0.488646336	0.023004361	0.005897427	**11:01:24**	-0.490048578	0.022510157	0.003971394
11:01:28	-0.491450819	0.01729136	0.002045362	**11:01:32**	-0.492853061	0.012072563	0.000119329
11:01:36	-0.494255303	-0.000779141	-0.001806704	**11:01:40**	-0.495657544	-0.016175159	-0.003732736
11:01:44	-0.497059786	-0.032364015	-0.005658769	**11:01:48**	-0.498462028	-0.050931388	-0.007584801
11:01:52	-0.499864269	-0.06949876	-0.009510834	**11:01:56**	-0.500420785	-0.082399497	-0.01029098
11:02:00	-0.499571541	-0.092741433	-0.009166439	**11:02:04**	-0.496565907	-0.103273782	-0.008041899
11:02:08	-0.493560274	-0.118233521	-0.006917359	**11:02:12**	-0.49055464	-0.13319326	-0.005792818
11:02:16	-0.487549007	-0.154604997	-0.004668278	**11:02:20**	-0.484543373	-0.178167408	-0.003543737
11:02:24	-0.481537739	-0.199523151	-0.002419197	**11:02:28**	-0.478532106	-0.214258912	-0.001294656
11:02:32	-0.475526472	-0.228994674	-0.000170116	**11:02:36**	-0.472520839	-0.243730431	0.000954424
11:02:40	-0.469515205	-0.258466192	0.002078965	**11:02:44**	-0.466509572	-0.27188073	0.003203505
11:02:48	-0.463503938	-0.281331603	0.004328046	**11:02:52**	-0.460498305	-0.290782477	0.005452586
11:02:56	-0.457492671	-0.293208589	0.006577127	**11:03:00**	-0.454487038	-0.293293112	0.007701667
11:03:04	-0.452808423	-0.29587249	0.008826207	**11:03:08**	-0.451129809	-0.30356339	0.009950748
11:03:12	-0.449451194	-0.31125429	0.011075288	**11:03:16**	-0.447772579	-0.30149931	0.012199829
11:03:20	-0.446093965	-0.285929036	0.013324369	**11:03:24**	-0.439076741	-0.267176498	0.01444891
11:03:28	-0.430322904	-0.252341269	0.01557345	**11:03:32**	-0.421569068	-0.242458517	0.01669799
11:03:36	-0.412815232	-0.238318893	0.017822531	**11:03:40**	-0.404061396	-0.236093645	0.018947071
11:03:44	-0.39530756	-0.233720597	0.020071612	**11:03:48**	-0.386553724	-0.230904147	0.021196152
11:03:52	-0.377799887	-0.228087697	0.022320692	**11:03:56**	-0.369046051	-0.213008789	0.023445233
11:04:00	-0.360292215	-0.193842393	0.024569773	**11:04:04**	-0.352692942	-0.173188922	0.025694314
11:04:08	-0.345093669	-0.146009569	0.026818854	**11:04:12**	-0.337494396	-0.118830213	0.027943395
11:04:16	-0.329895124	-0.101736692	0.029067935	**11:04:20**	-0.322295851	-0.088005105	0.030192475
11:04:24	-0.314696578	-0.07641213	0.031317016	**11:04:28**	-0.307097305	-0.071234985	0.032441556
11:04:32	-0.299498032	-0.066057839	0.033566097	**11:04:36**	-0.291898759	-0.0760496	0.034690637
11:04:40	-0.284299486	-0.091097665	0.035815178	**11:04:44**	-0.276700214	-0.106965115	0.036939718
11:04:48	-0.269100941	-0.125290728	0.038064258	**11:04:52**	-0.261501668	-0.143616344	0.039188799
11:04:56	-0.253902395	-0.161537671	0.040313339	**11:05:00**	-0.246303122	-0.179324236	0.04143788
11:05:04	-0.236939907	-0.192248748	0.04256242	**11:05:08**	-0.227576692	-0.193741469	0.04368696

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:05:12	-0.218213476	-0.19523419	0.044811501	**11:05:16**	-0.208850261	-0.190501312	0.045936041
11:05:20	-0.199487046	-0.183693236	0.047060582	**11:05:24**	-0.189512568	-0.175688041	0.049013331
11:05:28	-0.178001323	-0.164268547	0.053048269	**11:05:32**	-0.184287484	-0.163457807	0.057083208
11:05:36	-0.198439343	-0.162140125	0.061118146	**11:05:40**	-0.212591203	-0.155626874	0.065153085
11:05:44	-0.226743062	-0.149113625	0.069188024	**11:05:48**	-0.240894921	-0.149283593	0.073222962
11:05:52	-0.255046781	-0.149453561	0.077257901	**11:05:56**	-0.26919864	-0.159102693	0.081292839
11:06:00	-0.2833505	-0.178230988	0.085327778	**11:06:04**	-0.299069846	-0.198293637	0.089362717
11:06:08	-0.314789192	-0.247476934	0.093397655	**11:06:12**	-0.330508538	-0.296660231	0.097432594
11:06:16	-0.346227884	-0.344575732	0.101467532	**11:06:20**	-0.361947229	-0.391223419	0.105502471
11:06:24	-0.335212515	-0.412564917	0.109537409	**11:06:28**	-0.299744184	-0.406394371	0.116209745
11:06:32	-0.263174806	-0.399567508	0.124373906	**11:06:36**	-0.226605429	-0.395380853	0.132538066
11:06:40	-0.190036052	-0.39383437	0.140702227	**11:06:44**	-0.08994017	-0.354420723	0.148866387
11:06:48	-0.188423668	-0.419368827	0.15666907	**11:06:52**	-0.218608694	-0.443605271	0.162769687
11:06:56	-0.159127693	-0.416817784	0.168870304	**11:07:00**	-0.250122648	-0.482151279	0.174970921
11:07:04	-0.176955458	-0.4496303	0.181071538	**11:07:08**	-0.1147609	-0.410640703	0.17230517
11:07:12	-0.068333708	-0.381049753	0.116420738	**11:07:16**	-0.100995874	-0.400196131	0.060536306
11:07:20	-0.133658041	-0.42093586	0.004651875	**11:07:24**	-0.21970184	-0.473495554	-0.051232557
11:07:28	-0.277248411	-0.507690021	-0.088026375	**11:07:32**	-0.299842922	-0.521050072	-0.083113396
11:07:36	-0.322437434	-0.530738976	-0.078200418	**11:07:40**	-0.345031946	-0.536756663	-0.073287439
11:07:44	-0.367626458	-0.542774349	-0.06837446	**11:07:48**	-0.39022097	-0.550689199	-0.063461481
11:07:52	-0.412815482	-0.558604085	-0.058548502	**11:07:56**	-0.435409994	-0.565607819	-0.053635523
11:08:00	-0.458004505	-0.571700437	-0.048722544	**11:08:04**	-0.443065584	-0.55541994	-0.043809565
11:08:08	-0.442215849	-0.540970036	-0.038896587	**11:08:12**	-0.441366114	-0.526520131	-0.033983608
11:08:16	-0.440516379	-0.511369552	-0.029070629	**11:08:20**	-0.439666644	-0.495985419	-0.02415765
11:08:24	-0.438816909	-0.480601269	-0.019244671	**11:08:28**	-0.435761593	-0.456188635	-0.011343317
11:08:32	-0.430735454	-0.430601224	-0.000771665	**11:08:36**	-0.425709315	-0.404638693	0.009799988
11:08:40	-0.420683176	-0.378301034	0.02037164	**11:08:44**	-0.415657037	-0.351963384	0.030943292
11:08:48	-0.412131701	-0.314101587	0.039481482	**11:08:52**	-0.409604666	-0.276834859	0.046667062
11:08:56	-0.40707763	-0.238726375	0.053852641	**11:09:00**	-0.404550594	-0.200337303	0.06103822
11:09:04	-0.401737542	-0.161777745	0.0682238	**11:09:08**	-0.398924491	-0.132815048	0.075409379
11:09:12	-0.39899203	-0.105569425	0.078692004	**11:09:16**	-0.400327024	-0.079384538	0.080257334
11:09:20	-0.401662018	-0.053504865	0.081822664	**11:09:24**	-0.402997012	-0.027625193	0.083387994
11:09:28	-0.399318409	-0.00211454	0.084953324	**11:09:32**	-0.393307413	0.024786417	0.086518654
11:09:36	-0.387296417	0.041938922	0.088083984	**11:09:40**	-0.381285422	0.04934294	0.089649313
11:09:44	-0.375274426	0.056746958	0.091214643	**11:09:48**	-0.36926343	0.049547502	0.092779973
11:09:52	-0.363252434	0.042348046	0.094345303	**11:09:56**	-0.357241438	0.042650838	0.095910633
11:10:00	-0.351230443	0.050455876	0.097475963	**11:10:04**	-0.34598113	0.057806869	0.099041293
11:10:08	-0.340731817	0.063024073	0.100606622	**11:10:12**	-0.421426609	0.017011346	0.102171952
11:10:16	-0.41865763	0.016967689	0.103737282	**11:10:20**	-0.415888652	0.013141679	0.105302612
11:10:24	-0.413119673	0.009315668	0.106867942	**11:10:28**	-0.410350695	0.008838073	0.108433272
11:10:32	-0.407581716	0.00836046	0.109998602	**11:10:36**	-0.404812738	0.012367742	0.111563931
11:10:40	-0.42277377	0.008503045	0.113129261	**11:10:44**	-0.420569139	0.016658786	0.11465893
11:10:48	-0.419046373	0.013464862	0.115264728	**11:10:52**	-0.417523608	0.010270938	0.115870526
11:10:56	-0.416000842	0.007898312	0.116476324	**11:11:00**	-0.414478077	0.006346983	0.117082123
11:11:04	-0.413447169	0.004502465	0.117687921	**11:11:08**	-0.412416262	-0.006888271	0.118293719
11:11:12	-0.411385354	-0.018279006	0.118899517	**11:11:16**	-0.410354447	-0.027289698	0.119505315
11:11:20	-0.409323539	-0.033920347	0.120111114	**11:11:24**	-0.408292632	-0.039591594	0.120716912
11:11:28	-0.407261724	-0.042384676	0.12132271	**11:11:32**	-0.406230816	-0.04517774	0.121928508
11:11:36	-0.405199909	-0.052977288	0.122534307	**11:11:40**	-0.404169001	-0.06578332	0.123140105
11:11:44	-0.403138094	-0.078589334	0.123745903	**11:11:48**	-0.402107186	-0.089108835	0.124351701
11:11:52	-0.401076279	-0.099628337	0.1249575	**11:11:56**	-0.400045371	-0.112889962	0.125563298
11:12:00	-0.399014464	-0.12889372	0.126169096	**11:12:04**	-0.397590753	-0.144663334	0.126774894
11:12:08	-0.396167042	-0.140893925	0.127380693	**11:12:12**	-0.394743331	-0.137124517	0.127986491
11:12:16	-0.39331962	-0.133938705	0.128592289	**11:12:20**	-0.391693755	-0.131215989	0.129198087
11:12:24	-0.387545125	-0.126989484	0.129803886	**11:12:28**	-0.383396496	-0.12807164	0.130409684
11:12:32	-0.379247866	-0.129153796	0.131015482	**11:12:36**	-0.375099237	-0.127476171	0.13162128
11:12:40	-0.370950608	-0.123038772	0.132227079	**11:12:44**	-0.366801978	-0.118601373	0.132832877

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:12:48	-0.362653349	-0.121734375	0.133438675	**11:12:52**	-0.360228053	-0.125894639	0.134044473
11:12:56	-0.360674015	-0.13771163	0.134650272	**11:13:00**	-0.361119978	-0.155473837	0.13525607
11:13:04	-0.352063923	-0.167572043	0.149344404	**11:13:08**	-0.334900428	-0.159807664	0.174417633
11:13:12	-0.348105937	-0.170145772	0.158343438	**11:13:16**	-0.364248353	-0.184640787	0.138289983
11:13:20	-0.380390769	-0.201542062	0.118236528	**11:13:24**	-0.396533185	-0.218443337	0.098183073
11:13:28	-0.409026785	-0.23316961	0.083073454	**11:13:32**	-0.409104832	-0.248319386	0.084785856
11:13:36	-0.409182879	-0.262057972	0.086498258	**11:13:40**	-0.409260925	-0.271562988	0.08821066
11:13:44	-0.409338972	-0.281068004	0.089923063	**11:13:48**	-0.409417019	-0.293326831	0.091635465
11:13:52	-0.409495066	-0.305585659	0.093347867	**11:13:56**	-0.409573113	-0.317566237	0.095060269
11:14:00	-0.409651159	-0.329268572	0.096772672	**11:14:04**	-0.407899045	-0.339879967	0.098485074
11:14:08	-0.406146931	-0.346991822	0.100197476	**11:14:12**	-0.404394817	-0.354103677	0.101909878
11:14:16	-0.40274624	-0.365879027	0.103622281	**11:14:20**	-0.401470975	-0.38247868	0.105334683
11:14:24	-0.400195711	-0.399078332	0.107047085	**11:14:28**	-0.398920446	-0.410565686	0.108759487
11:14:32	-0.397645181	-0.422053039	0.110471889	**11:14:36**	-0.396369916	-0.429465276	0.112184292
11:14:40	-0.395094652	-0.432802415	0.113896694	**11:14:44**	-0.39489568	-0.436781097	0.11415081
11:14:48	-0.394781653	-0.438349541	0.114289834	**11:14:52**	-0.394667625	-0.439918001	0.114428859
11:14:56	-0.394553597	-0.440437457	0.114567884	**11:15:00**	-0.89443957	-0.939907942	-0.385293092
11:15:04	-0.89564751	-0.940166432	-0.385154067	**11:15:08**	-0.896855451	-0.950791603	-0.385015042
11:15:12	-0.398063392	-0.461416756	0.115123982	**11:15:16**	-0.399271333	-0.472041927	0.115263007
11:15:20	-0.400479274	-0.482667081	0.115402031	**11:15:24**	-0.401687215	-0.493292252	0.115541056
11:15:28	-0.402895156	-0.489441109	0.115680081	**11:15:32**	-0.404103097	-0.485589984	0.115819105
11:15:36	-0.404852966	-0.47881894	0.11595813	**11:15:40**	-0.404690636	-0.468857278	0.116097154
11:15:44	-0.404528305	-0.458895616	0.116236179	**11:15:48**	-0.404365974	-0.438262324	0.116375204
11:15:52	-0.404203644	-0.417629015	0.116514228	**11:15:56**	-0.404041313	-0.408242556	0.116653253
11:16:00	-0.403878983	-0.410102913	0.116792277	**11:16:04**	-0.404528134	-0.412446999	0.116931302
11:16:08	-0.405177285	-0.403894217	0.117070327	**11:16:12**	-0.405826436	-0.395341434	0.117209351
11:16:16	-0.406475587	-0.383030947	0.117348376	**11:16:20**	-0.407124738	-0.366962727	0.1174874
11:16:24	-0.407773889	-0.350894508	0.117626425	**11:16:28**	-0.40842304	-0.332444494	0.11776545
11:16:32	-0.40907219	-0.313994481	0.117904474	**11:16:36**	-0.409721341	-0.306361839	0.118043499
11:16:40	-0.410370492	-0.302334983	0.118182523	**11:16:44**	-0.411019643	-0.298308132	0.118321548
11:16:48	-0.411668794	-0.288815304	0.118460573	**11:16:52**	-0.412317945	-0.279322476	0.118599597
11:16:56	-0.412967096	-0.270778151	0.118738622	**11:17:00**	-0.413616247	-0.263182329	0.118877646
11:17:04	-0.412576664	-0.25457988	0.119016671	**11:17:08**	-0.41153708	-0.239845479	0.119155696
11:17:12	-0.410497497	-0.225111079	0.11929472	**11:17:16**	-0.409457913	-0.20415394	0.119433745
11:17:20	-0.40841833	-0.176974058	0.119572769	**11:17:24**	-0.407378746	-0.149794181	0.119711794
11:17:28	-0.406370748	-0.136235435	0.119850819	**11:17:32**	-0.40560522	-0.122821231	0.119989843
11:17:36	-0.404839692	-0.113130473	0.120128868	**11:17:40**	-0.404074164	-0.10716317	0.120267893
11:17:44	-0.403308636	-0.100415819	0.120406917	**11:17:48**	-0.402543109	-0.091328288	0.120545942
11:17:52	-0.401777581	-0.082240757	0.120684966	**11:17:56**	-0.401012053	-0.068645611	0.120823991
11:18:00	-0.400726134	-0.053833831	0.120313186	**11:18:04**	-0.401567528	-0.039694025	0.119459127
11:18:08	-0.402408923	-0.028657553	0.118605067	**11:18:12**	-0.403250317	-0.017621081	0.117751008
11:18:16	-0.404091712	-0.012367943	0.116896949	**11:18:20**	-0.404933106	-0.01289814	0.11604289
11:18:24	-0.405774501	-0.013428319	0.115188831	**11:18:28**	-0.406615895	-0.02077405	0.114334772
11:18:32	-0.40745729	-0.028119782	0.113480713	**11:18:36**	-0.408298684	-0.035020099	0.112626653
11:18:40	-0.409140079	-0.041474966	0.111772594	**11:18:44**	-0.409981473	-0.047929833	0.110918535
11:18:48	-0.410822868	-0.05245428	0.110064476	**11:18:52**	-0.411664262	-0.056978728	0.109210417
11:18:56	-0.412505657	-0.061503176	0.108356358	**11:19:00**	-0.413347051	-0.066027624	0.107502299
11:19:04	-0.412954446	-0.068702	0.106648239	**11:19:08**	-0.412561841	-0.068032863	0.10579418
11:19:12	-0.412169236	-0.067363727	0.104940121	**11:19:16**	-0.411776631	-0.063110935	0.104086062
11:19:20	-0.411384026	-0.055274469	0.103232003	**11:19:24**	-0.410991421	-0.047438003	0.102377944
11:19:28	-0.410598816	-0.036551871	0.101523885	**11:19:32**	-0.410206211	-0.025665757	0.100669825
11:19:36	-0.409813607	-0.025261527	0.099815766	**11:19:40**	-0.409421002	-0.035339219	0.098961707
11:19:44	-0.409028397	-0.04541691	0.098107648	**11:19:48**	-0.408635792	-0.049172161	0.097253589
11:19:52	-0.408243187	-0.052927413	0.09639953	**11:19:56**	-0.407850582	-0.050300286	0.095545471
11:20:00	-0.407457977	-0.045545676	0.094691411	**11:20:04**	-0.409131926	-0.042022926	0.093837352
11:20:08	-0.410805875	-0.037781077	0.092983293	**11:20:12**	-0.412479824	-0.033539211	0.092129234
11:20:16	-0.413756501	-0.034874534	0.091813444	**11:20:20**	-0.414868211	-0.041925518	0.091721171

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:20:24	-0.415979921	-0.048976503	0.091628898	**11:20:28**	-0.417091631	-0.055440222	0.091536625
11:20:32	-0.418203341	-0.06190394	0.091444352	**11:20:36**	-0.419315051	-0.073332165	0.091352079
11:20:40	-0.420426761	-0.089724914	0.091259806	**11:20:44**	-0.421538472	-0.106117654	0.091167533
11:20:48	-0.422650182	-0.114946965	0.091075261	**11:20:52**	-0.423761892	-0.123776276	0.090982988
11:20:56	-0.424873602	-0.134114503	0.090890715	**11:21:00**	-0.425985312	-0.145961646	0.090798442
11:21:04	-0.425924886	-0.157110106	0.090706169	**11:21:08**	-0.425864461	-0.157630976	0.090613896
11:21:12	-0.425804035	-0.158151836	0.090521623	**11:21:16**	-0.42574361	-0.162045361	0.09042935
11:21:20	-0.425683184	-0.169311541	0.090337077	**11:21:24**	-0.425622759	-0.176577721	0.090244804
11:21:28	-0.425562333	-0.179005053	0.090152531	**11:21:32**	-0.425501908	-0.181432377	0.090060258
11:21:36	-0.425441482	-0.180206128	0.089967985	**11:21:40**	-0.425381057	-0.175326292	0.089875712
11:21:44	-0.425320632	-0.170446461	0.089783439	**11:21:48**	-0.425260206	-0.174827928	0.089691166
11:21:52	-0.425199781	-0.179209396	0.089598893	**11:21:56**	-0.425139355	-0.186216087	0.08950662
11:22:00	-0.42507893	-0.195847997	0.089414347	**11:22:04**	-0.424580194	-0.205218637	0.089322074
11:22:08	-0.424081458	-0.220507221	0.089229801	**11:22:12**	-0.423609555	-0.2358118	0.089137528
11:22:16	-0.423157802	-0.249550882	0.089045256	**11:22:20**	-0.422706048	-0.261712457	0.088952983
11:22:24	-0.422254295	-0.273874032	0.08886071	**11:22:28**	-0.421802542	-0.274415454	0.088768437
11:22:32	-0.421350788	-0.274956876	0.088676164	**11:22:36**	-0.420899035	-0.277488462	0.088583891
11:22:40	-0.420447281	-0.282010213	0.088491618	**11:22:44**	-0.419995528	-0.286531963	0.088399345
11:22:48	-0.419543774	-0.287050114	0.088307072	**11:22:52**	-0.419092021	-0.287568264	0.088214799
11:22:56	-0.418640267	-0.284804528	0.088122526	**11:23:00**	-0.418188514	-0.278758899	0.088030253
11:23:04	-0.418178684	-0.272976693	0.08793798	**11:23:08**	-0.418168855	-0.267194489	0.087845707
11:23:12	-0.418159025	-0.261412285	0.087753434	**11:23:16**	-0.413242144	-0.253798078	0.0943098
11:23:20	-0.407240478	-0.246630263	0.102335958	**11:23:24**	-0.401238811	-0.239462448	0.110362116
11:23:28	-0.395237144	-0.232294632	0.118388274	**11:23:32**	-0.389235478	-0.214929492	0.126414433
11:23:36	-0.388404652	-0.198287716	0.12743454	**11:23:40**	-0.388202151	-0.174943794	0.127603321
11:23:44	-0.38799965	-0.151599873	0.127772102	**11:23:48**	-0.387797148	-0.137933109	0.127940883
11:23:52	-0.387594647	-0.124266345	0.128109664	**11:23:56**	-0.387392146	-0.108932718	0.128278445
11:24:00	-0.387189645	-0.091932221	0.128447225	**11:24:04**	-0.38672507	-0.074775506	0.128616006
11:24:08	-0.386260495	-0.059088412	0.128784787	**11:24:12**	-0.38579592	-0.043401335	0.128953568
11:24:16	-0.385331346	-0.034831455	0.129122349	**11:24:20**	-0.384866771	-0.033378808	0.12929113
11:24:24	-0.384402196	-0.031926161	0.129459911	**11:24:28**	-0.383937621	-0.023705961	0.129628692
11:24:32	-0.383473046	-0.01548578	0.129797473	**11:24:36**	-0.383008471	-0.008771619	0.129966254
11:24:40	-0.382543897	-0.003563513	0.130135035	**11:24:44**	-0.382079322	0.00164461	0.130303815
11:24:48	-0.381614747	0.009548704	0.130472596	**11:24:52**	-0.381150172	0.017452816	0.130641377
11:24:56	-0.380685597	0.028108698	0.130810158	**11:25:00**	-0.380221023	0.041516386	0.130978939
11:25:04	-0.380626094	0.054405673	0.13114772	**11:25:08**	-0.381031165	0.065399503	0.131316501
11:25:12	-0.381436236	0.076393332	0.131485282	**11:25:16**	-0.381841307	0.086643176	0.131654063
11:25:20	-0.382246378	0.096149105	0.131822844	**11:25:24**	-0.382651449	0.105654999	0.131991624
11:25:28	-0.38305652	0.11896531	0.132160405	**11:25:32**	-0.383461591	0.132275621	0.132329186
11:25:36	-0.383866662	0.142929399	0.132497967	**11:25:40**	-0.384271733	0.150926642	0.132666748
11:25:44	-0.384676804	0.158923886	0.132835529	**11:25:48**	-0.385081875	0.163152207	0.13300431
11:25:52	-0.385486946	0.167380527	0.133173091	**11:25:56**	-0.385892017	0.175227304	0.133341872
11:26:00	-0.386297088	0.186692537	0.133510653	**11:26:04**	-0.385510653	0.198868009	0.133679433
11:26:08	-0.384724219	0.206815979	0.133848214	**11:26:12**	-0.383937784	0.214763949	0.134016995
11:26:16	-0.38315135	0.218969677	0.134185776	**11:26:20**	-0.382364915	0.2194332	0.134354557
11:26:24	-0.381578481	0.219896723	0.134523338	**11:26:28**	-0.380792046	0.213615735	0.134692119
11:26:32	-0.380005612	0.207334747	0.1348609	**11:26:36**	-0.379219177	0.197095392	0.135029681
11:26:40	-0.378432743	0.182897706	0.135198462	**11:26:44**	-0.377646308	0.16870002	0.135367243
11:26:48	-0.376859874	0.162515423	0.135536023	**11:26:52**	-0.376073439	0.156330862	0.135704804
11:26:56	-0.375287005	0.143870173	0.135873585	**11:27:00**	-0.37450057	0.125133393	0.136042366
11:27:04	-0.373947529	0.10625749	0.136211147	**11:27:08**	-0.373394488	0.084653497	0.136379928
11:27:12	-0.372841448	0.063049505	0.136548709	**11:27:16**	-0.372288407	0.043476675	0.13671749
11:27:20	-0.371737735	0.025933578	0.136886271	**11:27:24**	-0.37118861	0.008389559	0.137055052
11:27:28	-0.370639486	0.004976472	0.137223832	**11:27:32**	-0.370090361	0.001563385	0.137392613
11:27:36	-0.369541236	0.00122297	0.137561394	**11:27:40**	-0.370452543	0.003084686	0.135751414
11:27:44	-0.37468812	0.002964874	0.12943733	**11:27:48**	-0.378923698	-0.009031405	0.123123246
11:27:52	-0.378699724	-0.018369415	0.122851476	**11:27:56**	-0.37765962	-0.029755326	0.123685492

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:28:00	-0.376619516	-0.043675586	0.124519508	**11:28:04**	-0.376379921	-0.058073016	0.125353524
11:28:08	-0.376140327	-0.074751452	0.12618754	**11:28:12**	-0.375900732	-0.091429888	0.127021556
11:28:16	-0.375661138	-0.107638359	0.127855572	**11:28:20**	-0.375421543	-0.123690162	0.128689587
11:28:24	-0.375181948	-0.138565925	0.129523603	**11:28:28**	-0.374942354	-0.149913516	0.130357619
11:28:32	-0.374702759	-0.161261107	0.131191635	**11:28:36**	-0.374463164	-0.171115694	0.132025651
11:28:40	-0.37422357	-0.179477278	0.132859667	**11:28:44**	-0.373983975	-0.187838862	0.133693683
11:28:48	-0.373744381	-0.186261526	0.134527699	**11:28:52**	-0.373504786	-0.18468419	0.135361715
11:28:56	-0.373265191	-0.183440839	0.136195731	**11:29:00**	-0.373025597	-0.182531478	0.137029747
11:29:04	-0.372202322	-0.181274194	0.137863763	**11:29:08**	-0.371379047	-0.176373689	0.138697779
11:29:12	-0.370555772	-0.171473185	0.139531795	**11:29:16**	-0.369732497	-0.166308839	0.140365811
11:29:20	-0.368909222	-0.160880651	0.141199827	**11:29:24**	-0.368085947	-0.155452464	0.142033843
11:29:28	-0.367262672	-0.165654146	0.142867859	**11:29:32**	-0.366439397	-0.175855828	0.143701875
11:29:36	-0.365616122	-0.188545583	0.144535891	**11:29:40**	-0.364792847	-0.203723413	0.145369907
11:29:44	-0.363969572	-0.218901243	0.146203923	**11:29:48**	-0.363146297	-0.226320141	0.147037938
11:29:52	-0.362323022	-0.233739039	0.147871954	**11:29:56**	-0.361499747	-0.237239652	0.14870597
11:30:00	0.139323528	0.263178017	0.649539986	**11:30:04**	0.140686201	0.263917214	0.650374002
11:30:08	0.142048873	0.267595637	0.651208018	**11:30:12**	-0.356588454	-0.228725941	0.152042034
11:30:16	-0.355225781	-0.234686343	0.15287605	**11:30:20**	-0.353863109	-0.250285571	0.153710066
11:30:24	-0.352500436	-0.265884797	0.154544082	**11:30:28**	-0.351137764	-0.286343441	0.155378098
11:30:32	-0.349775091	-0.306802086	0.156212114	**11:30:36**	-0.348412418	-0.321744667	0.15704613
11:30:40	-0.347049746	-0.3311712	0.157880146	**11:30:44**	-0.345687073	-0.340597725	0.158714162
11:30:48	-0.344324401	-0.339423368	0.159548178	**11:30:52**	-0.342961728	-0.338249011	0.160382194
11:30:56	-0.341599056	-0.334179123	0.16121621	**11:31:00**	-0.340236383	-0.327213686	0.162050226
11:31:04	-0.339488546	-0.320614743	0.162884242	**11:31:08**	-0.33874071	-0.303874847	0.163718258
11:31:12	-0.337992873	-0.287134959	0.164552274	**11:31:16**	-0.337245036	-0.272803055	0.165386289
11:31:20	-0.3364972	-0.260879147	0.166220305	**11:31:24**	-0.335749363	-0.248955235	0.167054321
11:31:28	-0.335150119	-0.259275874	0.167687007	**11:31:32**	-0.334635552	-0.269646991	0.168204963
11:31:36	-0.334120984	-0.278694327	0.168722919	**11:31:40**	-0.333606416	-0.286417895	0.169240875
11:31:44	-0.333091849	-0.294141454	0.169758831	**11:31:48**	-0.332577281	-0.301865014	0.170276787
11:31:52	-0.332062714	-0.309588582	0.170794743	**11:31:56**	-0.331548146	-0.319684875	0.171312699
11:32:00	-0.331033579	-0.332153892	0.171830655	**11:32:04**	-0.331535242	-0.345228669	0.172348611
11:32:08	-0.332036906	-0.356736644	0.172866568	**11:32:12**	-0.332538569	-0.368244619	0.173384524
11:32:16	-0.333040233	-0.377250311	0.17390248	**11:32:20**	-0.333541897	-0.383753721	0.174420436
11:32:24	-0.33404356	-0.39025713	0.174938392	**11:32:28**	-0.33453371	-0.398704792	0.175456348
11:32:32	-0.335017809	-0.407148864	0.175974304	**11:32:36**	-0.335501908	-0.417569633	0.17649226
11:32:40	-0.335986008	-0.429967115	0.177010216	**11:32:44**	-0.336470107	-0.442364598	0.177528172
11:32:48	-0.336954206	-0.452155785	0.178046128	**11:32:52**	-0.337438305	-0.461946955	0.178564084
11:32:56	-0.337922404	-0.470016103	0.17908204	**11:33:00**	-0.338406503	-0.476363213	0.179599997
11:33:04	-0.338243432	-0.482324553	0.180117953	**11:33:08**	-0.33808036	-0.481916946	0.180635909
11:33:12	-0.337917289	-0.481509339	0.181153865	**11:33:16**	-0.337754218	-0.477419074	0.181671821
11:33:20	-0.337591146	-0.472101232	0.182189777	**11:33:24**	-0.337428075	-0.466783408	0.182707733
11:33:28	-0.337265004	-0.453347613	0.183225689	**11:33:32**	-0.337101932	-0.439911799	0.183743645
11:33:36	-0.336938861	-0.430763408	0.184261601	**11:33:40**	-0.336775789	-0.434477248	0.184779557
11:33:44	-0.336612718	-0.438191087	0.185297513	**11:33:48**	-0.336449647	-0.453113068	0.18581547
11:33:52	-0.336286575	-0.468035049	0.186333426	**11:33:56**	-0.336123504	-0.475079842	0.186851382
11:34:00	-0.335960432	-0.474247445	0.187369338	**11:34:04**	-0.334295217	-0.472519644	0.187887294
11:34:08	-0.332630001	-0.465024496	0.18840525	**11:34:12**	-0.330964785	-0.457529348	0.188923206
11:34:16	-0.32929957	-0.448585898	0.189441162	**11:34:20**	-0.327634354	-0.438194127	0.189959118
11:34:24	-0.325969138	-0.427802355	0.190477074	**11:34:28**	-0.324303923	-0.434911126	0.19099503
11:34:32	-0.322638707	-0.442019878	0.191512986	**11:34:36**	-0.320973491	-0.448544136	0.192030942
11:34:40	-0.319308276	-0.454483882	0.192548899	**11:34:44**	-0.317936541	-0.460598568	0.192669213
11:34:48	-0.31707467	-0.458492037	0.192098705	**11:34:52**	-0.3162128	-0.456385488	0.191528196
11:34:56	-0.315350929	-0.450197144	0.190957688	**11:35:00**	-0.314489058	-0.439927004	0.19038718
11:35:04	-0.315705735	-0.430895853	0.189816671	**11:35:08**	-0.316922412	-0.430434822	0.189246163
11:35:12	-0.318139088	-0.429973791	0.188675655	**11:35:16**	-0.319355765	-0.436986352	0.188105146
11:35:20	-0.320572442	-0.451472488	0.187534638	**11:35:24**	-0.321789119	-0.465958623	0.18696413
11:35:28	-0.323005795	-0.481216511	0.186393621	**11:35:32**	-0.324222472	-0.496474381	0.185823113

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:35:36	-0.325439149	-0.508501136	0.185252605	**11:35:40**	-0.326655826	-0.519450817	0.184682096
11:35:44	-0.327872502	-0.530400499	0.184111588	**11:35:48**	-0.329089179	-0.537168298	0.18354108
11:35:52	-0.330305856	-0.543936097	0.182970571	**11:35:56**	-0.331522532	-0.547622999	0.182400063
11:36:00	-0.332739209	-0.548228969	0.181829555	**11:36:04**	-0.331522381	-0.547384364	0.181259046
11:36:08	-0.330305553	-0.555301808	0.180688538	**11:36:12**	-0.329088724	-0.563219252	0.18011803
11:36:16	-0.327871896	-0.565866051	0.179547521	**11:36:20**	-0.326655068	-0.563242205	0.178977013
11:36:24	-0.325438239	-0.560618358	0.178406505	**11:36:28**	-0.324221411	-0.564259767	0.177835996
11:36:32	-0.323004583	-0.567901176	0.177265488	**11:36:36**	-0.321787755	-0.569463227	0.17669498
11:36:40	-0.320570926	-0.568945919	0.176124471	**11:36:44**	-0.319354098	-0.571299956	0.175553963
11:36:48	-0.31813727	-0.582268061	0.174983455	**11:36:52**	-0.316920441	-0.593236166	0.174412946
11:36:56	-0.315703613	-0.604204271	0.173842438	**11:37:00**	-0.314486785	-0.615172377	0.17327193
11:37:04	-0.314827112	-0.627068678	0.172701421	**11:37:08**	-0.315167439	-0.640563625	0.172130913
11:37:12	-0.315507767	-0.654058572	0.171560405	**11:37:16**	-0.315848094	-0.661388422	0.170989896
11:37:20	-0.316188421	-0.662553244	0.170419388	**11:37:24**	-0.316528748	-0.663718066	0.16984888
11:37:28	-0.316869076	-0.673207357	0.169278371	**11:37:32**	-0.317209403	-0.682696648	0.168707863
11:37:36	-0.317552439	-0.689183543	0.168137355	**11:37:40**	-0.317896663	-0.692667134	0.167566846
11:37:44	-0.318240888	-0.696150726	0.166996338	**11:37:48**	-0.318585112	-0.681652992	0.16642583
11:37:52	-0.318929336	-0.667155223	0.165855321	**11:37:56**	-0.319273561	-0.654979407	0.165284813
11:38:00	-0.319688965	-0.645167903	0.164617862	**11:38:04**	-0.321070988	-0.63593262	0.163160372
11:38:08	-0.322453011	-0.626697302	0.161702882	**11:38:12**	-0.323835034	-0.617461984	0.160245393
11:38:16	-0.325217058	-0.608725783	0.158787903	**11:38:20**	-0.326599081	-0.600488664	0.157330413
11:38:24	-0.327981104	-0.592251509	0.155872924	**11:38:28**	-0.329363127	-0.584014389	0.154415434
11:38:32	-0.33074515	-0.57577727	0.152957945	**11:38:36**	-0.332127173	-0.572732133	0.151500455
11:38:40	-0.333509196	-0.57141767	0.150042965	**11:38:44**	-0.334891219	-0.570103206	0.148585476
11:38:48	-0.336273242	-0.563493404	0.147127986	**11:38:52**	-0.337655265	-0.556883567	0.145670496
11:38:56	-0.339037288	-0.556475352	0.144213007	**11:39:00**	-0.340419311	-0.562268688	0.142755517
11:39:04	-0.340536857	-0.567308324	0.141298027	**11:39:08**	-0.340654403	-0.577081578	0.139840538
11:39:12	-0.340771948	-0.586854832	0.138383048	**11:39:16**	-0.340889494	-0.588858374	0.136925558
11:39:20	-0.34100704	-0.583092204	0.135468069	**11:39:24**	-0.341124585	-0.57585707	0.134010579
11:39:28	-0.341242131	-0.564214975	0.13255309	**11:39:32**	-0.341359677	-0.552572881	0.1310956
11:39:36	-0.341477222	-0.539790363	0.12963811	**11:39:40**	-0.341594768	-0.525867494	0.128180621
11:39:44	-0.341712314	-0.511944625	0.126723131	**11:39:48**	-0.341829859	-0.503021169	0.125265641
11:39:52	-0.341947405	-0.494097678	0.123808152	**11:39:56**	-0.342064951	-0.482694714	0.122350662
11:40:00	-0.342182496	-0.468812224	0.120893172	**11:40:04**	-0.342681127	-0.455156911	0.119435683
11:40:08	-0.343179759	-0.434401491	0.117978193	**11:40:12**	-0.34367839	-0.413646071	0.116520704
11:40:16	-0.344177021	-0.391333396	0.115063214	**11:40:20**	-0.343337344	-0.366665724	0.115419018
11:40:24	-0.341654481	-0.341495422	0.116917269	**11:40:28**	-0.339971617	-0.32225505	0.118415519
11:40:32	-0.338288754	-0.303014669	0.11991377	**11:40:36**	-0.33660589	-0.284558093	0.12141202
11:40:40	-0.334923027	-0.266885309	0.122910271	**11:40:44**	-0.333240163	-0.24921253	0.124408522
11:40:48	-0.3315573	-0.220646761	0.125906772	**11:40:52**	-0.329874436	-0.192080993	0.127405023
11:40:56	-0.328191573	-0.167173645	0.128903274	**11:41:00**	-0.326508709	-0.145924715	0.130401524
11:41:04	-0.324369773	-0.124403933	0.131899775	**11:41:08**	-0.322230838	-0.1107349	0.133398026
11:41:12	-0.320091902	-0.097065862	0.134896276	**11:41:16**	-0.317952966	-0.080296636	0.136394527
11:41:20	-0.315814031	-0.060427202	0.137892778	**11:41:24**	-0.313675095	-0.040557777	0.139391028
11:41:28	-0.311536159	-0.022078627	0.140889279	**11:41:32**	-0.309397224	-0.003599486	0.142387529
11:41:36	-0.307258288	0.020559155	0.14388578	**11:41:40**	-0.305119352	0.050397278	0.145384031
11:41:44	-0.302980417	0.073556744	0.146882281	**11:41:48**	-0.301134192	0.076505756	0.147983934
11:41:52	-0.299654046	0.079236554	0.14858958	**11:41:56**	-0.298173901	0.090027712	0.149195226
11:42:00	-0.296693755	0.108879214	0.149800872	**11:42:04**	-0.297638256	0.126285421	0.150406518
11:42:08	-0.298582757	0.139066979	0.151012164	**11:42:12**	-0.299527258	0.151848501	0.15161781
11:42:16	-0.300471759	0.166093835	0.152223456	**11:42:20**	-0.30141626	0.181802944	0.152829102
11:42:24	-0.302360761	0.197512054	0.153434748	**11:42:28**	-0.303305262	0.206226063	0.154040394
11:42:32	-0.304249763	0.214940073	0.15464604	**11:42:36**	-0.305194264	0.223654082	0.155251686
11:42:40	-0.306138765	0.232368092	0.155857332	**11:42:44**	-0.307067618	0.241091429	0.156462978
11:42:48	-0.307990672	0.248085738	0.157068624	**11:42:52**	-0.308913726	0.255080011	0.15767427
11:42:56	-0.309836779	0.253562718	0.158279916	**11:43:00**	-0.310759833	0.243533788	0.158885562
11:43:04	-0.310897104	0.233973286	0.159491208	**11:43:08**	-0.311034375	0.214414419	0.160096854

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:43:12	-0.311171646	0.194855552	0.1607025	**11:43:16**	-0.311308917	0.178006903	0.161308146
11:43:20	-0.311446188	0.163868544	0.161913792	**11:43:24**	-0.31158346	0.149730149	0.162519438
11:43:28	-0.311720731	0.133252641	0.163125084	**11:43:32**	-0.311858002	0.116775132	0.16373073
11:43:36	-0.311995273	0.104695986	0.164336376	**11:43:40**	-0.312132544	0.105811946	0.164942023
11:43:44	-0.312269815	0.106927906	0.165547669	**11:43:48**	-0.312306829	0.105926865	0.166289154
11:43:52	-0.31087999	0.105798422	0.169014036	**11:43:56**	-0.309453152	0.107020114	0.171738918
11:44:00	-0.308026313	0.109591977	0.1744638	**11:44:04**	-0.30554519	0.112049025	0.177188682
11:44:08	-0.303064067	0.112276354	0.179913564	**11:44:12**	-0.300582943	0.112503684	0.182638446
11:44:16	-0.29810182	0.115428228	0.185363328	**11:44:20**	-0.295620697	0.121049986	0.18808821
11:44:24	-0.293139574	0.126671745	0.190813092	**11:44:28**	-0.290658451	0.12650182	0.193537974
11:44:32	-0.288177327	0.126331895	0.196262856	**11:44:36**	-0.286423673	0.120308984	0.198002079
11:44:40	-0.285244841	0.108524059	0.198962468	**11:44:44**	-0.284066008	0.096739116	0.199922856
11:44:48	-0.282887176	0.077559847	0.200883244	**11:44:52**	-0.281708343	0.058380577	0.201843633
11:44:56	-0.280529511	0.041568206	0.202804021	**11:45:00**	-0.779350679	-0.472877267	-0.29623559
11:45:04	-0.778271181	-0.48738197	-0.295275202	**11:45:08**	-0.777191683	-0.500459741	-0.294314814
11:45:12	-0.276112186	-0.01353753	0.206645575	**11:45:16**	-0.275032688	-0.023268192	0.207605963
11:45:20	-0.27395319	-0.029651752	0.208566351	**11:45:24**	-0.272873693	-0.036035313	0.20952674
11:45:28	-0.271794195	-0.048783895	0.210487128	**11:45:32**	-0.270714697	-0.061532477	0.211447516
11:45:36	-0.2696352	-0.07558871	0.212407905	**11:45:40**	-0.268555702	-0.090952612	0.213368293
11:45:44	-0.267476204	-0.106316514	0.214328681	**11:45:48**	-0.266396707	-0.128091937	0.21528907
11:45:52	-0.265317209	-0.149867359	0.216249458	**11:45:56**	-0.264237711	-0.172175825	0.217209846
11:46:00	-0.263158213	-0.195017334	0.218170235	**11:46:04**	-0.261886307	-0.217744152	0.219130623
11:46:08	-0.260614401	-0.232074141	0.220091012	**11:46:12**	-0.259342495	-0.246404125	0.2210514
11:46:16	-0.258070589	-0.254169422	0.222011788	**11:46:20**	-0.256798683	-0.25537003	0.222972177
11:46:24	-0.255526777	-0.256570638	0.223932565	**11:46:28**	-0.254254871	-0.266153547	0.224892953
11:46:32	-0.252982965	-0.275736448	0.225853342	**11:46:36**	-0.252723143	-0.288487131	0.225442442
11:46:40	-0.252463639	-0.302092832	0.225031111	**11:46:44**	-0.252204136	-0.317939382	0.22461978
11:46:48	-0.251944632	-0.340508486	0.224208449	**11:46:52**	-0.251685128	-0.36307759	0.223797117
11:46:56	-0.251425625	-0.37328804	0.223385786	**11:47:00**	-0.251166121	-0.371139817	0.222974455
11:47:04	-0.251461311	-0.369322255	0.222563124	**11:47:08**	-0.2517565	-0.369513633	0.222151793
11:47:12	-0.25205169	-0.36970501	0.221740461	**11:47:16**	-0.252346879	-0.367949394	0.22132913
11:47:20	-0.252642069	-0.364246767	0.220917799	**11:47:24**	-0.252937259	-0.360544158	0.220506468
11:47:28	-0.253232448	-0.364018434	0.220095137	**11:47:32**	-0.253527638	-0.367492711	0.219683805
11:47:36	-0.253822827	-0.380426586	0.219272474	**11:47:40**	-0.254118017	-0.402820057	0.218861143
11:47:44	-0.254413206	-0.425213529	0.218449812	**11:47:48**	-0.254708396	-0.454838834	0.218038481
11:47:52	-0.255036943	-0.484484076	0.217627149	**11:47:56**	-0.255375037	-0.508173387	0.217215818
11:48:00	-0.25571313	-0.525901148	0.216804487	**11:48:04**	-0.256276716	-0.543763322	0.216393156
11:48:08	-0.256840303	-0.561625496	0.215981825	**11:48:12**	-0.257403889	-0.57948767	0.215570493
11:48:16	-0.257967475	-0.5951731	0.215159162	**11:48:20**	-0.258531061	-0.608681785	0.214747831
11:48:24	-0.259094648	-0.62219047	0.2143365	**11:48:28**	-0.259658234	-0.625662133	0.213925168
11:48:32	-0.26022182	-0.629133797	0.213513837	**11:48:36**	-0.260785406	-0.632605425	0.213102506
11:48:40	-0.261348993	-0.636077089	0.212691175	**11:48:44**	-0.261912579	-0.639548753	0.212279844
11:48:48	-0.262476165	-0.635126849	0.211868512	**11:48:52**	-0.263039752	-0.630704945	0.211457181
11:48:56	-0.263806257	-0.62419183	0.210770912	**11:49:00**	-0.265115329	-0.615789928	0.20934951
11:49:04	-0.265516802	-0.606847092	0.207928108	**11:49:08**	-0.265918275	-0.597904184	0.206506707
11:49:12	-0.266319747	-0.588961347	0.205085305	**11:49:16**	-0.26672122	-0.578377407	0.203663903
11:49:20	-0.267122693	-0.5661524	0.202242501	**11:49:24**	-0.267524165	-0.553927392	0.200821099
11:49:28	-0.267925638	-0.530722235	0.199399697	**11:49:32**	-0.268327111	-0.507517078	0.197978295
11:49:36	-0.268728583	-0.483091202	0.196556893	**11:49:40**	-0.269130056	-0.457444607	0.195135491
11:49:44	-0.269531529	-0.431797993	0.193714089	**11:49:48**	-0.269933001	-0.416769609	0.192292688
11:49:52	-0.270334474	-0.401741243	0.190871286	**11:49:56**	-0.270735947	-0.384190999	0.189449884
11:50:00	-0.271137419	-0.364118914	0.188028482	**11:50:04**	-0.273516451	-0.345225621	0.18660708
11:50:08	-0.275895483	-0.327658712	0.185185678	**11:50:12**	-0.278274515	-0.310091812	0.183764276
11:50:16	-0.280653547	-0.301025473	0.182342874	**11:50:20**	-0.283032579	-0.300459695	0.180921472
11:50:24	-0.285411611	-0.299893926	0.17950007	**11:50:28**	-0.287790644	-0.294137098	0.178078669
11:50:32	-0.290169676	-0.288380279	0.176657267	**11:50:36**	-0.292548708	-0.284458997	0.175235865
11:50:40	-0.29492774	-0.282373271	0.173814463	**11:50:44**	-0.297306772	-0.280287537	0.172393061

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:50:48	-0.299685804	-0.279482175	0.170971659	**11:50:52**	-0.300129764	-0.277523347	0.172172116
11:50:56	-0.30046132	-0.272938263	0.17352487	**11:51:00**	-0.300792876	-0.265793915	0.174877625
11:51:04	-0.300299227	-0.258157685	0.176230379	**11:51:08**	-0.299805578	-0.249905552	0.177583133
11:51:12	-0.299311929	-0.241653424	0.178935888	**11:51:16**	-0.29881828	-0.233994331	0.180288642
11:51:20	-0.298324631	-0.226928272	0.181641397	**11:51:24**	-0.297830982	-0.219862213	0.182994151
11:51:28	-0.297337333	-0.216819819	0.184346906	**11:51:32**	-0.296843684	-0.213777425	0.18569966
11:51:36	-0.296350035	-0.2110764	0.187052415	**11:51:40**	-0.295856386	-0.208716746	0.188405169
11:51:44	-0.295362737	-0.206357092	0.189757923	**11:51:48**	-0.294869088	-0.195005934	0.191110678
11:51:52	-0.294375439	-0.183654777	0.192463432	**11:51:56**	-0.29388179	-0.165939331	0.193816187
11:52:00	-0.293388141	-0.141859599	0.195168941	**11:52:04**	-0.292276326	-0.117411388	0.196521696
11:52:08	-0.291164512	-0.085579079	0.19787445	**11:52:12**	-0.290052698	-0.053746779	0.199227205
11:52:16	-0.288940884	-0.021308356	0.200579959	**11:52:20**	-0.28782907	0.011736198	0.201932714
11:52:24	-0.286717255	0.044780735	0.203285468	**11:52:28**	-0.285605441	0.071848924	0.204638222
11:52:32	-0.28473609	0.098772567	0.20566246	**11:52:36**	-0.284022254	0.117487509	0.206475988
11:52:40	-0.283308418	0.128086417	0.207289516	**11:52:44**	-0.282594581	0.138685325	0.208103044
11:52:48	-0.281880745	0.154731405	0.208916572	**11:52:52**	-0.281166909	0.170777521	0.2097301
11:52:56	-0.280453073	0.182521701	0.210543628	**11:53:00**	-0.279716978	0.189977285	0.211357156
11:53:04	-0.279783723	0.196954272	0.212170684	**11:53:08**	-0.279850469	0.195277149	0.212984212
11:53:12	-0.279917214	0.193600062	0.21379774	**11:53:16**	-0.279983959	0.192827553	0.214611268
11:53:20	-0.280050704	0.192959659	0.215424796	**11:53:24**	-0.28011745	0.193091764	0.216238324
11:53:28	-0.280184195	0.192637421	0.217051852	**11:53:32**	-0.28025094	0.192183114	0.21786538
11:53:36	-0.280317685	0.192291024	0.218678908	**11:53:40**	-0.280384431	0.194085763	0.219492436
11:53:44	-0.280451176	0.195880503	0.220305964	**11:53:48**	-0.280517921	0.196858279	0.221119492
11:53:52	-0.280584666	0.197836091	0.22193302	**11:53:56**	-0.280651412	0.193042968	0.222746548
11:54:00	-0.280718157	0.182478911	0.223560076	**11:54:04**	-0.280237369	0.17224123	0.224373604
11:54:08	-0.279756581	0.164876953	0.225187132	**11:54:12**	-0.279275793	0.157512677	0.22600066
11:54:16	-0.278795005	0.15310363	0.226814188	**11:54:20**	-0.278314217	0.151649883	0.227627716
11:54:24	-0.277833429	0.150196137	0.228441244	**11:54:28**	-0.277352641	0.150000664	0.229254772
11:54:32	-0.276871853	0.149805156	0.2300683	**11:54:36**	-0.276391065	0.15207887	0.230881828
11:54:40	-0.275910277	0.156821807	0.231695356	**11:54:44**	-0.275429489	0.161564709	0.232508884
11:54:48	-0.274948701	0.161779103	0.233322412	**11:54:52**	-0.274467913	0.161993498	0.23413594
11:54:56	-0.273987126	0.160067494	0.234949468	**11:55:00**	-0.273506338	0.156001093	0.235762996
11:55:04	-0.272807406	0.152064723	0.236576524	**11:55:08**	-0.272108475	0.145698853	0.237390052
11:55:12	-0.271409544	0.139332983	0.23820358	**11:55:16**	-0.270710613	0.122810126	0.239017108
11:55:20	-0.270011682	0.096130336	0.239830636	**11:55:24**	-0.26931275	0.069450529	0.240644164
11:55:28	-0.269784266	0.042655612	0.239871835	**11:55:32**	-0.270292569	0.015838749	0.239049664
11:55:36	-0.270800871	-0.008609955	0.238227493	**11:55:40**	-0.271309174	-0.030690526	0.237405321
11:55:44	-0.271817476	-0.052771088	0.23658315	**11:55:48**	-0.272325778	-0.062799081	0.235760979
11:55:52	-0.272834081	-0.072827075	0.234938808	**11:55:56**	-0.273342383	-0.085094495	0.234116636
11:56:00	-0.273850686	-0.099601343	0.233294465	**11:56:04**	-0.274854343	-0.114403464	0.232472294
11:56:08	-0.275857999	-0.125694116	0.231650123	**11:56:12**	-0.276861656	-0.136984766	0.230827952
11:56:16	-0.277865313	-0.145556839	0.23000578	**11:56:20**	-0.278868969	-0.15141033	0.229183609
11:56:24	-0.279872626	-0.157263822	0.228361438	**11:56:28**	-0.280876283	-0.158140528	0.227539267
11:56:32	-0.28187994	-0.159017235	0.226717095	**11:56:36**	-0.282883596	-0.149400788	0.225894924
11:56:40	-0.283887253	-0.129291189	0.225072753	**11:56:44**	-0.28489091	-0.109181588	0.224250582
11:56:48	-0.285894566	-0.102331397	0.223428411	**11:56:52**	-0.286898223	-0.095481206	0.222606239
11:56:56	-0.28790188	-0.087741314	0.221784068	**11:57:00**	-0.288905537	-0.079111712	0.220961897
11:57:04	-0.289524964	-0.070253086	0.220139726	**11:57:08**	-0.290144391	-0.06139446	0.219317554
11:57:12	-0.290763818	-0.052535826	0.218495383	**11:57:16**	-0.291383245	-0.039789599	0.217673212
11:57:20	-0.292002673	-0.023155771	0.216851041	**11:57:24**	-0.2926221	-0.006521944	0.21602887
11:57:28	-0.293241527	0.002699953	0.215206698	**11:57:32**	-0.293860954	0.011921867	0.214384527
11:57:36	-0.294480381	0.011598931	0.213562356	**11:57:40**	-0.295099808	0.00173118	0.212740185
11:57:44	-0.295719236	-0.008136571	0.211918013	**11:57:48**	-0.296338663	-0.021083211	0.211095842
11:57:52	-0.29695809	-0.034029842	0.210273671	**11:57:56**	-0.297577517	-0.046180171	0.2094515
11:58:00	-0.298196944	-0.057534188	0.208629329	**11:58:04**	-0.298123337	-0.068475098	0.207807157
11:58:08	-0.298054696	-0.078209067	0.206984986	**11:58:12**	-0.294578991	-0.085912139	0.210780305
11:58:16	-0.288658274	-0.091612578	0.217888407	**11:58:20**	-0.282737557	-0.096767818	0.22499651

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
11:58:24	-0.27681684	-0.101923058	0.232104612	**11:58:28**	-0.270896123	-0.110299661	0.239212715
11:58:32	-0.264975406	-0.118676263	0.246320817	**11:58:36**	-0.259644804	-0.120505494	0.252629363
11:58:40	-0.259363031	-0.118445124	0.252097175	**11:58:44**	-0.259081257	-0.116384754	0.251564988
11:58:48	-0.258799484	-0.128871261	0.2510328	**11:58:52**	-0.25851771	-0.141357769	0.250500613
11:58:56	-0.258235937	-0.15266649	0.249968425	**11:59:00**	-0.257954163	-0.162797422	0.249436237
11:59:04	-0.258968931	-0.173701204	0.24890405	**11:59:08**	-0.259983698	-0.169612672	0.248371862
11:59:12	-0.260998466	-0.165524141	0.247839675	**11:59:16**	-0.262013233	-0.163566678	0.247307487
11:59:20	-0.263028	-0.163740284	0.246775299	**11:59:24**	-0.264042768	-0.163913889	0.246243112
11:59:28	-0.265057535	-0.159495848	0.245710924	**11:59:32**	-0.266072303	-0.155077807	0.245178736
11:59:36	-0.26708707	-0.143556089	0.244646549	**11:59:40**	-0.268101838	-0.124930694	0.244114361
11:59:44	-0.269116605	-0.106305299	0.243582174	**11:59:48**	-0.270131372	-0.088359143	0.243049986
11:59:52	-0.27114614	-0.070412986	0.242517798	**11:59:56**	-0.272160907	-0.053213565	0.241985611
12:00:00	0.226824325	-0.076849971	0.741453423	**12:00:04**	0.228009064	-0.084848276	0.740921236
12:00:08	0.229193803	-0.080347824	0.740389048	**12:00:12**	-0.269621459	-0.575847372	0.23985686
12:00:16	-0.26843672	-0.571346912	0.239324673	**12:00:20**	-0.267251981	-0.56684646	0.238792485
12:00:24	-0.266067243	-0.562346008	0.238260297	**12:00:28**	-0.264882504	-0.56847178	0.23772811
12:00:32	-0.263697765	-0.574597542	0.237195922	**12:00:36**	-0.262513026	-0.088809034	0.236663735
12:00:40	-0.261328288	-0.105715763	0.236131547	**12:00:44**	-0.260143549	-0.122622495	0.235599359
12:00:48	-0.25895881	-0.135214385	0.235067172	**12:00:52**	-0.257774072	-0.147806277	0.234534984
12:00:56	-0.256589333	-0.155937399	0.234002797	**12:01:00**	-0.755404594	-0.159607753	-0.266529391
12:01:04	-0.75601868	-0.164350358	-0.267061579	**12:01:08**	-0.756632766	-0.156338361	-0.267593766
12:01:12	-0.757246852	-0.148326364	-0.268125954	**12:01:16**	-0.757860938	-0.144088898	-0.268658142
12:01:20	-0.758475024	-0.143625966	-0.269190329	**12:01:24**	-0.75908911	-0.143163032	-0.269722517
12:01:28	-0.759703196	-0.150344459	-0.270254704	**12:01:32**	-0.760317282	-0.157525886	-0.270786892
12:01:36	-0.260931368	-0.165633077	0.22868092	**12:01:40**	-0.261545454	-0.174048857	0.228148733
12:01:44	-0.26215954	-0.182464637	0.227616545	**12:01:48**	-0.262773626	-0.195892888	0.227084358
12:01:52	-0.263387712	-0.209321139	0.22655217	**12:01:56**	-0.262613896	-0.217746822	0.227900472
12:02:00	-0.261579714	-0.224625557	0.229601547	**12:02:04**	-0.26100623	-0.231778902	0.231302623
12:02:08	-0.260432746	-0.236477933	0.233003699	**12:02:12**	-0.259859262	-0.241176965	0.234704774
12:02:16	-0.259285778	-0.254755834	0.23640585	**12:02:20**	-0.258712294	-0.277214549	0.238106925
12:02:24	-0.25813881	-0.299673255	0.239808001	**12:02:28**	-0.257565326	-0.324095255	0.241509077
12:02:32	-0.256991841	-0.348517263	0.243210152	**12:02:36**	-0.256418357	-0.374453285	0.244911228
12:02:40	-0.255844873	-0.401903322	0.246612303	**12:02:44**	-0.255271389	-0.429104334	0.248313379
12:02:48	-0.254697905	-0.455558233	0.250014455	**12:02:52**	-0.254124421	-0.482012132	0.25171553
12:02:56	-0.253550937	-0.51053164	0.253416606	**12:03:00**	-0.252977453	-0.541116756	0.255117681
12:03:04	-0.251111642	-0.570931536	0.256818757	**12:03:08**	-0.249245832	-0.578295215	0.258519833
12:03:12	-0.247380021	-0.585658894	0.260220908	**12:03:16**	-0.245531551	-0.586085027	0.261921984
12:03:20	-0.243685249	-0.5795645	0.263623059	**12:03:24**	-0.241838948	-0.573043973	0.265324135
12:03:28	-0.239992646	-0.558725701	0.267025211	**12:03:32**	-0.238146345	-0.536609648	0.268726286
12:03:36	-0.236300043	-0.508103313	0.270427362	**12:03:40**	-0.234453742	-0.473206729	0.272128437
12:03:44	-0.23260744	-0.43831011	0.273829513	**12:03:48**	-0.231048419	-0.396922936	0.275141348
12:03:52	-0.230057416	-0.355874366	0.275683567	**12:03:56**	-0.229066413	-0.315191624	0.276225786
12:04:00	-0.22807541	-0.274874729	0.276768005	**12:04:04**	-0.227498743	-0.234804814	0.277310224
12:04:08	-0.226922077	-0.210909642	0.277852442	**12:04:12**	-0.226345411	-0.187014479	0.278394661
12:04:16	-0.225768745	-0.171982771	0.27893688	**12:04:20**	-0.225192079	-0.165814525	0.279479099
12:04:24	-0.224615413	-0.159646279	0.280021318	**12:04:28**	-0.224038747	-0.152247297	0.280563537
12:04:32	-0.223462081	-0.144848317	0.281105756	**12:04:36**	-0.222885415	-0.133730222	0.281647975
12:04:40	-0.222308748	-0.118893014	0.282190194	**12:04:44**	-0.221732082	-0.104055806	0.282732413
12:04:48	-0.221155416	-0.097591361	0.283274632	**12:04:52**	-0.22057875	-0.091126913	0.283816851
12:04:56	-0.220002084	-0.083018873	0.28435907	**12:05:00**	-0.219425418	-0.073267242	0.284901288
12:05:04	-0.221458272	-0.065071102	0.285443507	**12:05:08**	-0.223491126	-0.048688054	0.285985726
12:05:12	-0.22552398	-0.032305015	0.286527945	**12:05:16**	-0.227556835	-0.021115176	0.287070164
12:05:20	-0.229589689	-0.011656409	0.287612383	**12:05:24**	-0.231622543	-0.002197642	0.288154602
12:05:28	-0.233655397	0.011033654	0.288696821	**12:05:32**	-0.235688251	0.024264924	0.28923904
12:05:36	-0.237721105	0.034824721	0.289781259	**12:05:40**	-0.239753959	0.042713025	0.290323478
12:05:44	-0.241786814	0.050601312	0.290865697	**12:05:48**	-0.243819668	0.055149125	0.291407916
12:05:52	-0.245852522	0.059696937	0.291950134	**12:05:56**	-0.247885376	0.063353175	0.292492353

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:06:00	-0.24991823	0.066712209	0.293034572	**12:06:04**	-0.248611145	0.072062129	0.293576791
12:06:08	-0.247304059	0.080425191	0.29411901	**12:06:12**	-0.245996974	0.088788271	0.294661229
12:06:16	-0.244689889	0.100721684	0.295203448	**12:06:20**	-0.243382804	0.116225464	0.295745667
12:06:24	-0.242075718	0.131729226	0.296287886	**12:06:28**	-0.240768633	0.149406535	0.296830105
12:06:32	-0.239461548	0.167083844	0.297372324	**12:06:36**	-0.238154462	0.177287436	0.297914543
12:06:40	-0.236847377	0.18001724	0.298456762	**12:06:44**	-0.235540292	0.18274708	0.29899898
12:06:48	-0.234233206	0.173845516	0.299541199	**12:06:52**	-0.232926121	0.164943917	0.300083418
12:06:56	-0.231619036	0.151106768	0.300625637	**12:07:00**	-0.23031195	0.132334052	0.301167856
12:07:04	-0.229216598	0.113435126	0.301710075	**12:07:08**	-0.228128992	0.10182941	0.302241799
12:07:12	-0.2322116	0.087141828	0.295768322	**12:07:16**	-0.236294208	0.074148146	0.289294844
12:07:20	-0.240376816	0.062848363	0.282821367	**12:07:24**	-0.244459424	0.051548581	0.276347889
12:07:28	-0.248542032	0.037533801	0.269874411	**12:07:32**	-0.248586502	0.025926075	0.268872268
12:07:36	-0.248180135	0.009437277	0.26848097	**12:07:40**	-0.247773769	-0.012201358	0.268089672
12:07:44	-0.247367402	-0.033839985	0.267698374	**12:07:48**	-0.246961035	-0.05681496	0.267307076
12:07:52	-0.246554669	-0.079789932	0.266915778	**12:07:56**	-0.246148302	-0.104576637	0.26652448
12:08:00	-0.245741936	-0.131175073	0.266133182	**12:08:04**	-0.247367792	-0.158984885	0.265741884
12:08:08	-0.248993648	-0.188244529	0.265350587	**12:08:12**	-0.250619504	-0.21750417	0.264959289
12:08:16	-0.25224536	-0.239209815	0.264567991	**12:08:20**	-0.253871217	-0.258397455	0.264176693
12:08:24	-0.255491603	-0.277581835	0.263785395	**12:08:28**	-0.257111602	-0.288329074	0.263394097
12:08:32	-0.2587316	-0.299076321	0.263002799	**12:08:36**	-0.260351598	-0.310263867	0.262611501
12:08:40	-0.261971597	-0.321891702	0.262220203	**12:08:44**	-0.263591595	-0.333519537	0.261828905
12:08:48	-0.265211594	-0.364209608	0.261437607	**12:08:52**	-0.266831592	-0.394899697	0.261046309
12:08:56	-0.26845159	-0.408275561	0.260655011	**12:09:00**	-0.270071589	-0.415880046	0.260263714
12:09:04	-0.270701046	-0.422894067	0.259872416	**12:09:08**	-0.271330503	-0.45076511	0.259481118
12:09:12	-0.27195996	-0.478636152	0.25908982	**12:09:16**	-0.272589417	-0.49886363	0.258698522
12:09:20	-0.273218874	-0.511447525	0.258307224	**12:09:24**	-0.273848331	-0.524031419	0.257915926
12:09:28	-0.274477788	-0.536615314	0.257524628	**12:09:32**	-0.275107245	-0.549199209	0.25713333
12:09:36	-0.275736702	-0.554116462	0.256742032	**12:09:40**	-0.276366159	-0.551367109	0.256350734
12:09:44	-0.276995616	-0.548617756	0.255959436	**12:09:48**	-0.277625073	-0.534215824	0.255568138
12:09:52	-0.278088077	-0.519714637	0.25540237	**12:09:56**	-0.277766214	-0.510975399	0.25630003
12:10:00	-0.27744435	-0.504312713	0.257197691	**12:10:04**	-0.276277726	-0.497146478	0.258095352
12:10:08	-0.275111102	-0.482331616	0.258993012	**12:10:12**	-0.273944479	-0.467516753	0.259890673
12:10:16	-0.272777855	-0.451603321	0.260788334	**12:10:20**	-0.271611231	-0.434591302	0.261685995
12:10:24	-0.270444607	-0.417579265	0.262583655	**12:10:28**	-0.269277984	-0.402886694	0.263481316
12:10:32	-0.26811136	-0.388194106	0.264378977	**12:10:36**	-0.266944736	-0.371193616	0.265276637
12:10:40	-0.265778112	-0.351885207	0.266174298	**12:10:44**	-0.264611488	-0.332576799	0.267071959
12:10:48	-0.263444865	-0.305941196	0.26796962	**12:10:52**	-0.262278241	-0.279305585	0.26886728
12:10:56	-0.261111617	-0.253132629	0.269764941	**12:11:00**	-0.259944993	-0.227113892	0.270662602
12:11:04	-0.260280392	-0.201990483	0.271560262	**12:11:08**	-0.26061579	-0.174204443	0.272457923
12:11:12	-0.260951189	-0.146418402	0.273355584	**12:11:16**	-0.261286588	-0.134382207	0.274253244
12:11:20	-0.261621986	-0.127595959	0.275150905	**12:11:24**	-0.261957385	-0.120809711	0.276048566
12:11:28	-0.262292783	-0.107709173	0.276946227	**12:11:32**	-0.262628182	-0.094608635	0.277843887
12:11:36	-0.26296358	-0.077331732	0.278741548	**12:11:40**	-0.263298979	-0.055878466	0.279639209
12:11:44	-0.263634377	-0.0344252	0.280536869	**12:11:48**	-0.263969776	-0.008344487	0.28143453
12:11:52	-0.266334594	0.01652652	0.2795825	**12:11:56**	-0.269907459	0.03721262	0.276093668
12:12:00	-0.273480324	0.054433909	0.272604836	**12:12:04**	-0.276613596	0.071917234	0.269116004
12:12:08	-0.279746868	0.085729926	0.265627172	**12:12:12**	-0.282880141	0.099542619	0.26213834
12:12:16	-0.286013413	0.108758126	0.258649508	**12:12:20**	-0.289146685	0.113376413	0.255160676
12:12:24	-0.292279957	0.117994718	0.251671844	**12:12:28**	-0.295413229	0.127198376	0.248183012
12:12:32	-0.29554916	0.138188667	0.248755322	**12:12:36**	-0.294759345	0.149730817	0.250581941
12:12:40	-0.29396953	0.161272932	0.252408559	**12:12:44**	-0.293179714	0.171302986	0.254235178
12:12:48	-0.292389899	0.176796788	0.256061796	**12:12:52**	-0.291600084	0.182290554	0.257888415
12:12:56	-0.290810269	0.187071067	0.259715033	**12:13:00**	-0.290020453	0.191138328	0.261541652
12:13:04	-0.289778646	0.19487893	0.263368271	**12:13:08**	-0.289536838	0.198619532	0.265194889
12:13:12	-0.28929503	0.202360134	0.267021508	**12:13:16**	-0.289053222	0.212508002	0.268848126
12:13:20	-0.288811415	0.229063136	0.270674745	**12:13:24**	-0.288569607	0.245618306	0.272501363
12:13:28	-0.288327799	0.260831388	0.274327982	**12:13:32**	-0.288074611	0.276051219	0.2761546

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:13:36	-0.287821097	0.28368202	0.277981219	**12:13:40**	-0.287567584	0.283723563	0.279807837
12:13:44	-0.287314071	0.283765105	0.281634456	**12:13:48**	-0.287060557	0.270976518	0.283461075
12:13:52	-0.286807044	0.258187931	0.285287693	**12:13:56**	-0.28655353	0.242444256	0.287114312
12:14:00	-0.286300017	0.223745459	0.28894093	**12:14:04**	-0.283437842	0.206601645	0.290767549
12:14:08	-0.280575666	0.191137377	0.292594167	**12:14:12**	-0.277713491	0.175673073	0.294420786
12:14:16	-0.274851316	0.169322168	0.296247404	**12:14:20**	-0.27198914	0.172084662	0.298074023
12:14:24	-0.269126965	0.174847121	0.299900641	**12:14:28**	-0.26626479	0.165623309	0.30172726
12:14:32	-0.263402614	0.156399496	0.303553878	**12:14:36**	-0.260540439	0.152428458	0.305380497
12:14:40	-0.257678264	0.153710157	0.307207116	**12:14:44**	-0.254816088	0.154991857	0.309033734
12:14:48	-0.251953913	0.157736906	0.310860353	**12:14:52**	-0.249091738	0.160481991	0.312686971
12:14:56	-0.246229563	0.161649996	0.31451359	**12:15:00**	-0.743367387	-0.338759006	-0.183659792
12:15:04	-0.742363104	-0.340275506	-0.181833173	**12:15:08**	-0.741532177	-0.350315062	-0.180241437
12:15:12	-0.241032027	0.139448228	0.320902125	**12:15:16**	-0.240531877	0.129211501	0.322045687
12:15:20	-0.240031726	0.118974791	0.323189248	**12:15:24**	-0.239531576	0.108738063	0.32433281
12:15:28	-0.239031426	0.096145985	0.325476372	**12:15:32**	-0.238531275	0.083553907	0.326619934
12:15:36	-0.238031125	0.07124395	0.327763495	**12:15:40**	-0.237530975	0.059216132	0.328907057
12:15:44	-0.237030824	0.047188314	0.330050619	**12:15:48**	-0.236530674	0.020105354	0.331194181
12:15:52	-0.236030524	-0.006977587	0.332337742	**12:15:56**	-0.235530373	-0.032628978	0.333481304
12:16:00	-0.235030223	-0.057803182	0.334624866	**12:16:04**	-0.235949623	-0.083823562	0.335768428
12:16:08	-0.236869023	-0.107779321	0.336911989	**12:16:12**	-0.237788424	-0.13173508	0.338055551
12:16:16	-0.238707824	-0.151624171	0.339199113	**12:16:20**	-0.239627224	-0.167446597	0.340342675
12:16:24	-0.240546625	-0.183269021	0.341486236	**12:16:28**	-0.241466025	-0.184401893	0.342629798
12:16:32	-0.242385425	-0.185534761	0.34377336	**12:16:36**	-0.243304825	-0.19128852	0.344916922
12:16:40	-0.244224226	-0.201663172	0.346060483	**12:16:44**	-0.245143626	-0.212037824	0.347204045
12:16:48	-0.246063026	-0.22832162	0.348347607	**12:16:52**	-0.246982426	-0.244605403	0.349491169
12:16:56	-0.247901827	-0.258372691	0.35063473	**12:17:00**	-0.248821227	-0.269623467	0.351778292
12:17:04	-0.247490803	-0.279533158	0.352921854	**12:17:08**	-0.24616038	-0.298632796	0.354065416
12:17:12	-0.244829956	-0.317732434	0.355208977	**12:17:16**	-0.243499532	-0.328959981	0.356352539
12:17:20	-0.242169109	-0.332315421	0.357496101	**12:17:24**	-0.240838685	-0.33567086	0.358639663
12:17:28	-0.23928686	-0.347515305	0.360083204	**12:17:32**	-0.236566509	-0.358663209	0.36311
12:17:36	-0.233846157	-0.374815359	0.366136796	**12:17:40**	-0.231125805	-0.395971719	0.369163592
12:17:44	-0.228405454	-0.417128096	0.372190389	**12:17:48**	-0.225685102	-0.435081285	0.375217185
12:17:52	-0.222964751	-0.453034473	0.378243981	**12:17:56**	-0.220244399	-0.469126987	0.381270777
12:18:00	-0.217524047	-0.483358861	0.384297573	**12:18:04**	-0.214365435	-0.497329495	0.38732437
12:18:08	-0.211206823	-0.50460916	0.390351166	**12:18:12**	-0.208048211	-0.51188879	0.393377962
12:18:16	-0.204889599	-0.524356281	0.396404758	**12:18:20**	-0.201730986	-0.542011598	0.399431554
12:18:24	-0.198815158	-0.559811636	0.402129398	**12:18:28**	-0.19854134	-0.546810399	0.401247543
12:18:32	-0.198267522	-0.533809163	0.400365688	**12:18:36**	-0.197993825	-0.534825628	0.399483833
12:18:40	-0.197737567	-0.549870118	0.398601978	**12:18:44**	-0.197481309	-0.564914643	0.397720123
12:18:48	-0.197225052	-0.569847358	0.396838268	**12:18:52**	-0.196968794	-0.574780072	0.395956413
12:18:56	-0.196712536	-0.578024003	0.395074558	**12:19:00**	-0.196456279	-0.580705006	0.394192703
12:19:04	-0.197950547	-0.584429506	0.393310848	**12:19:08**	-0.199444815	-0.576325592	0.392428993
12:19:12	-0.200939084	-0.568221643	0.391547138	**12:19:16**	-0.202433352	-0.555570107	0.390665283
12:19:20	-0.203927621	-0.538370915	0.389783428	**12:19:24**	-0.205421889	-0.521171722	0.388901573
12:19:28	-0.206916157	-0.496342767	0.388019718	**12:19:32**	-0.208410426	-0.471513848	0.387137863
12:19:36	-0.209904694	-0.452663071	0.386256008	**12:19:40**	-0.211398963	-0.439790471	0.385374152
12:19:44	-0.212893231	-0.426917872	0.384492297	**12:19:48**	-0.214387499	-0.411825519	0.383610442
12:19:52	-0.215881768	-0.396733167	0.382728587	**12:19:56**	-0.217376036	-0.377964445	0.381846732
12:20:00	-0.218870305	-0.355519353	0.380964877	**12:20:04**	-0.221470336	-0.333733408	0.380083022
12:20:08	-0.224070368	-0.30873214	0.379201167	**12:20:12**	-0.2266704	-0.28373089	0.378319312
12:20:16	-0.229270431	-0.265018513	0.377437457	**12:20:20**	-0.231870463	-0.252595019	0.376555602
12:20:24	-0.234470495	-0.240171533	0.375673747	**12:20:28**	-0.237070527	-0.239661759	0.374791892
12:20:32	-0.239670558	-0.239151984	0.373910037	**12:20:36**	-0.24227059	-0.239701502	0.373028182
12:20:40	-0.244870622	-0.241310328	0.372146327	**12:20:44**	-0.247470653	-0.242919154	0.371264472
12:20:48	-0.250070685	-0.237262484	0.370382617	**12:20:52**	-0.252670717	-0.231605822	0.369500762
12:20:56	-0.255270748	-0.225949156	0.368618907	**12:21:00**	-0.25787078	-0.22029249	0.367737051
12:21:04	-0.257710826	-0.212990639	0.366855196	**12:21:08**	-0.257550872	-0.20082074	0.365973341

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:21:12	-0.257390918	-0.188650839	0.365091486	**12:21:16**	-0.257230964	-0.178477144	0.364209631
12:21:20	-0.257071009	-0.170299654	0.363327776	**12:21:24**	-0.256911055	-0.162122164	0.362445921
12:21:28	-0.256751101	-0.163684356	0.361564066	**12:21:32**	-0.256337068	-0.165095096	0.361026466
12:21:36	-0.255775151	-0.166417684	0.360689237	**12:21:40**	-0.255213234	-0.167740272	0.360352008
12:21:44	-0.254651317	-0.169062861	0.360014778	**12:21:48**	-0.2540894	-0.175402096	0.359677549
12:21:52	-0.253527482	-0.181741333	0.35934032	**12:21:56**	-0.252965565	-0.187049905	0.359003091
12:22:00	-0.252403648	-0.191327813	0.358665862	**12:22:04**	-0.250325863	-0.194702136	0.358328633
12:22:08	-0.248248078	-0.194135706	0.357991403	**12:22:12**	-0.246170293	-0.193569275	0.357654174
12:22:16	-0.244092508	-0.193378635	0.357316945	**12:22:20**	-0.242014723	-0.193563777	0.356979716
12:22:24	-0.239936938	-0.193748918	0.356642487	**12:22:28**	-0.237859153	-0.190964707	0.356305257
12:22:32	-0.235781368	-0.188180496	0.355968028	**12:22:36**	-0.233703583	-0.185396285	0.355630799
12:22:40	-0.231625798	-0.182612073	0.35529357	**12:22:44**	-0.229548013	-0.179827862	0.354956341
12:22:48	-0.227470229	-0.169872456	0.354619112	**12:22:52**	-0.225392444	-0.15991705	0.354281882
12:22:56	-0.223314659	-0.157663619	0.353944653	**12:23:00**	-0.221236874	-0.163112164	0.353607424
12:23:04	-0.221856673	-0.1701687	0.353270195	**12:23:08**	-0.222476472	-0.168151964	0.352932966
12:23:12	-0.223096272	-0.166135229	0.352595737	**12:23:16**	-0.223716071	-0.165412055	0.352258507
12:23:20	-0.224335871	-0.165982442	0.351921278	**12:23:24**	-0.22495567	-0.166552829	0.351584049
12:23:28	-0.225575469	-0.165892338	0.35124682	**12:23:32**	-0.226195269	-0.165231849	0.350909591
12:23:36	-0.226815068	-0.166931929	0.350572361	**12:23:40**	-0.227434867	-0.170992578	0.350235132
12:23:44	-0.228054476	-0.175053114	0.349897903	**12:23:48**	-0.228670373	-0.189938647	0.349560674
12:23:52	-0.229286269	-0.204824181	0.349223445	**12:23:56**	-0.229902165	-0.215149298	0.348886216
12:24:00	-0.230518061	-0.220913989	0.348548986	**12:24:04**	-0.23214564	-0.227281737	0.348211757
12:24:08	-0.233773218	-0.224553869	0.347874528	**12:24:12**	-0.235400797	-0.221826	0.347537299
12:24:16	-0.237028375	-0.224160237	0.34720007	**12:24:20**	-0.238655954	-0.231556571	0.34686284
12:24:24	-0.240283532	-0.238952913	0.346525611	**12:24:28**	-0.24191111	-0.249136519	0.346188382
12:24:32	-0.243538689	-0.259320125	0.345851153	**12:24:36**	-0.245166267	-0.269015948	0.345513924
12:24:40	-0.245516405	-0.277462516	0.346907519	**12:24:44**	-0.244369161	-0.285016528	0.350329938
12:24:48	-0.243221918	-0.279986335	0.353752358	**12:24:52**	-0.242074674	-0.274956142	0.357174777
12:24:56	-0.240927431	-0.268969063	0.360597196	**12:25:00**	-0.239780187	-0.262025079	0.364019615
12:25:04	-0.237240908	-0.254251323	0.367442034	**12:25:08**	-0.23642473	-0.242079724	0.368529797
12:25:12	-0.236951153	-0.230708437	0.367798449	**12:25:16**	-0.237477576	-0.216636347	0.367067102
12:25:20	-0.238003999	-0.199863458	0.366335754	**12:25:24**	-0.238530422	-0.18309057	0.365604406
12:25:28	-0.239056845	-0.186375615	0.364873059	**12:25:32**	-0.239583268	-0.189660657	0.364141711
12:25:36	-0.240109691	-0.186635462	0.363410363	**12:25:40**	-0.240636114	-0.177300031	0.362679016
12:25:44	-0.241162537	-0.167964596	0.361947668	**12:25:48**	-0.24168896	-0.152788943	0.36121632
12:25:52	-0.242215383	-0.13761329	0.360484973	**12:25:56**	-0.242741807	-0.123502775	0.359753625
12:26:00	-0.24326823	-0.110457396	0.359022277	**12:26:04**	-0.244020037	-0.097546367	0.35829093
12:26:08	-0.244771845	-0.106835338	0.357559582	**12:26:12**	-0.245523652	-0.11612431	0.356828234
12:26:16	-0.24627546	-0.127823714	0.356096887	**12:26:20**	-0.247027267	-0.141933548	0.355365539
12:26:24	-0.247779075	-0.156043383	0.354634192	**12:26:28**	-0.248530882	-0.149829497	0.353902844
12:26:32	-0.24928269	-0.143615612	0.353171496	**12:26:36**	-0.250034497	-0.135374572	0.352440149
12:26:40	-0.250786305	-0.125106378	0.351708801	**12:26:44**	-0.251538112	-0.114838184	0.350977453
12:26:48	-0.25228992	-0.109407538	0.350246106	**12:26:52**	-0.253041727	-0.103976891	0.349514758
12:26:56	-0.253793535	-0.104000828	0.34878341	**12:27:00**	-0.254545342	-0.105842956	0.348052063
12:27:04	-0.255312535	-0.10769426	0.347320715	**12:27:08**	-0.256079729	-0.10766763	0.346589367
12:27:12	-0.256846922	-0.107641001	0.34585802	**12:27:16**	-0.257614115	-0.109471764	0.345126672
12:27:20	-0.258381309	-0.111921663	0.344395324	**12:27:24**	-0.259148502	-0.114371562	0.343663977
12:27:28	-0.259915695	-0.10259518	0.342932629	**12:27:32**	-0.260682889	-0.090818799	0.342201281
12:27:36	-0.261450082	-0.088833895	0.341469934	**12:27:40**	-0.262217275	-0.09664046	0.340738586
12:27:44	-0.262984468	-0.104447025	0.340007238	**12:27:48**	-0.263751662	-0.116303361	0.339275891
12:27:52	-0.264518855	-0.128159691	0.338544543	**12:27:56**	-0.265286048	-0.148746411	0.337813195
12:28:00	-0.266053242	-0.178063513	0.337081848	**12:28:04**	-0.266386972	-0.204278343	0.3363505
12:28:08	-0.266720702	-0.221961485	0.335619153	**12:28:12**	-0.267054432	-0.239644623	0.334887805
12:28:16	-0.267388162	-0.248775469	0.334156457	**12:28:20**	-0.267721892	-0.249354023	0.33342511
12:28:24	-0.268055622	-0.249932569	0.332693762	**12:28:28**	-0.268389352	-0.255037533	0.331962414
12:28:32	-0.268723082	-0.260142498	0.331231067	**12:28:36**	-0.267841795	-0.257179016	0.332145964
12:28:40	-0.266817088	-0.246785839	0.333255184	**12:28:44**	-0.26579238	-0.236392662	0.334364404

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:28:48	-0.264767673	-0.22599949	0.335473624	**12:28:52**	-0.263755891	-0.215614019	0.336582844
12:28:56	-0.26287708	-0.202928009	0.337692065	**12:29:00**	-0.26199827	-0.189448735	0.338801285
12:29:04	-0.26181899	-0.17638644	0.339910505	**12:29:08**	-0.26163971	-0.167025325	0.341019725
12:29:12	-0.261460429	-0.157664209	0.342128945	**12:29:16**	-0.261281149	-0.146192127	0.343238165
12:29:20	-0.261101869	-0.132609076	0.344347385	**12:29:24**	-0.260922589	-0.119026026	0.345456605
12:29:28	-0.260743308	-0.114686274	0.346565825	**12:29:32**	-0.260564028	-0.110346514	0.347675045
12:29:36	-0.260384748	-0.107069284	0.348784265	**12:29:40**	-0.260205468	-0.104854569	0.349893486
12:29:44	-0.260026187	-0.102639854	0.351002706	**12:29:48**	-0.259846907	-0.104128378	0.352111926
12:29:52	-0.259667627	-0.105616902	0.353221146	**12:29:56**	-0.259488347	-0.107105426	0.354330366
12:30:00	0.240690934	0.39140605	0.855439586	**12:30:04**	0.240901171	0.389935979	0.856548806
12:30:08	0.241111408	0.390998088	0.857658026	**12:30:12**	-0.258678355	-0.107939802	0.358767246
12:30:16	-0.258468118	-0.103140266	0.359876466	**12:30:20**	-0.258257881	-0.094603294	0.360985687
12:30:24	-0.258047644	-0.086066326	0.362094907	**12:30:28**	-0.257837407	-0.085495463	0.363204127
12:30:32	-0.25762717	-0.084924601	0.364313347	**12:30:36**	-0.257537558	-0.088119647	0.365259131
12:30:40	-0.258873394	-0.095858378	0.364273552	**12:30:44**	-0.260209231	-0.104732384	0.363287973
12:30:48	-0.261545068	-0.117012207	0.362302394	**12:30:52**	-0.262880904	-0.129292027	0.361316816
12:30:56	-0.264216741	-0.139875917	0.360331237	**12:31:00**	-0.265552578	-0.148763872	0.359345658
12:31:04	-0.266521852	-0.157433326	0.35836008	**12:31:08**	-0.267491126	-0.172702847	0.357374501
12:31:12	-0.2684604	-0.187972371	0.356388922	**12:31:16**	-0.269429675	-0.204900297	0.355403343
12:31:20	-0.270398949	-0.223486634	0.354417765	**12:31:24**	-0.271368223	-0.242072966	0.353432186
12:31:28	-0.272337497	-0.256771977	0.352446607	**12:31:32**	-0.273306771	-0.271470988	0.351461029
12:31:36	-0.274276046	-0.284887024	0.35047545	**12:31:40**	-0.27524532	-0.297020084	0.349489871
12:31:44	-0.276214594	-0.309153134	0.348504292	**12:31:48**	-0.277183868	-0.312277962	0.347518714
12:31:52	-0.27689038	-0.314650068	0.346533135	**12:31:56**	-0.271406924	-0.313928515	0.345547556
12:32:00	-0.265923468	-0.31320698	0.344561977	**12:32:04**	-0.259908163	-0.312168399	0.343576399
12:32:08	-0.253892859	-0.311129819	0.34259082	**12:32:12**	-0.247877554	-0.310091239	0.341605241
12:32:16	-0.241862249	-0.305443582	0.340619663	**12:32:20**	-0.251707871	-0.306641283	0.339634084
12:32:24	-0.252624334	-0.30251645	0.338648505	**12:32:28**	-0.253540798	-0.291197908	0.337662926
12:32:32	-0.254457261	-0.279879375	0.336677348	**12:32:36**	-0.255373724	-0.272800628	0.335691769
12:32:40	-0.256290187	-0.269961684	0.33470619	**12:32:44**	-0.25720665	-0.267122732	0.333720612
12:32:48	-0.258123113	-0.25742704	0.332735033	**12:32:52**	-0.259039576	-0.247731348	0.331749454
12:32:56	-0.259956039	-0.242799714	0.330763875	**12:33:00**	-0.260872502	-0.242632155	0.329778297
12:33:04	-0.263087846	-0.240845224	0.328792718	**12:33:08**	-0.26530319	-0.231877444	0.327807139
12:33:12	-0.267518534	-0.22290966	0.32682156	**12:33:16**	-0.270781616	-0.216136789	0.324416386
12:33:20	-0.275718452	-0.211931985	0.319743417	**12:33:24**	-0.280655288	-0.207727182	0.315070448
12:33:28	-0.285592123	-0.215477477	0.310397479	**12:33:32**	-0.290528959	-0.223227772	0.30572451
12:33:36	-0.295465795	-0.227662054	0.301051541	**12:33:40**	-0.30040263	-0.228780333	0.296378572
12:33:44	-0.305339466	-0.229898611	0.291705602	**12:33:48**	-0.310276302	-0.236296844	0.287032633
12:33:52	-0.314686492	-0.242381151	0.282359664	**12:33:56**	-0.31902275	-0.241983517	0.277686695
12:34:00	-0.323359008	-0.235148014	0.273013726	**12:34:04**	-0.326389325	-0.227534059	0.268340757
12:34:08	-0.329419641	-0.230958289	0.263667788	**12:34:12**	-0.328154537	-0.231822085	0.264814749
12:34:16	-0.323757013	-0.224751033	0.270205875	**12:34:20**	-0.319359489	-0.21161232	0.275597
12:34:24	-0.314961965	-0.198473606	0.280988125	**12:34:28**	-0.310564441	-0.177334851	0.28637925
12:34:32	-0.306166917	-0.156196097	0.291770375	**12:34:36**	-0.301769392	-0.137990329	0.2971615
12:34:40	-0.297371868	-0.122717554	0.302552626	**12:34:44**	-0.295384818	-0.108881625	0.304677762
12:34:48	-0.294399959	-0.106756653	0.305445016	**12:34:52**	-0.2934151	-0.104631681	0.30621227
12:34:56	-0.292430241	-0.104076399	0.306979523	**12:35:00**	-0.291445381	-0.105090809	0.307746777
12:35:04	-0.291622363	-0.106641824	0.308514031	**12:35:08**	-0.291799344	-0.107724982	0.309281285
12:35:12	-0.291976325	-0.108808145	0.310048538	**12:35:16**	-0.292153307	-0.109891303	0.310815792
12:35:20	-0.292330288	-0.10253681	0.311583046	**12:35:24**	-0.29250727	-0.095182321	0.3123503
12:35:28	-0.292684251	-0.093657195	0.313117553	**12:35:32**	-0.292861232	-0.09213206	0.313884807
12:35:36	-0.293038214	-0.093821172	0.314652061	**12:35:40**	-0.293215195	-0.09658171	0.315419315
12:35:44	-0.293392176	-0.100316445	0.316186568	**12:35:48**	-0.293569158	-0.10697383	0.316953822
12:35:52	-0.293746139	-0.113631206	0.317721076	**12:35:56**	-0.29392312	-0.123268224	0.31848833
12:36:00	-0.294100102	-0.133898457	0.319255583	**12:36:04**	-0.294391379	-0.141487954	0.320022837
12:36:08	-0.294682656	-0.139750857	0.320790091	**12:36:12**	-0.294973933	-0.13801376	0.321557345
12:36:16	-0.295265211	-0.140518464	0.322324598	**12:36:20**	-0.295556488	-0.1444371	0.323091852

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:36:24	-0.295847765	-0.147492413	0.323859106	**12:36:28**	-0.296139042	-0.147957762	0.324626359
12:36:32	-0.296430319	-0.148423109	0.325393613	**12:36:36**	-0.296721597	-0.145801075	0.326160867
12:36:40	-0.297012874	-0.142149911	0.326928121	**12:36:44**	-0.297304151	-0.136316323	0.327695374
12:36:48	-0.297595428	-0.123935447	0.328462628	**12:36:52**	-0.297886705	-0.111554571	0.329229882
12:36:56	-0.298177983	-0.101424403	0.329997136	**12:37:00**	-0.29846926	-0.092044474	0.330764389
12:37:04	-0.297776668	-0.084585883	0.331531643	**12:37:08**	-0.297084075	-0.084650724	0.332298897
12:37:12	-0.296391483	-0.084715564	0.333066151	**12:37:16**	-0.295698891	-0.075583805	0.333833404
12:37:20	-0.295006299	-0.063386515	0.334600658	**12:37:24**	-0.294313707	-0.05694212	0.335367912
12:37:28	-0.294181468	-0.0680904	0.335375933	**12:37:32**	-0.295265411	-0.079963627	0.333736133
12:37:36	-0.296349354	-0.092947068	0.332096333	**12:37:40**	-0.297433296	-0.106300583	0.330456533
12:37:44	-0.298517239	-0.125935488	0.328816732	**12:37:48**	-0.299601182	-0.164414556	0.327176932
12:37:52	-0.300685124	-0.202893627	0.325537132	**12:37:56**	-0.301769067	-0.230325009	0.323897332
12:38:00	-0.302853009	-0.257756385	0.322257531	**12:38:04**	-0.303537142	-0.284488215	0.320617731
12:38:08	-0.304221276	-0.309836343	0.318977931	**12:38:12**	-0.304905409	-0.335184472	0.31733813
12:38:16	-0.305589542	-0.339352617	0.31569833	**12:38:20**	-0.306273675	-0.336460784	0.31405853
12:38:24	-0.306957808	-0.333568952	0.31241873	**12:38:28**	-0.307641941	-0.33067711	0.310778929
12:38:32	-0.308326074	-0.327785278	0.309139129	**12:38:36**	-0.309010207	-0.329664876	0.307499329
12:38:40	-0.30969434	-0.333134956	0.305859529	**12:38:44**	-0.310378473	-0.337926233	0.304219728
12:38:48	-0.311062606	-0.346681064	0.302579928	**12:38:52**	-0.311746739	-0.355435894	0.300940128
12:38:56	-0.311437222	-0.356379259	0.300646639	**12:39:00**	-0.311093797	-0.354895988	0.300399093
12:39:04	-0.31126492	-0.356240686	0.300151547	**12:39:08**	-0.311425537	-0.365142852	0.299904001
12:39:12	-0.311537193	-0.374015833	0.299656455	**12:39:16**	-0.311648848	-0.378237411	0.299408909
12:39:20	-0.311760504	-0.380908504	0.299161363	**12:39:24**	-0.31187216	-0.379029434	0.298913817
12:39:28	-0.311983816	-0.372600238	0.298666271	**12:39:32**	-0.312095471	-0.366171024	0.298418725
12:39:36	-0.312207127	-0.35642491	0.298171179	**12:39:40**	-0.312318783	-0.345573156	0.297923632
12:39:44	-0.312430438	-0.335235006	0.297676086	**12:39:48**	-0.312542094	-0.325410433	0.29742854
12:39:52	-0.31265375	-0.315585861	0.297180994	**12:39:56**	-0.312765405	-0.298110964	0.296933448
12:40:00	-0.312877061	-0.278085952	0.296685902	**12:40:04**	-0.314259116	-0.270176637	0.296438356
12:40:08	-0.315641172	-0.273625736	0.29619081	**12:40:12**	-0.317023227	-0.277074843	0.295943264
12:40:16	-0.318405282	-0.28577151	0.295695718	**12:40:20**	-0.319787337	-0.296217378	0.295448172
12:40:24	-0.321169393	-0.297782788	0.295200626	**12:40:28**	-0.322551448	-0.290467746	0.29495308
12:40:32	-0.323933503	-0.283152705	0.294705534	**12:40:36**	-0.325315559	-0.267269695	0.294457987
12:40:40	-0.326697614	-0.248530698	0.294210441	**12:40:44**	-0.328079669	-0.229294045	0.293962895
12:40:48	-0.329461724	-0.208564433	0.293715349	**12:40:52**	-0.33084378	-0.187834822	0.293467803
12:40:56	-0.332225835	-0.172860779	0.293220257	**12:41:00**	-0.33360789	-0.159805258	0.292972711
12:41:04	-0.333818022	-0.146767261	0.292725165	**12:41:08**	-0.334028154	-0.135877527	0.292477619
12:41:12	-0.334238286	-0.124987793	0.292230073	**12:41:16**	-0.334448418	-0.116376773	0.291982527
12:41:20	-0.334658551	-0.108525314	0.291734981	**12:41:24**	-0.334868683	-0.102124814	0.291487435
12:41:28	-0.335078815	-0.100077145	0.291239888	**12:41:32**	-0.335288947	-0.098029477	0.290992342
12:41:36	-0.335499079	-0.083668693	0.290744796	**12:41:40**	-0.335709211	-0.065203535	0.29049725
12:41:44	-0.335919343	-0.052510839	0.290249704	**12:41:48**	-0.336129475	-0.05713554	0.290002158
12:41:52	-0.336339607	-0.06176024	0.289754612	**12:41:56**	-0.336549739	-0.068929414	0.289507066
12:42:00	-0.336759871	-0.076946755	0.28925952	**12:42:04**	-0.337771665	-0.087074317	0.289011974
12:42:08	-0.338783458	-0.102098976	0.288764428	**12:42:12**	-0.339795251	-0.117123645	0.288516882
12:42:16	-0.341269353	-0.127970162	0.287642946	**12:42:20**	-0.343481321	-0.137771922	0.285769264
12:42:24	-0.345693289	-0.147025899	0.283895583	**12:42:28**	-0.347905258	-0.154636517	0.282021901
12:42:32	-0.350117226	-0.162247135	0.28014822	**12:42:36**	-0.352329194	-0.171838703	0.278274538
12:42:40	-0.354541162	-0.182090592	0.276400857	**12:42:44**	-0.35675313	-0.193386779	0.274527175
12:42:48	-0.358965099	-0.207815867	0.272653494	**12:42:52**	-0.361177067	-0.222244954	0.270779812
12:42:56	-0.363389035	-0.231993882	0.268906131	**12:43:00**	-0.365601003	-0.240182758	0.267032449
12:43:04	-0.366775057	-0.247922818	0.265158768	**12:43:08**	-0.367949112	-0.256172479	0.263285086
12:43:12	-0.369123166	-0.264422144	0.261411405	**12:43:16**	-0.37029722	-0.273425632	0.259537723
12:43:20	-0.371471274	-0.282680398	0.257664041	**12:43:24**	-0.372645329	-0.291494319	0.25579036
12:43:28	-0.373354919	-0.298708838	0.254545987	**12:43:32**	-0.372390422	-0.304925469	0.255569862
12:43:36	-0.371425924	-0.312798587	0.256593736	**12:43:40**	-0.370461427	-0.321223858	0.257617611
12:43:44	-0.36949693	-0.328892007	0.258641485	**12:43:48**	-0.368532432	-0.334288769	0.25966536
12:43:52	-0.367567935	-0.339685523	0.260689234	**12:43:56**	-0.366603437	-0.330011494	0.261713109

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:44:00	-0.36563894	-0.320337456	0.262736983	**12:44:04**	-0.365163003	-0.309230151	0.263760858
12:44:08	-0.364687066	-0.29294932	0.264784732	**12:44:12**	-0.364211129	-0.276668493	0.265808607
12:44:16	-0.363742031	-0.264659082	0.266832481	**12:44:20**	-0.363298058	-0.254087099	0.267856355
12:44:24	-0.362854086	-0.245542346	0.26888023	**12:44:28**	-0.362410113	-0.243079283	0.269904104
12:44:32	-0.36196614	-0.240616221	0.270927979	**12:44:36**	-0.361522167	-0.23469056	0.271951853
12:44:40	-0.361078195	-0.227610699	0.272975728	**12:44:44**	-0.360634222	-0.221059161	0.273999602
12:44:48	-0.360190249	-0.216092597	0.275023477	**12:44:52**	-0.359746277	-0.211126033	0.276047351
12:44:56	-0.359302304	-0.20012142	0.277071226	**12:45:00**	-0.858858331	-0.687104125	-0.2219049
12:45:04	-0.85840508	-0.675945692	-0.220881025	**12:45:08**	-0.857951829	-0.670380435	-0.219857151
12:45:12	-0.357498578	-0.164815179	0.281166723	**12:45:16**	-0.357045327	-0.158289159	0.282190598
12:45:20	-0.356592075	-0.15144289	0.283214472	**12:45:24**	-0.356138824	-0.145622541	0.284238347
12:45:28	-0.355685573	-0.142879945	0.285262221	**12:45:32**	-0.355232322	-0.140137348	0.286286096
12:45:36	-0.354779071	-0.136322555	0.28730997	**12:45:40**	-0.35432582	-0.131435572	0.288333845
12:45:44	-0.353872568	-0.12654859	0.289357719	**12:45:48**	-0.353419317	-0.127203475	0.290381594
12:45:52	-0.352966066	-0.127858352	0.291405468	**12:45:56**	-0.352512815	-0.124313164	0.292429343
12:46:00	-0.3534288	-0.117384084	0.291598018	**12:46:04**	-0.359147375	-0.113317753	0.283737947
12:46:08	-0.364865949	-0.107782832	0.275877876	**12:46:12**	-0.370584524	-0.10224791	0.268017805
12:46:16	-0.376303098	-0.101879409	0.260157734	**12:46:20**	-0.382021673	-0.106677318	0.252297664
12:46:24	-0.387740248	-0.111475227	0.244437593	**12:46:28**	-0.393458822	-0.13151398	0.236577522
12:46:32	-0.399177397	-0.151552733	0.228717451	**12:46:36**	-0.404895971	-0.172503638	0.22085738
12:46:40	-0.407817652	-0.192699503	0.216786863	**12:46:44**	-0.405740995	-0.209915939	0.21948867
12:46:48	-0.403664337	-0.229751686	0.222190477	**12:46:52**	-0.40158768	-0.249587433	0.224892284
12:46:56	-0.399511022	-0.263256793	0.227594092	**12:47:00**	-0.397434365	-0.270759768	0.230295899
12:47:04	-0.395071895	-0.278092374	0.232997706	**12:47:08**	-0.392709426	-0.275564882	0.235699513
12:47:12	-0.390346957	-0.27303739	0.238401321	**12:47:16**	-0.387984487	-0.272226088	0.241103128
12:47:20	-0.385622018	-0.273130985	0.243804935	**12:47:24**	-0.383259549	-0.274035878	0.246506742
12:47:28	-0.380897079	-0.278697308	0.249208549	**12:47:32**	-0.37853461	-0.283358738	0.251910357
12:47:36	-0.376172141	-0.282308643	0.254612164	**12:47:40**	-0.373809671	-0.275547023	0.257313971
12:47:44	-0.371447202	-0.268785403	0.260015778	**12:47:48**	-0.369260972	-0.262128837	0.262478796
12:47:52	-0.368466992	-0.256302167	0.263055433	**12:47:56**	-0.367673013	-0.245845425	0.263632069
12:48:00	-0.366879033	-0.230758606	0.264208706	**12:48:04**	-0.367735053	-0.216655326	0.264785343
12:48:08	-0.368591072	-0.215438317	0.265361979	**12:48:12**	-0.369447091	-0.214221308	0.265938616
12:48:16	-0.370303111	-0.211322654	0.266515252	**12:48:20**	-0.37115913	-0.206742353	0.267091889
12:48:24	-0.372015149	-0.202162052	0.267668526	**12:48:28**	-0.372871169	-0.197581752	0.268245162
12:48:32	-0.373727188	-0.193001452	0.268821799	**12:48:36**	-0.374583207	-0.186486014	0.269398435
12:48:40	-0.375439227	-0.178035436	0.269975072	**12:48:44**	-0.376295246	-0.16958486	0.270551709
12:48:48	-0.377151265	-0.175965448	0.271128345	**12:48:52**	-0.378007285	-0.182346041	0.271704982
12:48:56	-0.378863304	-0.184112953	0.272281618	**12:49:00**	-0.379719324	-0.181266191	0.272858255
12:49:04	-0.379759683	-0.177933226	0.273434892	**12:49:08**	-0.379800042	-0.164409539	0.274011528
12:49:12	-0.379840402	-0.150885857	0.274588165	**12:49:16**	-0.379880761	-0.14642153	0.275164801
12:49:20	-0.37992112	-0.144976997	0.275741438	**12:49:24**	-0.37996148	-0.143532464	0.276318075
12:49:28	-0.380001839	-0.143260464	0.276894711	**12:49:32**	-0.380042198	-0.142988464	0.277471348
12:49:36	-0.379912963	-0.143203037	0.278047985	**12:49:40**	-0.379619414	-0.143907347	0.278624621
12:49:44	-0.379325865	-0.144611649	0.279201258	**12:49:48**	-0.379032316	-0.142565797	0.279777894
12:49:52	-0.378738767	-0.140519936	0.280354531	**12:49:56**	-0.378445218	-0.131504708	0.280931168
12:50:00	-0.378151669	-0.115520093	0.281507804	**12:50:04**	-0.376474247	-0.098710582	0.282084441
12:50:08	-0.374796825	-0.086219439	0.282661077	**12:50:12**	-0.373119403	-0.073728296	0.283237714
12:50:16	-0.371441981	-0.06031091	0.283814351	**12:50:20**	-0.369764558	-0.045967282	0.284390987
12:50:24	-0.368087136	-0.031623653	0.284967624	**12:50:28**	-0.366409714	-0.026503601	0.28554426
12:50:32	-0.364732292	-0.021383548	0.286120897	**12:50:36**	-0.36305487	-0.013033197	0.286697534
12:50:40	-0.361377448	-0.001452531	0.28727417	**12:50:44**	-0.359700025	0.010128136	0.287850807
12:50:48	-0.358022603	0.029062483	0.288427443	**12:50:52**	-0.354834095	0.048897583	0.291051474
12:50:56	-0.351554361	0.071353563	0.293799106	**12:51:00**	-0.348274628	0.096376081	0.296546739
12:51:04	-0.346049007	0.12077024	0.299294372	**12:51:08**	-0.343823386	0.134555959	0.302042005
12:51:12	-0.341597765	0.148341678	0.304789638	**12:51:16**	-0.339372144	0.155943753	0.30753727
12:51:20	-0.337146524	0.157362183	0.310284903	**12:51:24**	-0.334920903	0.158780614	0.313032536
12:51:28	-0.332695282	0.163657228	0.315780169	**12:51:32**	-0.330469661	0.168533806	0.318527801

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:51:36	-0.328244041	0.170903217	0.321275434	**12:51:40**	-0.32601842	0.17076546	0.324023067
12:51:44	-0.323792799	0.170627702	0.3267707	**12:51:48**	-0.321567178	0.167111418	0.329518332
12:51:52	-0.321175795	0.162501738	0.329780729	**12:51:56**	-0.320912251	0.150491326	0.329869914
12:52:00	-0.320648707	0.131156349	0.329959099	**12:52:04**	-0.319068593	0.11260616	0.330048284
12:52:08	-0.317488479	0.078676091	0.330137469	**12:52:12**	-0.315908364	0.044746021	0.330226654
12:52:16	-0.31432825	0.018227564	0.330315838	**12:52:20**	-0.312748136	-0.005820339	0.330405023
12:52:24	-0.311168021	-0.02986826	0.330494208	**12:52:28**	-0.309587907	-0.057147944	0.330583393
12:52:32	-0.308007793	-0.084427628	0.330672578	**12:52:36**	-0.30651166	-0.104391292	0.330761763
12:52:40	-0.305460521	-0.117254129	0.330850948	**12:52:44**	-0.304409383	-0.130116966	0.330940133
12:52:48	-0.303358244	-0.145473821	0.331029317	**12:52:52**	-0.302307105	-0.160830676	0.331118502
12:52:56	-0.301255967	-0.174470014	0.331207687	**12:53:00**	-0.300204828	-0.187536846	0.331296872
12:53:04	-0.300128755	-0.2011849	0.331386057	**12:53:08**	-0.300052681	-0.21834864	0.331475242
12:53:12	-0.299976608	-0.235512383	0.331564427	**12:53:16**	-0.299900535	-0.243570921	0.331653611
12:53:20	-0.299824461	-0.242524254	0.331742796	**12:53:24**	-0.299748388	-0.241477587	0.331831981
12:53:28	-0.299672314	-0.238766661	0.331921166	**12:53:32**	-0.299596241	-0.23106296	0.332010351
12:53:36	-0.299520168	-0.226480922	0.332099536	**12:53:40**	-0.299444094	-0.225020542	0.332188721
12:53:44	-0.299368021	-0.223560162	0.332277905	**12:53:48**	-0.299291947	-0.214688943	0.33236709
12:53:52	-0.299215874	-0.205817724	0.332456275	**12:53:56**	-0.299139801	-0.197678933	0.33254546
12:54:00	-0.299063727	-0.190272569	0.332634645	**12:54:04**	-0.299652785	-0.183262679	0.33272383
12:54:08	-0.300241843	-0.184297441	0.332813015	**12:54:12**	-0.300830901	-0.185332203	0.3329022
12:54:16	-0.301419958	-0.190367755	0.332991384	**12:54:20**	-0.302009016	-0.199404099	0.333080569
12:54:24	-0.302598074	-0.208440441	0.333169754	**12:54:28**	-0.303187132	-0.226092833	0.333258939
12:54:32	-0.303688438	-0.24369292	0.333348124	**12:54:36**	-0.303983372	-0.263859291	0.333437309
12:54:40	-0.304278306	-0.284922106	0.333526494	**12:54:44**	-0.30457324	-0.305984911	0.333615678
12:54:48	-0.304868174	-0.320815077	0.333704863	**12:54:52**	-0.305163108	-0.335645252	0.333794048
12:54:56	-0.305458042	-0.346689734	0.333883233	**12:55:00**	-0.305752976	-0.353948522	0.333972418
12:55:04	-0.306383249	-0.3614072	0.332708499	**12:55:08**	-0.308226525	-0.373274982	0.329801063
12:55:12	-0.310069802	-0.385142764	0.326893628	**12:55:16**	-0.311913078	-0.402810615	0.323986192
12:55:20	-0.313756354	-0.426278517	0.321078756	**12:55:24**	-0.315599631	-0.449746436	0.31817132
12:55:28	-0.317442907	-0.474371904	0.315263884	**12:55:32**	-0.319286184	-0.498997354	0.312356448
12:55:36	-0.32112946	-0.516912312	0.309449012	**12:55:40**	-0.322972736	-0.53259048	0.306541577
12:55:44	-0.324816013	-0.545561166	0.303634141	**12:55:48**	-0.326659289	-0.550409581	0.300726705
12:55:52	-0.326879182	-0.554290359	0.300018816	**12:55:56**	-0.324636315	-0.559959037	0.302647758
12:56:00	-0.322393447	-0.566712997	0.305276701	**12:56:04**	-0.319519044	-0.571404744	0.307905643
12:56:08	-0.31664464	-0.571039058	0.310534585	**12:56:12**	-0.313770236	-0.570673372	0.313163528
12:56:16	-0.310895833	-0.572572117	0.31579247	**12:56:20**	-0.308021429	-0.575225684	0.318421413
12:56:24	-0.305147025	-0.580438718	0.321050355	**12:56:28**	-0.302272622	-0.593330261	0.323679297
12:56:32	-0.299398218	-0.606221804	0.32630824	**12:56:36**	-0.296523814	-0.60850114	0.328937182
12:56:40	-0.29364941	-0.607243062	0.331566125	**12:56:44**	-0.290775007	-0.604436861	0.334195067
12:56:48	-0.287900603	-0.596986114	0.336824009	**12:56:52**	-0.285026199	-0.589535403	0.339452952
12:56:56	-0.282151796	-0.57585731	0.342081894	**12:57:00**	-0.279277392	-0.560103413	0.344710837
12:57:04	-0.277891902	-0.541433113	0.347339779	**12:57:08**	-0.276506411	-0.511351124	0.349968721
12:57:12	-0.275120921	-0.481269134	0.352597664	**12:57:16**	-0.27373543	-0.44999659	0.355226606
12:57:20	-0.27234994	-0.418327165	0.357855549	**12:57:24**	-0.270964449	-0.393413176	0.360484491
12:57:28	-0.269578959	-0.375254607	0.363113433	**12:57:32**	-0.268193468	-0.357096037	0.365742376
12:57:36	-0.266807978	-0.327196011	0.368371318	**12:57:40**	-0.265422487	-0.293382182	0.37100026
12:57:44	-0.264036997	-0.262646789	0.373629203	**12:57:48**	-0.262651506	-0.241146724	0.376258145
12:57:52	-0.261266016	-0.219646662	0.378887088	**12:57:56**	-0.259880525	-0.203730708	0.38151603
12:58:00	-0.258495035	-0.187814752	0.384144972	**12:58:04**	-0.25873607	-0.172196017	0.384834756
12:58:08	-0.260129067	-0.155246963	0.383963728	**12:58:12**	-0.261522064	-0.138297908	0.3830927
12:58:16	-0.262915061	-0.121730541	0.382221672	**12:58:20**	-0.264308058	-0.105290401	0.381350644
12:58:24	-0.265701056	-0.090985254	0.380479616	**12:58:28**	-0.267094053	-0.083085082	0.379608588
12:58:32	-0.26848705	-0.07518491	0.378737561	**12:58:36**	-0.269880047	-0.061780078	0.377866533
12:58:40	-0.271273044	-0.046540357	0.376995505	**12:58:44**	-0.272666041	-0.027963989	0.376124477
12:58:48	-0.274059039	0.000622344	0.375253449	**12:58:52**	-0.275452036	0.029208677	0.374382421
12:58:56	-0.276845033	0.046283395	0.373511393	**12:59:00**	-0.27823803	0.059520936	0.372640365
12:59:04	-0.27917009	0.070373664	0.371769338	**12:59:08**	-0.28010215	0.073247766	0.37089831

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
12:59:12	-0.28103421	0.076121869	0.370027282	**12:59:16**	-0.28196627	0.077037768	0.369156254
12:59:20	-0.28289833	0.077300904	0.368285226	**12:59:24**	-0.28383039	0.080631079	0.367414198
12:59:28	-0.28476245	0.093162323	0.36654317	**12:59:32**	-0.28569451	0.105693566	0.365672142
12:59:36	-0.28662657	0.114908477	0.364801115	**12:59:40**	-0.2875731	0.1230093	0.363930087
12:59:44	-0.288548851	0.130831903	0.363059059	**12:59:48**	-0.289524601	0.137872041	0.362188031
12:59:52	-0.290500351	0.14491218	0.361317003	**12:59:56**	-0.291476101	0.167022044	0.360445975
13:00:00	0.207548149	0.694155127	0.859574947	**13:00:04**	0.208509674	0.717789347	0.858703919
13:00:08	0.209471198	0.727462502	0.857832892	**13:00:12**	-0.289567278	0.237135656	0.356961864
13:00:16	-0.288605753	0.244402474	0.356090836	**13:00:20**	-0.287644229	0.250867181	0.355219808
13:00:24	-0.286682705	0.254477171	0.35434878	**13:00:28**	-0.28572118	0.24952294	0.353477752
13:00:32	-0.284759656	0.244568709	0.352606724	**13:00:36**	-0.283798132	0.231440655	0.351735696
13:00:40	-0.282836607	0.215587957	0.350864669	**13:00:44**	-0.281875083	0.200574286	0.349993641
13:00:48	-0.280913559	0.188077659	0.349122613	**13:00:52**	-0.279952034	0.175581033	0.348251585
13:00:56	-0.27899051	0.163483296	0.347380557	**13:01:00**	-0.278028986	0.151518581	0.346509529
13:01:04	-0.275435706	0.14396908	0.348346132	**13:01:08**	-0.272802795	0.146770926	0.350236432
13:01:12	-0.270169883	0.149572808	0.352126733	**13:01:16**	-0.267536971	0.152887734	0.354017034
13:01:20	-0.26490406	0.156373664	0.355907335	**13:01:24**	-0.262271148	0.158284752	0.357797635
13:01:28	-0.259638237	0.155471247	0.359687936	**13:01:32**	-0.257005325	0.152657742	0.361578237
13:01:36	-0.254372413	0.142211331	0.363468538	**13:01:40**	-0.251739502	0.129220605	0.365358838
13:01:44	-0.24910659	0.115437041	0.367249139	**13:01:48**	-0.246473679	0.099274961	0.36913944
13:01:52	-0.243840767	0.083112881	0.371029741	**13:01:56**	-0.241207855	0.072113312	0.372920041
13:02:00	-0.238574944	0.062834592	0.374810342	**13:02:04**	-0.238309183	0.050669048	0.376700643
13:02:08	-0.238043422	0.034076113	0.378590944	**13:02:12**	-0.237937369	0.017387979	0.380264854
13:02:16	-0.238825483	-0.00634476	0.380591753	**13:02:20**	-0.239713597	-0.032228174	0.380918652
13:02:24	-0.24060171	-0.055904918	0.381245551	**13:02:28**	-0.241489824	-0.072961682	0.38157245
13:02:32	-0.242377937	-0.090018446	0.381899349	**13:02:36**	-0.243266051	-0.107075205	0.382226248
13:02:40	-0.244154165	-0.124131969	0.382553147	**13:02:44**	-0.245042278	-0.13986751	0.382880046
13:02:48	-0.245930392	-0.151639385	0.383206945	**13:02:52**	-0.246818505	-0.163411261	0.383533844
13:02:56	-0.247706619	-0.168158375	0.383860743	**13:03:00**	-0.248594733	-0.1705639	0.384187642
13:03:04	-0.248408085	-0.174032617	0.38451454	**13:03:08**	-0.248221437	-0.182612855	0.384841439
13:03:12	-0.24803479	-0.191193093	0.385168338	**13:03:16**	-0.247848142	-0.182327452	0.385495237
13:03:20	-0.247661494	-0.167646516	0.385822136	**13:03:24**	-0.247474846	-0.152965579	0.386149035
13:03:28	-0.247288199	-0.143237119	0.386475934	**13:03:32**	-0.247101551	-0.138461135	0.386802833
13:03:36	-0.246914903	-0.139428279	0.387129732	**13:03:40**	-0.246728256	-0.142309799	0.387456631
13:03:44	-0.246541608	-0.14504352	0.38778353	**13:03:48**	-0.24635496	-0.147333838	0.388110429
13:03:52	-0.246168313	-0.149624156	0.388437328	**13:03:56**	-0.245981665	-0.139652016	0.388764227
13:04:00	-0.245795017	-0.125592388	0.389091126	**13:04:04**	-0.245456662	-0.109267038	0.389418025
13:04:08	-0.245118306	-0.086415805	0.389744924	**13:04:12**	-0.244779951	-0.063564569	0.390071823
13:04:16	-0.244441595	-0.050799168	0.390398722	**13:04:20**	-0.24410324	-0.041395701	0.390725621
13:04:24	-0.243764884	-0.034130847	0.39105252	**13:04:28**	-0.243426528	-0.033281822	0.391379418
13:04:32	-0.243088173	-0.032432796	0.391706317	**13:04:36**	-0.242749817	-0.046752677	0.392033216
13:04:40	-0.242411462	-0.066128863	0.392360115	**13:04:44**	-0.242073106	-0.086324433	0.392687014
13:04:48	-0.241653971	-0.108930015	0.393013913	**13:04:52**	-0.241104279	-0.131457776	0.393340812
13:04:56	-0.240554586	-0.153581249	0.393667711	**13:05:00**	-0.240004894	-0.175569959	0.39399461
13:05:04	-0.239895452	-0.194010502	0.39345683	**13:05:08**	-0.240568607	-0.201485748	0.391858698
13:05:12	-0.241241762	-0.208960994	0.390260567	**13:05:16**	-0.241914916	-0.21021064	0.388662436
13:05:20	-0.242588071	-0.209385089	0.387064304	**13:05:24**	-0.243261226	-0.207726782	0.385466173
13:05:28	-0.24393438	-0.20357022	0.383868041	**13:05:32**	-0.244607535	-0.199413654	0.38226991
13:05:36	-0.24528069	-0.190061526	0.380671779	**13:05:40**	-0.245953844	-0.175513828	0.379073647
13:05:44	-0.246626999	-0.160966131	0.377475516	**13:05:48**	-0.247300154	-0.153101653	0.375877384
13:05:52	-0.247973308	-0.145237174	0.374279253	**13:05:56**	-0.248646463	-0.146851859	0.372681122
13:06:00	-0.249319617	-0.157945706	0.37108299	**13:06:04**	-0.250777715	-0.169507446	0.369484859
13:06:08	-0.252235812	-0.210189834	0.367886727	**13:06:12**	-0.253693909	-0.250872222	0.366288596
13:06:16	-0.255018475	-0.290207217	0.364871388	**13:06:20**	-0.255572029	-0.327814811	0.364498837
13:06:24	-0.256125582	-0.365422423	0.364126286	**13:06:28**	-0.256679136	-0.380723963	0.363753734
13:06:32	-0.257232689	-0.396025504	0.363381183	**13:06:36**	-0.257786243	-0.413967253	0.363008631
13:06:40	-0.258339796	-0.434549173	0.36263608	**13:06:44**	-0.25889335	-0.455131094	0.362263529

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:06:48	-0.259446903	-0.461704677	0.361890977	**13:06:52**	-0.260000457	-0.468278259	0.361518426
13:06:56	-0.26055401	-0.477276439	0.361145875	**13:07:00**	-0.261107564	-0.488699217	0.360773323
13:07:04	-0.26138256	-0.499955987	0.360400772	**13:07:08**	-0.261657557	-0.498203523	0.36002822
13:07:12	-0.261932553	-0.496451023	0.359655669	**13:07:16**	-0.262207549	-0.496291911	0.359283118
13:07:20	-0.262482546	-0.49772615	0.358910566	**13:07:24**	-0.262757542	-0.49916039	0.358538015
13:07:28	-0.263032538	-0.499216159	0.358165463	**13:07:32**	-0.263307535	-0.499271893	0.357792912
13:07:36	-0.263582531	-0.495656481	0.357420361	**13:07:40**	-0.263857527	-0.48836985	0.357047809
13:07:44	-0.264132524	-0.481083219	0.356675258	**13:07:48**	-0.26440752	-0.475693752	0.356302706
13:07:52	-0.264682517	-0.470304321	0.355930155	**13:07:56**	-0.264957513	-0.464003738	0.355557604
13:08:00	-0.265232509	-0.456792039	0.355185052	**13:08:04**	-0.263832359	-0.448581793	0.354812501
13:08:08	-0.262432209	-0.433803795	0.354439949	**13:08:12**	-0.261032059	-0.419025796	0.354067398
13:08:16	-0.259631909	-0.403547123	0.353694847	**13:08:20**	-0.258231759	-0.387834896	0.353322295
13:08:24	-0.256831608	-0.372122652	0.352949744	**13:08:28**	-0.255431458	-0.348696637	0.352577192
13:08:32	-0.254031308	-0.325270622	0.352204641	**13:08:36**	-0.252631158	-0.301469487	0.35183209
13:08:40	-0.251231008	-0.277293224	0.351459538	**13:08:44**	-0.249830858	-0.253116969	0.351086987
13:08:48	-0.248430707	-0.216521962	0.350714435	**13:08:52**	-0.247030557	-0.179926953	0.350341884
13:08:56	-0.245630407	-0.142490188	0.349969333	**13:09:00**	-0.244230257	-0.104772836	0.349596781
13:09:04	-0.244450595	-0.068021434	0.34922423	**13:09:08**	-0.244670932	-0.040866892	0.348851678
13:09:12	-0.245708217	-0.01419932	0.347372233	**13:09:16**	-0.246886585	0.01207893	0.345701632
13:09:20	-0.248064953	0.038051964	0.34403103	**13:09:24**	-0.249243321	0.064024999	0.342360428
13:09:28	-0.250421689	0.086640487	0.340689827	**13:09:32**	-0.252545478	0.108692424	0.339019225
13:09:36	-0.254867618	0.120877676	0.337348624	**13:09:40**	-0.257189758	0.123314441	0.335678022
13:09:44	-0.259511898	0.125751206	0.33400742	**13:09:48**	-0.261834038	0.113584497	0.332336819
13:09:52	-0.264156178	0.101417788	0.330666217	**13:09:56**	-0.266478318	0.096753327	0.328995616
13:10:00	-0.268800458	0.099591112	0.327325014	**13:10:04**	-0.269633897	0.103316271	0.325654412
13:10:08	-0.270286556	0.105015401	0.323983811	**13:10:12**	-0.2702498	0.107125498	0.322313209
13:10:16	-0.270213044	0.105453206	0.320642608	**13:10:20**	-0.270176288	0.09999856	0.318972006
13:10:24	-0.270139532	0.094543914	0.317301404	**13:10:28**	-0.270102776	0.092437683	0.315630803
13:10:32	-0.27006602	0.090331435	0.313960201	**13:10:36**	-0.270029264	0.092710081	0.3122896
13:10:40	-0.269992508	0.099573586	0.310618998	**13:10:44**	-0.269875658	0.106484834	0.309056917
13:10:48	-0.267685779	0.103688566	0.310303614	**13:10:52**	-0.265495901	0.100892298	0.311550311
13:10:56	-0.263306022	0.098917327	0.312797008	**13:11:00**	-0.261116143	0.097763654	0.314043704
13:11:04	-0.260621404	0.095599534	0.315290401	**13:11:08**	-0.260126666	0.083889197	0.316537098
13:11:12	-0.259631927	0.072178859	0.317783795	**13:11:16**	-0.259137188	0.062848565	0.319030492
13:11:20	-0.25864245	0.055898315	0.320277189	**13:11:24**	-0.258147711	0.049907465	0.321523886
13:11:28	-0.257652972	0.046794782	0.322770583	**13:11:32**	-0.257158233	0.043682116	0.32401728
13:11:36	-0.256663495	0.035562966	0.325263977	**13:11:40**	-0.256168756	0.022437332	0.326510674
13:11:44	-0.255674017	0.009311716	0.32775737	**13:11:48**	-0.255179279	-0.001527387	0.329004067
13:11:52	-0.25468454	-0.01236649	0.330250764	**13:11:56**	-0.254189801	-0.025947718	0.331497461
13:12:00	-0.253695062	-0.042271078	0.332744158	**13:12:04**	-0.25417739	-0.059176852	0.333990855
13:12:08	-0.254659718	-0.056543603	0.335237552	**13:12:12**	-0.255142045	-0.053910354	0.336484249
13:12:16	-0.255624373	-0.051860703	0.337730946	**13:12:20**	-0.256106701	-0.050394648	0.338977643
13:12:24	-0.256589028	-0.048928584	0.34022434	**13:12:28**	-0.257071356	-0.052771182	0.341471037
13:12:32	-0.257553684	-0.056613781	0.342717733	**13:12:36**	-0.258036011	-0.057696597	0.34396443
13:12:40	-0.258518339	-0.056019639	0.345211127	**13:12:44**	-0.259000667	-0.054342682	0.346457824
13:12:48	-0.259482995	-0.060236126	0.347704521	**13:12:52**	-0.259965322	-0.066129579	0.348951218
13:12:56	-0.260615102	-0.078068063	0.349971031	**13:13:00**	-0.261945563	-0.096357506	0.35006858
13:13:04	-0.26183639	-0.113788809	0.350166128	**13:13:08**	-0.261727216	-0.116190246	0.350263676
13:13:12	-0.261618043	-0.118591679	0.350361224	**13:13:16**	-0.26150887	-0.123399373	0.350458772
13:13:20	-0.261399696	-0.130613328	0.35055632	**13:13:24**	-0.261290523	-0.137827283	0.350653869
13:13:28	-0.26118135	-0.145041238	0.350751417	**13:13:32**	-0.261072176	-0.160079415	0.350848965
13:13:36	-0.260963003	-0.173706401	0.350946513	**13:13:40**	-0.26085383	-0.183099819	0.351044061
13:13:44	-0.260744656	-0.192493236	0.351141609	**13:13:48**	-0.260635483	-0.204640464	0.351239158
13:13:52	-0.26052631	-0.216787692	0.351336706	**13:13:56**	-0.260417136	-0.228656672	0.351434254
13:14:00	-0.260307963	-0.240247407	0.351531802	**13:14:04**	-0.258971173	-0.251106371	0.35162935
13:14:08	-0.257634383	-0.258465795	0.351726898	**13:14:12**	-0.256297593	-0.265825218	0.351824447
13:14:16	-0.254960804	-0.277786419	0.351921995	**13:14:20**	-0.253624014	-0.294349398	0.352019543

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:14:24	-0.252287224	-0.310912376	0.352117091	**13:14:28**	-0.250950434	-0.322363055	0.352214639
13:14:32	-0.249613644	-0.333813734	0.352312187	**13:14:36**	-0.248276854	-0.341189297	0.352409736
13:14:40	-0.246940064	-0.344489762	0.352507284	**13:14:44**	-0.245603275	-0.347790209	0.352604832
13:14:48	-0.244266485	-0.348629782	0.35270238	**13:14:52**	-0.242929695	-0.349469374	0.352799928
13:14:56	-0.241592905	-0.349259959	0.352897476	**13:15:00**	-0.740256115	-0.848001575	-0.147004975
13:15:04	-0.741819568	-0.84847198	-0.146907427	**13:15:08**	-0.743349952	-0.859289355	-0.146809879
13:15:12	-0.244880336	-0.370106711	0.353287669	**13:15:16**	-0.24641072	-0.380924085	0.353385217
13:15:20	-0.247941104	-0.391741442	0.353482765	**13:15:24**	-0.249471487	-0.402558816	0.353580314
13:15:28	-0.251001871	-0.398899876	0.353677862	**13:15:32**	-0.252532255	-0.395240954	0.35377541
13:15:36	-0.254062639	-0.388935163	0.353872958	**13:15:40**	-0.255593022	-0.379982502	0.353970506
13:15:44	-0.257123406	-0.371029841	0.354068054	**13:15:48**	-0.25865379	-0.35140555	0.354165603
13:15:52	-0.260184174	-0.331781241	0.354263151	**13:15:56**	-0.261714557	-0.323403783	0.354360699
13:16:00	-0.263244941	-0.326273141	0.354458247	**13:16:04**	-0.2641675	-0.328780201	0.354555795
13:16:08	-0.265090058	-0.320390393	0.354653343	**13:16:12**	-0.266012617	-0.312000585	0.354750892
13:16:16	-0.266935176	-0.299853071	0.35484844	**13:16:20**	-0.267857734	-0.283947825	0.354945988
13:16:24	-0.268898401	-0.268112982	0.35488351	**13:16:28**	-0.270322149	-0.250124694	0.354301988
13:16:32	-0.271745897	-0.232136407	0.353720467	**13:16:36**	-0.273169646	-0.22496549	0.353138946
13:16:40	-0.274593394	-0.22140036	0.352557425	**13:16:44**	-0.276017142	-0.217835234	0.351975904
13:16:48	-0.27744089	-0.208804131	0.351394383	**13:16:52**	-0.278864638	-0.199773028	0.350812861
13:16:56	-0.280288386	-0.191690429	0.35023134	**13:17:00**	-0.281712135	-0.184556332	0.349649819
13:17:04	-0.281043287	-0.176174873	0.349068298	**13:17:08**	-0.280374439	-0.161661462	0.348486777
13:17:12	-0.279705591	-0.147148052	0.347905256	**13:17:16**	-0.279036743	-0.126411902	0.347323734
13:17:20	-0.278367895	-0.09945301	0.346742213	**13:17:24**	-0.277699048	-0.072494123	0.346160692
13:17:28	-0.2770302	-0.05913754	0.345579171	**13:17:32**	-0.276361352	-0.045780965	0.34499765
13:17:36	-0.275692504	-0.036147836	0.344416128	**13:17:40**	-0.275023656	-0.030238163	0.343834607
13:17:44	-0.274354808	-0.023548441	0.343253086	**13:17:48**	-0.27368596	-0.01451854	0.342671565
13:17:52	-0.273017113	-0.005488638	0.342090044	**13:17:56**	-0.272348265	0.008048879	0.341508523
13:18:00	-0.271679417	0.023088917	0.340927001	**13:18:04**	-0.272972304	0.036959594	0.34034548
13:18:08	-0.274265192	0.047726938	0.339763959	**13:18:12**	-0.27555808	0.058494282	0.339182438
13:18:16	-0.276850967	0.063478292	0.338600917	**13:18:20**	-0.278143855	0.062678968	0.338019396
13:18:24	-0.279436742	0.061879661	0.337437874	**13:18:28**	-0.28072963	0.054264801	0.336856353
13:18:32	-0.282022517	0.046649942	0.336274832	**13:18:36**	-0.283315405	0.039480497	0.335693311
13:18:40	-0.284608292	0.032756502	0.33511179	**13:18:44**	-0.28590118	0.026032507	0.334530269
13:18:48	-0.287194067	0.021238931	0.333948747	**13:18:52**	-0.288486955	0.016445355	0.333367226
13:18:56	-0.289779842	0.011651779	0.332785705	**13:19:00**	-0.29107273	0.006858203	0.332204184
13:19:04	-0.292495376	0.003101785	0.331622663	**13:19:08**	-0.293918022	0.002688878	0.331041141
13:19:12	-0.295340668	0.002275972	0.33045962	**13:19:16**	-0.296763314	0.005446721	0.329878099
13:19:20	-0.29818596	0.012201144	0.329296578	**13:19:24**	-0.299608606	0.018955567	0.328715057
13:19:28	-0.300519941	0.02906444	0.328826318	**13:19:32**	-0.301151509	0.039340061	0.329316641
13:19:36	-0.301783077	0.039133797	0.329806963	**13:19:40**	-0.302414644	0.028445612	0.330297286
13:19:44	-0.303046212	0.017757427	0.330787609	**13:19:48**	-0.30367778	0.013391683	0.331277932
13:19:52	-0.304309348	0.009025938	0.331768254	**13:19:56**	-0.304940915	0.011042571	0.332258577
13:20:00	-0.305572483	0.015186687	0.3327489	**13:20:04**	-0.305433478	0.019790112	0.333239222
13:20:08	-0.305294472	0.025112634	0.333729545	**13:20:12**	-0.305148642	0.030439243	0.334219868
13:20:16	-0.304995981	0.029955926	0.334710191	**13:20:20**	-0.304843321	0.023658614	0.335200513
13:20:24	-0.30469066	0.017361301	0.335690836	**13:20:28**	-0.304537999	0.011651254	0.336181159
13:20:32	-0.304385338	0.005941207	0.336671481	**13:20:36**	-0.304232678	-0.004733346	0.337161804
13:20:40	-0.304080017	-0.020372423	0.337652127	**13:20:44**	-0.303927356	-0.036011491	0.33814245
13:20:48	-0.303774695	-0.04408713	0.338632772	**13:20:52**	-0.303622035	-0.05216277	0.339123095
13:20:56	-0.303469374	-0.061747325	0.339613418	**13:21:00**	-0.303316713	-0.072840796	0.340103741
13:21:04	-0.302649012	-0.083627269	0.340594063	**13:21:08**	-0.301981311	-0.08378615	0.341084386
13:21:12	-0.30131361	-0.083945023	0.341574709	**13:21:16**	-0.300645908	-0.08747656	0.342065031
13:21:20	-0.299978207	-0.094380752	0.342555354	**13:21:24**	-0.299310506	-0.101284945	0.343045677
13:21:28	-0.298642805	-0.10335029	0.343536	**13:21:32**	-0.297975103	-0.105415626	0.344026322
13:21:36	-0.297307402	-0.103827389	0.344516645	**13:21:40**	-0.296639701	-0.098585565	0.345006968
13:21:44	-0.295972	-0.093343746	0.34549729	**13:21:48**	-0.295304298	-0.097363226	0.345987613
13:21:52	-0.294636597	-0.101382706	0.346477936	**13:21:56**	-0.293968896	-0.10802741	0.346968259

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:22:00	-0.293301195	-0.117297332	0.347458581	**13:22:04**	-0.291741817	-0.126035739	0.347948904
13:22:08	-0.290182439	-0.140692091	0.348439227	**13:22:12**	-0.288623061	-0.155348443	0.34892955
13:22:16	-0.287063683	-0.168427288	0.349419872	**13:22:20**	-0.285504306	-0.179928624	0.349910195
13:22:24	-0.283944928	-0.191429962	0.350400518	**13:22:28**	-0.28238555	-0.191311146	0.35089084
13:22:32	-0.280826172	-0.191192331	0.351381163	**13:22:36**	-0.279266795	-0.19306368	0.351871486
13:22:40	-0.277707417	-0.196925192	0.352361809	**13:22:44**	-0.276148039	-0.200786705	0.352852131
13:22:48	-0.274588661	-0.200644618	0.353342454	**13:22:52**	-0.273029283	-0.200502531	0.353832777
13:22:56	-0.271469906	-0.197078557	0.354323099	**13:23:00**	-0.269721992	-0.190260307	0.355068872
13:23:04	-0.269010169	-0.184059654	0.356155745	**13:23:08**	-0.268298346	-0.177859002	0.357242618
13:23:12	-0.267586523	-0.17165835	0.358329491	**13:23:16**	-0.2668747	-0.166550713	0.359416364
13:23:20	-0.266162877	-0.162536092	0.360503237	**13:23:24**	-0.265451053	-0.15852147	0.36159011
13:23:28	-0.26473923	-0.154506849	0.362676983	**13:23:32**	-0.264027407	-0.140294902	0.363763856
13:23:36	-0.263315584	-0.123724061	0.364850729	**13:23:40**	-0.262603761	-0.100076541	0.365937602
13:23:44	-0.261891938	-0.076429021	0.367024475	**13:23:48**	-0.261180114	-0.062458658	0.368111348
13:23:52	-0.260468291	-0.048488295	0.369198221	**13:23:56**	-0.259756468	-0.032851069	0.370285094
13:24:00	-0.259044645	-0.015546973	0.371371967	**13:24:04**	-0.258735586	0.001517041	0.37245884
13:24:08	-0.258426526	0.017111435	0.373545713	**13:24:12**	-0.258117467	0.032705812	0.374632586
13:24:16	-0.257808408	0.041182991	0.375719459	**13:24:20**	-0.257499349	0.042542938	0.376806332
13:24:24	-0.257190289	0.043902885	0.377893205	**13:24:28**	-0.25688123	0.052030384	0.378980078
13:24:32	-0.256572171	0.060157865	0.380066951	**13:24:36**	-0.256263112	0.066779326	0.381153824
13:24:40	-0.255954052	0.07189473	0.382240697	**13:24:44**	-0.255644993	0.077010153	0.38332757
13:24:48	-0.255335934	0.084821547	0.384414443	**13:24:52**	-0.255026875	0.092632958	0.385501316
13:24:56	-0.254717815	0.10319614	0.386588189	**13:25:00**	-0.254408756	0.116511128	0.387675062
13:25:04	-0.252755083	0.130627601	0.388761935	**13:25:08**	-0.25110141	0.142848615	0.389848808
13:25:12	-0.249447737	0.15506963	0.390935681	**13:25:16**	-0.247794064	0.166546659	0.392022554
13:25:20	-0.246133052	0.177284148	0.393109427	**13:25:24**	-0.244465725	0.188025366	0.3941963
13:25:28	-0.242798398	0.202571002	0.395283173	**13:25:32**	-0.241131071	0.217116637	0.396370046
13:25:36	-0.239463744	0.229005739	0.397456919	**13:25:40**	-0.237796417	0.238238308	0.398543792
13:25:44	-0.236129089	0.247470876	0.399630665	**13:25:48**	-0.234461762	0.252934521	0.400717538
13:25:52	-0.232794435	0.258398165	0.401804411	**13:25:56**	-0.231127108	0.267480267	0.402891284
13:26:00	-0.229540189	0.280132895	0.40386921	**13:26:04**	-0.228962862	0.292183721	0.404811453
13:26:08	-0.228385534	0.300007045	0.405753696	**13:26:12**	-0.227808207	0.307830369	0.406695939
13:26:16	-0.22723088	0.311911452	0.407638182	**13:26:20**	-0.226653552	0.31225033	0.408580425
13:26:24	-0.226076225	0.312589207	0.409522668	**13:26:28**	-0.225498898	0.306183574	0.410464911
13:26:32	-0.22492157	0.29977794	0.411407154	**13:26:36**	-0.224344243	0.289413939	0.412349397
13:26:40	-0.223766916	0.275091608	0.41329164	**13:26:44**	-0.223189588	0.260769277	0.414233882
13:26:48	-0.222612261	0.254460034	0.415176125	**13:26:52**	-0.222034934	0.248150827	0.416118368
13:26:56	-0.221457606	0.235565493	0.417060611	**13:27:00**	-0.220880279	0.216704067	0.418002854
13:27:04	-0.220322981	0.197830701	0.418945097	**13:27:08**	-0.219765684	0.176229246	0.41988734
13:27:12	-0.219208386	0.154627791	0.420829583	**13:27:16**	-0.218651088	0.135057499	0.421771826
13:27:20	-0.21809379	0.117518352	0.422714069	**13:27:24**	-0.217536492	0.099979204	0.423656312
13:27:28	-0.216979195	0.096570989	0.424598555	**13:27:32**	-0.216421897	0.093162775	0.425540798
13:27:36	-0.215864599	0.092827232	0.426483041	**13:27:40**	-0.215307301	0.09556436	0.427425283
13:27:44	-0.214750004	0.098301507	0.428367526	**13:27:48**	-0.214192706	0.089162186	0.429309769
13:27:52	-0.213635408	0.080022865	0.430252012	**13:27:56**	-0.21307811	0.06834916	0.431194255
13:28:00	-0.212520812	0.054141108	0.432136498	**13:28:04**	-0.212209746	0.03978628	0.433078741
13:28:08	-0.21189868	0.023150448	0.434020984	**13:28:12**	-0.211587614	0.006514615	0.434963227
13:28:16	-0.211276548	-0.009651253	0.43590547	**13:28:20**	-0.210965482	-0.025660454	0.436847713
13:28:24	-0.210654415	-0.040493613	0.437789956	**13:28:28**	-0.210343349	-0.051798601	0.438732199
13:28:32	-0.210032283	-0.063103589	0.439674441	**13:28:36**	-0.209721217	-0.072915573	0.440616684
13:28:40	-0.207316257	-0.079986416	0.444395976	**13:28:44**	-0.203943222	-0.086480205	0.449486927
13:28:48	-0.200570187	-0.083035074	0.454577878	**13:28:52**	-0.197197152	-0.079589943	0.459668828
13:28:56	-0.193824118	-0.076478797	0.464759779	**13:29:00**	-0.190451083	-0.07370164	0.469850729
13:29:04	-0.189377102	-0.072294915	0.470189365	**13:29:08**	-0.189352512	-0.067870494	0.469106166
13:29:12	-0.189327921	-0.063446073	0.468022966	**13:29:16**	-0.189303331	-0.05875781	0.466939767
13:29:20	-0.189278741	-0.053805706	0.465856568	**13:29:24**	-0.18925415	-0.048853603	0.464773368
13:29:28	-0.18922956	-0.059531368	0.463690169	**13:29:32**	-0.18920497	-0.070209133	0.462606969

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:29:36	-0.18918038	-0.083374972	0.46152377	**13:29:40**	-0.189155789	-0.099028886	0.460440571
13:29:44	-0.189131199	-0.1146828	0.459357371	**13:29:48**	-0.189106609	-0.12257778	0.458274172
13:29:52	-0.189082018	-0.130472762	0.457190972	**13:29:56**	-0.189057428	-0.134449458	0.456107773
13:30:00	0.310967162	0.365492127	0.955024573	**13:30:04**	0.308537206	0.363970597	0.953941374
13:30:08	0.30610725	0.365388292	0.952858175	**13:30:12**	-0.196322706	-0.133194013	0.451774975
13:30:16	-0.198752662	-0.141415142	0.450691776	**13:30:20**	-0.201182618	-0.159275097	0.449608576
13:30:24	-0.203612575	-0.17713505	0.448525377	**13:30:28**	-0.206044817	-0.199855785	0.447442178
13:30:32	-0.208478676	-0.222577483	0.446358978	**13:30:36**	-0.210912534	-0.239783117	0.445275779
13:30:40	-0.213346393	-0.251472704	0.444192579	**13:30:44**	-0.215780252	-0.263162283	0.44310938
13:30:48	-0.218214111	-0.264250979	0.44202618	**13:30:52**	-0.22064797	-0.265339676	0.440942981
13:30:56	-0.223081828	-0.263532841	0.439859782	**13:31:00**	-0.225515687	-0.258830458	0.438776582
13:31:04	-0.226067337	-0.253006119	0.437693383	**13:31:08**	-0.226618987	-0.237040826	0.436610183
13:31:12	-0.227170637	-0.221075542	0.435526984	**13:31:16**	-0.227722286	-0.207518242	0.434443785
13:31:20	-0.228273936	-0.196368938	0.433360585	**13:31:24**	-0.228825586	-0.185219629	0.432277386
13:31:28	-0.229377236	-0.196226298	0.431194186	**13:31:32**	-0.229928886	-0.207232971	0.430110987
13:31:36	-0.230480536	-0.216915862	0.429027788	**13:31:40**	-0.231032185	-0.225274986	0.427944588
13:31:44	-0.231583835	-0.233634101	0.426861389	**13:31:48**	-0.232135485	-0.241993216	0.425778189
13:31:52	-0.232687135	-0.25035234	0.42469499	**13:31:56**	-0.233238785	-0.261084188	0.42361179
13:32:00	-0.233697163	-0.274133164	0.422654966	**13:32:04**	-0.235077226	-0.287731541	0.421866627
13:32:08	-0.236457289	-0.299763116	0.421078289	**13:32:12**	-0.237837351	-0.311794691	0.420289951
13:32:16	-0.239217414	-0.321323983	0.419501612	**13:32:20**	-0.240597476	-0.328350993	0.418713274
13:32:24	-0.241977539	-0.335378002	0.417924936	**13:32:28**	-0.243357602	-0.344356127	0.417136597
13:32:32	-0.244737664	-0.353334269	0.416348259	**13:32:36**	-0.246117727	-0.364289108	0.415559921
13:32:40	-0.247497789	-0.37722066	0.414771582	**13:32:44**	-0.248877852	-0.390152212	0.413983244
13:32:48	-0.250257914	-0.40047747	0.413194905	**13:32:52**	-0.251637977	-0.41080271	0.412406567
13:32:56	-0.25301804	-0.419405928	0.411618229	**13:33:00**	-0.254398102	-0.426287107	0.41082989
13:33:04	-0.255377646	-0.432929543	0.410041552	**13:33:08**	-0.25635719	-0.433203031	0.409253214
13:33:12	-0.257336734	-0.433476519	0.408464875	**13:33:16**	-0.258316277	-0.430067349	0.407676537
13:33:20	-0.259295821	-0.425430603	0.406888199	**13:33:24**	-0.260275365	-0.420793874	0.40609986
13:33:28	-0.261254909	-0.408039173	0.405311522	**13:33:32**	-0.262234452	-0.395284455	0.404523184
13:33:36	-0.263213996	-0.386817159	0.403734845	**13:33:40**	-0.26419354	-0.391212094	0.402946507
13:33:44	-0.265173084	-0.395607029	0.402158169	**13:33:48**	-0.266152628	-0.411210105	0.40136983
13:33:52	-0.267132171	-0.426813181	0.400581492	**13:33:56**	-0.268111715	-0.434539069	0.399793154
13:34:00	-0.269045222	-0.434360325	0.399067191	**13:34:04**	-0.26948859	-0.433889418	0.398350144
13:34:08	-0.269931957	-0.427651164	0.397633097	**13:34:12**	-0.270375325	-0.42141291	0.396916049
13:34:16	-0.270818692	-0.413726353	0.396199002	**13:34:20**	-0.271262059	-0.404591476	0.395481955
13:34:24	-0.271705427	-0.395456598	0.394764907	**13:34:28**	-0.272148794	-0.403822262	0.39404786
13:34:32	-0.272592162	-0.412187908	0.393330813	**13:34:36**	-0.273035529	-0.41996906	0.392613765
13:34:40	-0.273478897	-0.4271657	0.391896718	**13:34:44**	-0.273922264	-0.43436234	0.391179671
13:34:48	-0.274365632	-0.433033841	0.390462623	**13:34:52**	-0.274808999	-0.431705324	0.389745576
13:34:56	-0.275252367	-0.426295012	0.389028529	**13:35:00**	-0.275695734	-0.416802904	0.388311482
13:35:04	-0.276592396	-0.407580998	0.387594434	**13:35:08**	-0.277489057	-0.406929211	0.386877387
13:35:12	-0.278385719	-0.406277423	0.38616034	**13:35:16**	-0.27928238	-0.413099228	0.385443292
13:35:20	-0.280179042	-0.427394608	0.384726245	**13:35:24**	-0.281075703	-0.441689988	0.384009198
13:35:28	-0.281972365	-0.45675712	0.38329215	**13:35:32**	-0.282869026	-0.471824234	0.382575103
13:35:36	-0.283744028	-0.483647321	0.381858056	**13:35:40**	-0.284605579	-0.494385318	0.381141008
13:35:44	-0.285467131	-0.505123314	0.380423961	**13:35:48**	-0.286328683	-0.511679429	0.379706914
13:35:52	-0.287190235	-0.518235543	0.378989866	**13:35:56**	-0.288051787	-0.521710761	0.378272819
13:36:00	-0.288913338	-0.522105047	0.377555772	**13:36:04**	-0.288876234	-0.521963657	0.376838724
13:36:08	-0.288839131	-0.530584317	0.376121677	**13:36:12**	-0.288802027	-0.539204976	0.37540463
13:36:16	-0.288085209	-0.542149824	0.375608537	**13:36:20**	-0.286275663	-0.539172667	0.377292998
13:36:24	-0.284466117	-0.536195511	0.37897746	**13:36:28**	-0.28265657	-0.53948361	0.380661922
13:36:32	-0.280847024	-0.542771709	0.382346383	**13:36:36**	-0.279037478	-0.54398045	0.384030845
13:36:40	-0.277227932	-0.543109832	0.385715307	**13:36:44**	-0.275418386	-0.545110559	0.387399768
13:36:48	-0.273608839	-0.555725354	0.38908423	**13:36:52**	-0.271799293	-0.566340149	0.390768692
13:36:56	-0.269989747	-0.576954944	0.392453153	**13:37:00**	-0.268180201	-0.58756974	0.394137615
13:37:04	-0.26685598	-0.59847383	0.395822077	**13:37:08**	-0.26553176	-0.610976566	0.397506538

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:37:12	-0.26420754	-0.623479302	0.399191	**13:37:16**	-0.26288332	-0.629816941	0.400875461
13:37:20	-0.261559099	-0.629989552	0.402559923	**13:37:24**	-0.260234879	-0.630162164	0.404244385
13:37:28	-0.258910659	-0.638659244	0.405928846	**13:37:32**	-0.257586439	-0.647156323	0.407613308
13:37:36	-0.256262218	-0.652649392	0.40929777	**13:37:40**	-0.254937998	-0.65513845	0.410982231
13:37:44	-0.253613778	-0.657627507	0.412666693	**13:37:48**	-0.252618031	-0.642331038	0.413906101
13:37:52	-0.2533585	-0.628069464	0.412793084	**13:37:56**	-0.254098969	-0.616129843	0.411680067
13:38:00	-0.254839438	-0.606512105	0.41056705	**13:38:04**	-0.255832557	-0.597045003	0.409454033
13:38:08	-0.256825677	-0.587577865	0.408341015	**13:38:12**	-0.257818797	-0.578110728	0.407227998
13:38:16	-0.258811916	-0.569142708	0.406114981	**13:38:20**	-0.259805036	-0.560673769	0.405001964
13:38:24	-0.260798156	-0.552204795	0.403888947	**13:38:28**	-0.261791275	-0.543735856	0.40277593
13:38:32	-0.262784395	-0.535266917	0.401662913	**13:38:36**	-0.263777514	-0.531989961	0.400549895
13:38:40	-0.264770634	-0.530443678	0.399436878	**13:38:44**	-0.265763754	-0.528897395	0.398323861
13:38:48	-0.266756873	-0.522055774	0.397210844	**13:38:52**	-0.267749993	-0.515214118	0.396097827
13:38:56	-0.268743113	-0.514574084	0.39498481	**13:39:00**	-0.269736232	-0.5201356	0.393871793
13:39:04	-0.270650164	-0.52564995	0.392758776	**13:39:08**	-0.271564096	-0.535897917	0.391645758
13:39:12	-0.272478028	-0.546145885	0.390532741	**13:39:16**	-0.27339196	-0.54862414	0.389419724
13:39:20	-0.274305892	-0.543332683	0.388306707	**13:39:24**	-0.275219824	-0.536572263	0.38719369
13:39:28	-0.274755183	-0.524583136	0.387948522	**13:39:32**	-0.273819847	-0.512313435	0.389341106
13:39:36	-0.27288451	-0.498903311	0.390733691	**13:39:40**	-0.271949174	-0.484352835	0.392126275
13:39:44	-0.271013838	-0.46980236	0.39351886	**13:39:48**	-0.270078502	-0.460251297	0.394911444
13:39:52	-0.269143165	-0.4507002	0.396304029	**13:39:56**	-0.268207829	-0.438669629	0.397696613
13:40:00	-0.267272493	-0.424159533	0.399089198	**13:40:04**	-0.266014542	-0.409457149	0.400481782
13:40:08	-0.264756592	-0.387654657	0.401874367	**13:40:12**	-0.263498642	-0.365852165	0.403266951
13:40:16	-0.262240691	-0.34249242	0.404659536	**13:40:20**	-0.260982741	-0.317575421	0.40605212
13:40:24	-0.25972479	-0.292658404	0.407444705	**13:40:28**	-0.25846684	-0.273671316	0.408837289
13:40:32	-0.25720889	-0.254684219	0.410229874	**13:40:36**	-0.255950939	-0.236480927	0.411622458
13:40:40	-0.254692989	-0.219061427	0.413015043	**13:40:44**	-0.253451728	-0.20165188	0.414407627
13:40:48	-0.252219134	-0.17335451	0.415800212	**13:40:52**	-0.25098654	-0.145057141	0.417192796
13:40:56	-0.249753946	-0.120418191	0.418585381	**13:41:00**	-0.248521352	-0.099437661	0.419977965
13:41:04	-0.247211143	-0.078410869	0.42137055	**13:41:08**	-0.245900933	-0.065235827	0.422763134
13:41:12	-0.244590724	-0.05206078	0.424155719	**13:41:16**	-0.243280514	-0.035785545	0.425548303
13:41:20	-0.241970304	-0.016410102	0.426940888	**13:41:24**	-0.240660095	0.002965332	0.428333472
13:41:28	-0.239349885	0.020950492	0.429726057	**13:41:32**	-0.238039676	0.038935642	0.431118641
13:41:36	-0.236729466	0.062600293	0.432511226	**13:41:40**	-0.235815199	0.09170841	0.433367342
13:41:44	-0.235822185	0.113588724	0.432975238	**13:41:48**	-0.235829172	0.115433066	0.432583134
13:41:52	-0.235836158	0.117277407	0.432191029	**13:41:56**	-0.235843145	0.12718211	0.431798925
13:42:00	-0.235850131	0.145147155	0.431406821	**13:42:04**	-0.235108431	0.163558481	0.431014716
13:42:08	-0.23436673	0.177345157	0.430622612	**13:42:12**	-0.233625029	0.191131798	0.430230508
13:42:16	-0.232883329	0.20638225	0.429838403	**13:42:20**	-0.232141628	0.223096479	0.429446299
13:42:24	-0.231399928	0.239810707	0.429054195	**13:42:28**	-0.230658227	0.249529835	0.42866209
13:42:32	-0.229916527	0.259248963	0.428269986	**13:42:36**	-0.229174826	0.268968091	0.427877882
13:42:40	-0.228433125	0.278687219	0.427485777	**13:42:44**	-0.227691425	0.288406347	0.427093673
13:42:48	-0.226949724	0.29639299	0.426701569	**13:42:52**	-0.226208024	0.304379598	0.426309464
13:42:56	-0.225466323	0.303854639	0.42591736	**13:43:00**	-0.224724622	0.294818043	0.425525256
13:43:04	-0.224889713	0.285240959	0.425133151	**13:43:08**	-0.225054804	0.265665509	0.424741047
13:43:12	-0.225219895	0.246090058	0.424348943	**13:43:16**	-0.225384985	0.229224827	0.423956838
13:43:20	-0.225550076	0.215069885	0.423564734	**13:43:24**	-0.225715167	0.200914907	0.42317263
13:43:28	-0.225880257	0.184420816	0.422780525	**13:43:32**	-0.226045348	0.167926725	0.422388421
13:43:36	-0.226210439	0.155830996	0.421996317	**13:43:40**	-0.22637553	0.156930373	0.421604212
13:43:44	-0.22654062	0.15802975	0.421212108	**13:43:48**	-0.226622088	0.157002211	0.420933306
13:43:52	-0.225311962	0.156804198	0.422539995	**13:43:56**	-0.224001835	0.157956319	0.424146685
13:44:00	-0.222691709	0.160458612	0.425753375	**13:44:04**	-0.221097352	0.162387073	0.427360065
13:44:08	-0.219502994	0.162085814	0.428966755	**13:44:12**	-0.217908637	0.161784556	0.430573444
13:44:16	-0.21631428	0.164180513	0.432180134	**13:44:20**	-0.214719922	0.169273684	0.433786824
13:44:24	-0.213125565	0.174366855	0.435393514	**13:44:28**	-0.211531208	0.173668343	0.437000204
13:44:32	-0.20993685	0.17296983	0.438606894	**13:44:36**	-0.208342493	0.166851965	0.440213583
13:44:40	-0.206748136	0.155314728	0.441820273	**13:44:44**	-0.205153778	0.143777473	0.443426963

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:44:48	-0.203559421	0.124845892	0.445033653	**13:44:52**	-0.201965064	0.10591431	0.446640343
13:44:56	-0.200370707	0.089349627	0.448247032	**13:45:00**	-0.698776349	-0.424848158	-0.050146278
13:45:04	-0.698015522	-0.439542816	-0.048539588	**13:45:08**	-0.697254695	-0.452810542	-0.046932898
13:45:12	-0.196493868	0.033921715	0.454673792	**13:45:16**	-0.195733041	0.024001099	0.456280482
13:45:20	-0.194972214	0.017427583	0.457887171	**13:45:24**	-0.194211387	0.010854068	0.459493861
13:45:28	-0.193644457	-0.002200047	0.460837838	**13:45:32**	-0.193337025	-0.015408846	0.461830215
13:45:36	-0.193029594	-0.029925296	0.462822592	**13:45:40**	-0.192722162	-0.045749415	0.46381497
13:45:44	-0.192414731	-0.061573533	0.464807347	**13:45:48**	-0.192107299	-0.083809173	0.465799724
13:45:52	-0.191779406	-0.106032615	0.466792102	**13:45:56**	-0.191442718	-0.128783859	0.467784479
13:46:00	-0.191106031	-0.152068145	0.468776856	**13:46:04**	-0.191118569	-0.1755606	0.469769234
13:46:08	-0.191131107	-0.190656226	0.470761611	**13:46:12**	-0.191143645	-0.205751848	0.471753988
13:46:16	-0.191156183	-0.214282781	0.472746366	**13:46:20**	-0.191168721	-0.216249027	0.473738743
13:46:24	-0.191181259	-0.218215272	0.47473112	**13:46:28**	-0.191193797	-0.228563819	0.475723497
13:46:32	-0.191206335	-0.238912357	0.476715875	**13:46:36**	-0.191218873	-0.251825389	0.477708252
13:46:40	-0.191231411	-0.26559325	0.478700629	**13:46:44**	-0.191243949	-0.28160196	0.479693007
13:46:48	-0.191256487	-0.304333224	0.480685384	**13:46:52**	-0.191269025	-0.327064488	0.481677761
13:46:56	-0.191281563	-0.337437097	0.482670139	**13:47:00**	-0.191294101	-0.335451033	0.483662516
13:47:04	-0.190696315	-0.333101183	0.484654893	**13:47:08**	-0.19009853	-0.332760273	0.485647271
13:47:12	-0.189500745	-0.332419362	0.486639648	**13:47:16**	-0.18890296	-0.330131457	0.487632025
13:47:20	-0.188305175	-0.325896542	0.488624403	**13:47:24**	-0.187707389	-0.321661644	0.48961678
13:47:28	-0.187109604	-0.324603632	0.490609157	**13:47:32**	-0.186511819	-0.327545621	0.491601535
13:47:36	-0.185914034	-0.339947207	0.492593912	**13:47:40**	-0.185316248	-0.36180839	0.493586289
13:47:44	-0.184718463	-0.383669573	0.494578666	**13:47:48**	-0.184120678	-0.412762589	0.495571044
13:47:52	-0.183522893	-0.441855659	0.496563421	**13:47:56**	-0.182925108	-0.464987107	0.497555798
13:48:00	-0.182327322	-0.482157006	0.498548176	**13:48:04**	-0.18175026	-0.499339257	0.497511784
13:48:08	-0.181177345	-0.51652398	0.496469774	**13:48:12**	-0.18060443	-0.533708703	0.495427763
13:48:16	-0.180031515	-0.548716682	0.494385752	**13:48:20**	-0.1794586	-0.561547916	0.493343742
13:48:24	-0.178885684	-0.57437915	0.492301731	**13:48:28**	-0.178312769	-0.577173363	0.49125972
13:48:32	-0.177739854	-0.579967576	0.49021771	**13:48:36**	-0.177166939	-0.582761753	0.489175699
13:48:40	-0.176594024	-0.585555966	0.488133688	**13:48:44**	-0.176021109	-0.588350179	0.487091678
13:48:48	-0.175448194	-0.583250824	0.486049667	**13:48:52**	-0.174875279	-0.578151469	0.485007656
13:48:56	-0.174302364	-0.570839947	0.483965646	**13:49:00**	-0.173729448	-0.561316221	0.482923635
13:49:04	-0.174232017	-0.552433647	0.481881625	**13:49:08**	-0.174734586	-0.543551001	0.480839614
13:49:12	-0.175237155	-0.534668426	0.479797603	**13:49:16**	-0.175739724	-0.524144748	0.478755593
13:49:20	-0.176242293	-0.511980003	0.477713582	**13:49:24**	-0.176744862	-0.499815257	0.476671571
13:49:28	-0.177247431	-0.476670362	0.475629561	**13:49:32**	-0.17775	-0.453525467	0.47458755
13:49:36	-0.178252569	-0.429159853	0.473545539	**13:49:40**	-0.178755138	-0.403573519	0.472503529
13:49:44	-0.179257707	-0.377987168	0.471461518	**13:49:48**	-0.179760276	-0.363019046	0.470419508
13:49:52	-0.180262845	-0.348050941	0.469377497	**13:49:56**	-0.180765414	-0.330560959	0.468335486
13:50:00	-0.181267983	-0.310549136	0.467293476	**13:50:04**	-0.183181816	-0.291378546	0.466081421
13:50:08	-0.185248135	-0.273625233	0.464662761	**13:50:12**	-0.187314454	-0.25587193	0.463244101
13:50:16	-0.189380773	-0.246619187	0.461825442	**13:50:20**	-0.191447092	-0.245867006	0.460406782
13:50:24	-0.193513411	-0.245114834	0.458988122	**13:50:28**	-0.19557973	-0.239171602	0.457569462
13:50:32	-0.197646049	-0.233228379	0.456150803	**13:50:36**	-0.199712368	-0.229120694	0.454732143
13:50:40	-0.201778687	-0.226848565	0.453313483	**13:50:44**	-0.203845005	-0.224576427	0.451894824
13:50:48	-0.205911324	-0.223584662	0.450476164	**13:50:52**	-0.207977643	-0.222592897	0.449057504
13:50:56	-0.210043962	-0.219041878	0.447638844	**13:51:00**	-0.212103084	-0.212927305	0.446220185
13:51:04	-0.213261919	-0.206276095	0.444801525	**13:51:08**	-0.214420754	-0.199008983	0.443382865
13:51:12	-0.215579589	-0.191741875	0.441964206	**13:51:16**	-0.216738424	-0.185067801	0.440545546
13:51:20	-0.21789726	-0.178986763	0.439126886	**13:51:24**	-0.219056095	-0.172905724	0.437708227
13:51:28	-0.22021493	-0.17084835	0.436289567	**13:51:32**	-0.221373765	-0.168790977	0.434870907
13:51:36	-0.2225326	-0.167074972	0.433452247	**13:51:40**	-0.223025728	-0.16530352	0.432935564
13:51:44	-0.223355262	-0.163434552	0.432640538	**13:51:48**	-0.223684795	-0.15257408	0.432345512
13:51:52	-0.224014328	-0.141713609	0.432050486	**13:51:56**	-0.224343862	-0.124488851	0.43175546
13:52:00	-0.224673395	-0.100899804	0.431460434	**13:52:04**	-0.224465622	-0.076990478	0.431165407
13:52:08	-0.224257849	-0.045697054	0.430870381	**13:52:12**	-0.224050076	-0.014403639	0.430575355
13:52:16	-0.223842304	0.017495898	0.430280329	**13:52:20**	-0.223634531	0.050001568	0.429985303

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
13:52:24	-0.223426758	0.082507219	0.429690277	**13:52:28**	-0.223218985	0.109036523	0.429395251
13:52:32	-0.223011212	0.135565809	0.429100225	**13:52:36**	-0.22280344	0.153979096	0.428805199
13:52:40	-0.222595667	0.164276347	0.428510173	**13:52:44**	-0.222387894	0.174573598	0.428215146
13:52:48	-0.222180121	0.190318022	0.42792012	**13:52:52**	-0.221972348	0.206062481	0.427625094
13:52:56	-0.221764576	0.217505005	0.427330068	**13:53:00**	-0.221556803	0.224645664	0.427035042
13:53:04	-0.221940995	0.231433426	0.426740016	**13:53:08**	-0.222325187	0.229567078	0.42644499
13:53:12	-0.222709379	0.227700765	0.426149964	**13:53:16**	-0.223093572	0.226739031	0.425854938
13:53:20	-0.223477764	0.226681912	0.425559912	**13:53:24**	-0.223861956	0.226624792	0.425264886
13:53:28	-0.224246148	0.225981224	0.424969859	**13:53:32**	-0.22463034	0.225337691	0.424674833
13:53:36	-0.225014533	0.225256376	0.424379807	**13:53:40**	-0.225398725	0.22686189	0.424084781
13:53:44	-0.225782917	0.228467404	0.423789755	**13:53:48**	-0.226167109	0.229255956	0.423494729
13:53:52	-0.226551302	0.230044542	0.423199703	**13:53:56**	-0.226935494	0.225062194	0.422904677
13:54:00	-0.227319686	0.214308912	0.422609651	**13:54:04**	-0.226850973	0.204064032	0.422314625
13:54:08	-0.226382261	0.196692558	0.422019598	**13:54:12**	-0.225913548	0.189321084	0.421724572
13:54:16	-0.225444835	0.184904839	0.421429546	**13:54:20**	-0.224976123	0.183443895	0.42113452
13:54:24	-0.22450741	0.18198295	0.420839494	**13:54:28**	-0.224038698	0.18178028	0.420544468
13:54:32	-0.223569985	0.181577573	0.420249442	**13:54:36**	-0.223101272	0.18384409	0.419954416
13:54:40	-0.22263256	0.188579829	0.41965939	**13:54:44**	-0.222163847	0.193315532	0.419364364
13:54:48	-0.221695134	0.193522729	0.419069338	**13:54:52**	-0.221226422	0.193729925	0.418774311
13:54:56	-0.220757709	0.191796724	0.418479285	**13:55:00**	-0.220288996	0.187723125	0.418184259
13:55:04	-0.221001594	0.182945365	0.417889233	**13:55:08**	-0.221790597	0.17569256	0.417490684
13:55:12	-0.223522759	0.167877553	0.415814234	**13:55:16**	-0.225254921	0.149905559	0.414137785
13:55:20	-0.226987083	0.121776633	0.412461335	**13:55:24**	-0.228719245	0.093647688	0.410784885
13:55:28	-0.230451408	0.066101319	0.409108435	**13:55:32**	-0.23218357	0.038554932	0.407431985
13:55:36	-0.233915732	0.013376705	0.405755535	**13:55:40**	-0.235647894	-0.00943339	0.404079085
13:55:44	-0.237380056	-0.032243476	0.402402635	**13:55:48**	-0.239112219	-0.043000993	0.400726185
13:55:52	-0.240844381	-0.05375851	0.399049735	**13:55:56**	-0.242576543	-0.066755455	0.397373286
13:56:00	-0.244308705	-0.081991826	0.395696836	**13:56:04**	-0.242758245	-0.095271478	0.395881844
13:56:08	-0.240796499	-0.104794499	0.396603527	**13:56:12**	-0.238830445	-0.11431495	0.397325211
13:56:16	-0.236864391	-0.121116825	0.398046894	**13:56:20**	-0.234898337	-0.125200118	0.398768578
13:56:24	-0.232932284	-0.129283412	0.399490261	**13:56:28**	-0.23096623	-0.128389919	0.400211944
13:56:32	-0.229000176	-0.127496427	0.400933628	**13:56:36**	-0.227034122	-0.116109782	0.401655311
13:56:40	-0.225068068	-0.094229985	0.402376995	**13:56:44**	-0.223102014	-0.072350186	0.403098678
13:56:48	-0.221135961	-0.063729796	0.403820361	**13:56:52**	-0.219169907	-0.055109406	0.404542045
13:56:56	-0.217203853	-0.045599316	0.405263728	**13:57:00**	-0.215237799	-0.035199516	0.405985412
13:57:04	-0.214076492	-0.025279422	0.406707095	**13:57:08**	-0.212915184	-0.015359327	0.407428778
13:57:12	-0.211753876	-0.005439224	0.408150462	**13:57:16**	-0.210592569	0.008368471	0.408872145
13:57:20	-0.209431261	0.026063767	0.409593829	**13:57:24**	-0.208269954	0.043759063	0.410315512
13:57:28	-0.207108646	0.054042428	0.411037195	**13:57:32**	-0.205947339	0.06432581	0.411758879
13:57:36	-0.204786031	0.065064342	0.412480562	**13:57:40**	-0.203624724	0.05625806	0.413202246
13:57:44	-0.202463416	0.047451777	0.413923929	**13:57:48**	-0.201302109	0.035566606	0.414645612
13:57:52	-0.200140801	0.023681443	0.415367296	**13:57:56**	-0.198979493	0.012592582	0.416088979
13:58:00	-0.197818186	0.002300034	0.416810663	**13:58:04**	-0.199512404	-0.009694649	0.417532346
13:58:08	-0.201206623	-0.020479432	0.418254029	**13:58:12**	-0.202900841	-0.031264215	0.418975713
13:58:16	-0.20459506	-0.041503799	0.419697396	**13:58:20**	-0.206289278	-0.051198184	0.42041908
13:58:24	-0.207983497	-0.060892569	0.421140763	**13:58:28**	-0.209677715	-0.073808317	0.421862446
13:58:32	-0.211371934	-0.086724065	0.42258413	**13:58:36**	-0.213066152	-0.092740681	0.423305813
13:58:40	-0.21476037	-0.091858169	0.424027497	**13:58:44**	-0.216454589	-0.090975657	0.42474918
13:58:48	-0.218148807	-0.104640023	0.425470863	**13:58:52**	-0.219843026	-0.118304389	0.426192547
13:58:56	-0.221537244	-0.130790968	0.42691423	**13:59:00**	-0.223231463	-0.142099759	0.427635914
13:59:04	-0.222289242	-0.15183701	0.428357597	**13:59:08**	-0.221347022	-0.146581948	0.42907928
13:59:12	-0.220404802	-0.141326888	0.429800964	**13:59:16**	-0.219462582	-0.138202895	0.430522647
13:59:20	-0.218335256	-0.137099632	0.431495133	**13:59:24**	-0.217197885	-0.13599038	0.43248123
13:59:28	-0.216060513	-0.130289482	0.433467327	**13:59:32**	-0.214923141	-0.124588585	0.434453424
13:59:36	-0.21378577	-0.11178401	0.435439521	**13:59:40**	-0.212648398	-0.091875758	0.436425618
13:59:44	-0.211511026	-0.071967507	0.437411715	**13:59:48**	-0.210373655	-0.052738494	0.438397812
13:59:52	-0.209236283	-0.03350948	0.43938391	**13:59:56**	-0.208098911	-0.015027202	0.440370007

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:00:00	0.293038461	0.545143699	0.941356104	**14:00:04**	0.293295101	0.540085279	0.942342201
14:00:08	0.293551742	0.53502684	0.943328298	**14:00:12**	-0.206191618	0.02996842	0.444314395
14:00:16	-0.205934978	0.024909991	0.445300492	**14:00:20**	-0.205678337	0.019477694	0.44628659
14:00:24	-0.205421697	0.013671531	0.447272687	**14:00:28**	-0.205165056	0.007865368	0.448258784
14:00:32	-0.204908416	0.002059204	0.449244881	**14:00:36**	-0.204651775	-0.003746959	0.450230978
14:00:40	-0.204395135	-0.009338507	0.451217075	**14:00:44**	-0.204138494	-0.014715422	0.452203172
14:00:48	-0.203881854	-0.020092345	0.45318927	**14:00:52**	-0.203625213	-0.023080165	0.454175367
14:00:56	-0.203368573	-0.026067985	0.455161464	**14:01:00**	-0.203111932	-0.037956907	0.456147561
14:01:04	-0.202068068	-0.05827767	0.457133658	**14:01:08**	-0.201024204	-0.078598433	0.458119755
14:01:12	-0.199980339	-0.104030174	0.459105852	**14:01:16**	-0.19875714	-0.129355015	0.46009195
14:01:20	-0.197493061	-0.147754741	0.461078047	**14:01:24**	-0.196228983	-0.159253714	0.462064144
14:01:28	-0.195758649	-0.171225831	0.461974783	**14:01:32**	-0.195737831	-0.17403673	0.461276368
14:01:36	-0.195717013	-0.176847625	0.460577952	**14:01:40**	-0.195696195	-0.176997549	0.459879537
14:01:44	-0.195675377	-0.174486504	0.459181121	**14:01:48**	-0.195654559	-0.171975453	0.458482706
14:01:52	-0.195633741	-0.168510243	0.45778429	**14:01:56**	-0.195612923	-0.165045029	0.457085875
14:02:00	-0.195592105	-0.162654614	0.456387459	**14:02:04**	-0.193857622	-0.16031751	0.455689044
14:02:08	-0.192123139	-0.157980407	0.454990628	**14:02:12**	-0.190388655	-0.156136056	0.454292213
14:02:16	-0.188654172	-0.1542917	0.453593797	**14:02:20**	-0.186919689	-0.150329548	0.452895382
14:02:24	-0.185185206	-0.14424959	0.452196966	**14:02:28**	-0.183450722	-0.138169632	0.451498551
14:02:32	-0.181716239	-0.135148068	0.450800135	**14:02:36**	-0.179981756	-0.132126501	0.450101719
14:02:40	-0.178247273	-0.130782404	0.449403304	**14:02:44**	-0.176512789	-0.131115773	0.448704888
14:02:48	-0.174778306	-0.131449141	0.448006473	**14:02:52**	-0.173043823	-0.134978875	0.447308057
14:02:56	-0.17130934	-0.138508608	0.446609642	**14:03:00**	-0.169574856	-0.143086972	0.445911226
14:03:04	-0.170258683	-0.150155483	0.44522573	**14:03:08**	-0.16872685	-0.155903274	0.447542265
14:03:12	-0.167195016	-0.162498068	0.449858799	**14:03:16**	-0.165663183	-0.169092862	0.452175334
14:03:20	-0.16413135	-0.175007433	0.454491869	**14:03:24**	-0.162599516	-0.180241788	0.456808404
14:03:28	-0.161067683	-0.185476143	0.459124939	**14:03:32**	-0.15953585	-0.187964715	0.461441474
14:03:36	-0.158004016	-0.190453287	0.463758009	**14:03:40**	-0.156472183	-0.192365945	0.466074543
14:03:44	-0.15494035	-0.193702681	0.468391078	**14:03:48**	-0.153408516	-0.195039416	0.470707613
14:03:52	-0.151876683	-0.245270528	0.473024148	**14:03:56**	-0.15034485	-0.295501631	0.475340683
14:04:00	-0.148813016	-0.332539156	0.477657218	**14:04:04**	-0.145603317	-0.355382953	0.479973753
14:04:08	-0.142393618	-0.37822675	0.482290287	**14:04:12**	-0.139183919	-0.376300796	0.484606822
14:04:16	-0.136782633	-0.374856726	0.486923357	**14:04:20**	-0.134486742	-0.372360211	0.489174327
14:04:24	-0.132522417	-0.368946105	0.490976053	**14:04:28**	-0.130558092	-0.365531981	0.492777779
14:04:32	-0.128593767	-0.363259772	0.494579505	**14:04:36**	-0.126629441	-0.360987546	0.496381232
14:04:40	-0.124665116	-0.360683524	0.498182958	**14:04:44**	-0.122700791	-0.362347671	0.499984684
14:04:48	-0.120736465	-0.364011836	0.50178641	**14:04:52**	-0.11877214	-0.369328761	0.503588137
14:04:56	-0.116807815	-0.374645669	0.505389863	**14:05:00**	-0.114843489	-0.381085696	0.507191589
14:05:04	-0.11454122	-0.389639534	0.508993315	**14:05:08**	-0.11423895	-0.398193407	0.510795042
14:05:12	-0.11393668	-0.408030567	0.512596768	**14:05:16**	-0.11363441	-0.417867726	0.514398494
14:05:20	-0.11333214	-0.427704886	0.51620022	**14:05:24**	-0.11302987	-0.43754201	0.518001947
14:05:28	-0.112727601	-0.446866374	0.519803673	**14:05:32**	-0.112425331	-0.454652279	0.521605399
14:05:36	-0.112123061	-0.462438184	0.523407125	**14:05:40**	-0.111926725	-0.470468967	0.52506532
14:05:44	-0.113309489	-0.479622761	0.524583969	**14:05:48**	-0.114692253	-0.488776554	0.524102617
14:05:52	-0.116075017	-0.497930383	0.523621265	**14:05:56**	-0.117457781	-0.507084176	0.523139914
14:06:00	-0.118840545	-0.515372473	0.522658562	**14:06:04**	-0.119638675	-0.522446783	0.522177211
14:06:08	-0.120436805	-0.529521057	0.521695859	**14:06:12**	-0.121234936	-0.531458703	0.521214508
14:06:16	-0.122033066	-0.533396349	0.520733156	**14:06:20**	-0.122831197	-0.533271727	0.520251805
14:06:24	-0.123149346	-0.530798761	0.519770453	**14:06:28**	-0.123393941	-0.528281916	0.519289101
14:06:32	-0.123638535	-0.52576507	0.51880775	**14:06:36**	-0.12388313	-0.52324826	0.518326398
14:06:40	-0.124127725	-0.521003641	0.517845047	**14:06:44**	-0.124372319	-0.519031284	0.517363695
14:06:48	-0.124616914	-0.517058926	0.516882344	**14:06:52**	-0.124861509	-0.534884583	0.516400992
14:06:56	-0.125106103	-0.552710241	0.515919641	**14:07:00**	-0.125350698	-0.556794652	0.515438289
14:07:04	-0.125898952	-0.547318859	0.514956937	**14:07:08**	-0.126447207	-0.537843031	0.514475586
14:07:12	-0.126995461	-0.538264914	0.513994234	**14:07:16**	-0.127543715	-0.538686832	0.513512883
14:07:20	-0.128091969	-0.540466649	0.513031531	**14:07:24**	-0.128640224	-0.543604434	0.51255018
14:07:28	-0.129188478	-0.54674222	0.512068828	**14:07:32**	-0.129736732	-0.54987997	0.511587477

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:07:36	-0.130284987	-0.553017756	0.511106125	**14:07:40**	-0.130833241	-0.5552343	0.510624774
14:07:44	-0.131381495	-0.556529673	0.510143422	**14:07:48**	-0.131929749	-0.55782501	0.50966207
14:07:52	-0.132478004	-0.557333858	0.509180719	**14:07:56**	-0.133026258	-0.556842671	0.508699367
14:08:00	-0.133574512	-0.554558634	0.508218016	**14:08:04**	-0.133365655	-0.550030374	0.507736664
14:08:08	-0.133156797	-0.545502114	0.507255313	**14:08:12**	-0.13294794	-0.53726661	0.506773961
14:08:16	-0.132739082	-0.52903107	0.50629261	**14:08:20**	-0.132530225	-0.518668597	0.505811258
14:08:24	-0.132321367	-0.506179157	0.505329906	**14:08:28**	-0.13211251	-0.493689717	0.504848555
14:08:32	-0.131903653	-0.479874355	0.504367203	**14:08:36**	-0.131694795	-0.466058993	0.503885852
14:08:40	-0.131485938	-0.451117491	0.5034045	**14:08:44**	-0.13127708	-0.435049849	0.502923149
14:08:48	-0.131068223	-0.418982207	0.502441797	**14:08:52**	-0.130859365	-0.400029968	0.501960446
14:08:56	-0.130650508	-0.381077729	0.501479094	**14:09:00**	-0.13044165	-0.361062682	0.500997743
14:09:04	-0.130113104	-0.339913498	0.500516391	**14:09:08**	-0.129784557	-0.318764296	0.500035039
14:09:12	-0.12945601	-0.29655829	0.499553688	**14:09:16**	-0.128494172	-0.273974789	0.499930392
14:09:20	-0.127265938	-0.251232476	0.50066804	**14:09:24**	-0.126037705	-0.228490181	0.501405687
14:09:28	-0.124809471	-0.205747886	0.502143335	**14:09:32**	-0.123581237	-0.183829837	0.502880982
14:09:36	-0.122353004	-0.161911788	0.50361863	**14:09:40**	-0.12112477	-0.140795936	0.504356278
14:09:44	-0.119896536	-0.12048228	0.505093925	**14:09:48**	-0.118668303	-0.100168624	0.505831573
14:09:52	-0.117440069	-0.047363451	0.50656922	**14:09:56**	-0.116211836	0.005441717	0.507306868
14:10:00	-0.114983602	0.083670887	0.508044516	**14:10:04**	-0.113807832	0.187292757	0.508782163
14:10:08	-0.112632062	0.290914644	0.509519811	**14:10:12**	-0.111456292	0.352118455	0.510257459
14:10:16	-0.110280522	0.41332223	0.510995106	**14:10:20**	-0.109104751	0.456881925	0.511732754
14:10:24	-0.107928981	0.482797469	0.512470401	**14:10:28**	-0.106753211	0.508713049	0.513208049
14:10:32	-0.105577441	0.512456468	0.513945697	**14:10:36**	-0.104401671	0.516199887	0.514683344
14:10:40	-0.103225901	0.514966418	0.515420992	**14:10:44**	-0.102050131	0.50875606	0.516158639
14:10:48	-0.100874361	0.502545739	0.516896287	**14:10:52**	-0.099698591	0.491389014	0.517633935
14:10:56	-0.098522821	0.480232289	0.518371582	**14:11:00**	-0.09734705	0.467787303	0.51910923
14:11:04	-0.095566355	0.454414714	0.519846878	**14:11:08**	-0.09378566	0.441042053	0.520584525
14:11:12	-0.092004965	0.427669464	0.521322173	**14:11:16**	-0.09022427	0.414296804	0.52205982
14:11:20	-0.088443575	0.401139168	0.522797468	**14:11:24**	-0.08666288	0.38819652	0.523535116
14:11:28	-0.084882184	0.375253873	0.524272763	**14:11:32**	-0.082419101	0.36271795	0.525010411
14:11:36	-0.079886765	0.350223344	0.525748059	**14:11:40**	-0.077354428	0.338310248	0.526485706
14:11:44	-0.074822092	0.326978697	0.527223354	**14:11:48**	-0.072289756	0.315647145	0.527961001
14:11:52	-0.06975742	0.307603023	0.528698649	**14:11:56**	-0.067225084	0.299558902	0.529436297
14:12:00	-0.064692748	0.292739052	0.530173944	**14:12:04**	-0.064520787	0.28573642	0.530911592
14:12:08	-0.064348826	0.278733824	0.531649239	**14:12:12**	-0.064176864	0.273247659	0.532386887
14:12:16	-0.064004903	0.267761494	0.533124535	**14:12:20**	-0.063832942	0.262275328	0.533862182
14:12:24	-0.063660981	0.256789145	0.53459983	**14:12:28**	-0.06348902	0.25130298	0.535337478
14:12:32	-0.063317059	0.247805022	0.536075125	**14:12:36**	-0.063145098	0.244307064	0.536812773
14:12:40	-0.062973136	0.241667923	0.53755042	**14:12:44**	-0.063145223	0.239682518	0.537821912
14:12:48	-0.063683942	0.237478568	0.537596649	**14:12:52**	-0.06422266	0.271085115	0.537371386
14:12:56	-0.064761379	0.304691661	0.537146123	**14:13:00**	-0.065300097	0.327655232	0.53692086
14:13:04	-0.064567102	0.340733912	0.536695597	**14:13:08**	-0.063834106	0.353812593	0.536470334
14:13:12	-0.063101111	0.343955799	0.536245071	**14:13:16**	-0.062368115	0.334098969	0.536019808
14:13:20	-0.06163512	0.322061629	0.535794545	**14:13:24**	-0.060902124	0.307843707	0.535569282
14:13:28	-0.060169129	0.293625821	0.535344019	**14:13:32**	-0.059436133	0.275910029	0.535118756
14:13:36	-0.058703137	0.258194255	0.534893493	**14:13:40**	-0.057970142	0.238738216	0.53466823
14:13:44	-0.057237146	0.21754191	0.534442967	**14:13:48**	-0.056504151	0.196345622	0.534217704
14:13:52	-0.055771155	0.175149335	0.533992441	**14:13:56**	-0.05503816	0.153953029	0.533767178
14:14:00	-0.054305164	0.133413929	0.533541915	**14:14:04**	-0.052286492	0.114298379	0.533316652
14:14:08	-0.050267819	0.095182829	0.533091389	**14:14:12**	-0.048249147	0.077688264	0.532866126
14:14:16	-0.046230474	0.060193708	0.532640863	**14:14:20**	-0.044211802	0.043118687	0.5324156
14:14:24	-0.042193129	0.026463216	0.532190337	**14:14:28**	-0.040174457	0.009807742	0.531965074
14:14:32	-0.038155784	-0.005091317	0.531739811	**14:14:36**	-0.036137112	-0.019990376	0.531514548
14:14:40	-0.034118439	-0.033112296	0.531289285	**14:14:44**	-0.032099767	-0.044457075	0.531064022
14:14:48	-0.030081094	-0.055801853	0.530838758	**14:14:52**	-0.028062422	-0.064000838	0.530613495
14:14:56	-0.026043749	-0.072199822	0.530388232	**14:15:00**	-0.524025077	-0.578766653	0.030162969
14:15:04	-0.522377335	-0.583922431	0.029937706	**14:15:08**	-0.520729593	-0.589078209	0.029712443

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:15:12	-0.019081852	-0.092109959	0.52948718	**14:15:16**	-0.01743411	-0.095141709	0.529261917
14:15:20	-0.015786368	-0.098173459	0.529036654	**14:15:24**	-0.014138626	-0.101205209	0.528811391
14:15:28	-0.012490885	-0.104236959	0.528586128	**14:15:32**	-0.010843143	-0.107268709	0.528360865
14:15:36	-0.009195401	-0.110300459	0.528135602	**14:15:40**	-0.007547659	-0.112797891	0.527910339
14:15:44	-0.005899917	-0.114761006	0.527685076	**14:15:48**	-0.004252176	-0.116724111	0.527459813
14:15:52	-0.002604434	-0.108370677	0.52723455	**14:15:56**	-0.000956692	-0.100017242	0.527009287
14:16:00	0.00069105	-0.099743274	0.526784024	**14:16:04**	0.002688279	-0.107340431	0.526558761
14:16:08	0.006482821	-0.113866237	0.528768705	**14:16:12**	0.010072828	-0.11792396	0.532844213
14:16:16	0.010868719	-0.123647211	0.536919721	**14:16:20**	0.01166461	-0.125670714	0.540995229
14:16:24	0.012460501	-0.123994486	0.545070737	**14:16:28**	0.013129044	-0.122394161	0.549146245
14:16:32	0.012211834	-0.11851553	0.553221754	**14:16:36**	0.011294624	-0.1146369	0.557297262
14:16:40	0.008318173	-0.111985742	0.56137277	**14:16:44**	0.00521905	-0.109407717	0.565448278
14:16:48	0.007815186	-0.103434835	0.569523786	**14:16:52**	0.033898947	-0.086667909	0.573599294
14:16:56	0.059982708	-0.069900983	0.577674802	**14:17:00**	0.086066469	-0.055162874	0.58175031
14:17:04	0.097336955	-0.051283556	0.585825818	**14:17:08**	0.116972155	-0.042418161	0.589901326
14:17:12	0.136607356	-0.035020273	0.593976834	**14:17:16**	0.156242557	-0.027622385	0.598052342
14:17:20	0.166200608	-0.025618016	0.602127851	**14:17:24**	0.148570728	-0.039683505	0.606203359
14:17:28	0.134325988	-0.051731165	0.610278867	**14:17:32**	0.145851	-0.048417875	0.614354375
14:17:36	0.157376011	-0.045104585	0.618429883	**14:17:40**	0.156770084	-0.050200249	0.606068997
14:17:44	0.14746394	-0.061659865	0.581920057	**14:17:48**	0.145924108	-0.068490113	0.56829381
14:17:52	0.159659716	-0.067432926	0.575364489	**14:17:56**	0.140162361	-0.086185376	0.582435167
14:18:00	0.143467087	-0.091345876	0.589505846	**14:18:04**	0.146192564	-0.09685164	0.596576525
14:18:08	0.148918041	-0.102357421	0.603647204	**14:18:12**	0.151643518	-0.107358809	0.610717882
14:18:16	0.154368995	-0.112360215	0.617788561	**14:18:20**	0.155591491	-0.118257508	0.62485924
14:18:24	0.153167465	-0.126328453	0.631929919	**14:18:28**	0.150743439	-0.13439938	0.639000598
14:18:32	0.148319413	-0.141677665	0.646071276	**14:18:36**	0.145895387	-0.148955967	0.653141955
14:18:40	0.126266916	-0.16564239	0.636902071	**14:18:44**	0.102391584	-0.184013157	0.61490805
14:18:48	0.083691045	-0.19929931	0.592914029	**14:18:52**	0.065762177	-0.200565933	0.570920008
14:18:56	0.047833309	-0.201832556	0.548925987	**14:19:00**	0.029904441	-0.2140759	0.526931966
14:19:04	0.012840313	-0.236780542	0.504937945	**14:19:08**	-0.004223816	-0.259485166	0.482943924
14:19:12	-0.021287944	-0.274012946	0.460949903	**14:19:16**	-0.038352072	-0.288540709	0.438955882
14:19:20	-0.012872842	-0.273721411	0.474604501	**14:19:24**	-0.010875007	-0.268911347	0.478437823
14:19:28	-0.008877172	-0.264101283	0.482271145	**14:19:32**	-0.006879337	-0.254650778	0.486104467
14:19:36	-0.004881502	-0.245200254	0.489937789	**14:19:40**	-0.002883667	-0.234138632	0.493771111
14:19:44	-0.000885832	-0.221465893	0.497604433	**14:19:48**	0.001112003	-0.208793155	0.501437755
14:19:52	0.003109839	-0.194657457	0.505271077	**14:19:56**	0.005107674	-0.180521777	0.509104399
14:20:00	0.007105509	-0.165744135	0.512937721	**14:20:04**	0.009011544	-0.150379268	0.517029922
14:20:08	0.012384488	-0.134140007	0.52310966	**14:20:12**	0.015757432	-0.115456368	0.529189399
14:20:16	0.019130376	-0.096772729	0.535269137	**14:20:20**	0.022503321	-0.077437348	0.541348876
14:20:24	0.025876265	-0.057450215	0.547428614	**14:20:28**	0.029249209	-0.037463086	0.553508353
14:20:32	0.032622153	-0.019289521	0.559588091	**14:20:36**	0.034749106	-0.001858674	0.563979616
14:20:40	0.0329036	0.012626086	0.562988797	**14:20:44**	0.031058094	0.026532678	0.561997979
14:20:48	0.029212588	0.040439269	0.56100716	**14:20:52**	0.027367082	0.052148997	0.560016341
14:20:56	0.025521576	0.063858722	0.559025522	**14:21:00**	0.02367607	0.073962376	0.558034703
14:21:04	0.020325045	0.081562543	0.557043884	**14:21:08**	0.016974021	0.089162704	0.556053066
14:21:12	0.013622996	0.094155221	0.555062247	**14:21:16**	0.010271972	0.099147738	0.554071428
14:21:20	0.006920947	0.103358795	0.553080609	**14:21:24**	0.003569922	0.106788391	0.55208979
14:21:28	0.001557388	0.11101584	0.551098972	**14:21:32**	0.000603233	0.114527475	0.550108153
14:21:36	-0.000350923	0.118039119	0.549117334	**14:21:40**	-0.001305078	0.120892376	0.548126515
14:21:44	-0.002259234	0.123087265	0.547135696	**14:21:48**	-0.003213389	0.125282145	0.546144878
14:21:52	-0.004167545	0.162472422	0.545154059	**14:21:56**	-0.0051217	0.1996627	0.54416324
14:22:00	-0.006075855	0.240813938	0.543172421	**14:22:04**	-0.006297893	0.286362575	0.542181602
14:22:08	-0.006519931	0.331911212	0.541190784	**14:22:12**	-0.006741968	0.34985654	0.540199965
14:22:16	-0.006964006	0.367801868	0.539209146	**14:22:20**	-0.007186044	0.379051146	0.538218327
14:22:24	-0.007408082	0.383604304	0.537227508	**14:22:28**	-0.007630119	0.388157498	0.53623669
14:22:32	-0.007852157	0.387067236	0.535245871	**14:22:36**	-0.008074195	0.385976975	0.534255052
14:22:40	-0.008296232	0.383705716	0.533264233	**14:22:44**	-0.00851827	0.380253531	0.532273414

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:22:48	-0.008740308	0.376801345	0.531282595	**14:22:52**	-0.008962346	0.373349125	0.530291777
14:22:56	-0.009184383	0.369896939	0.529300958	**14:23:00**	-0.009406421	0.366444718	0.528310139
14:23:04	-0.009345999	0.363160903	0.52731932	**14:23:08**	-0.009285576	0.359877053	0.526328501
14:23:12	-0.009225154	0.356593237	0.525337683	**14:23:16**	-0.009164731	0.353309422	0.524346864
14:23:20	-0.009104309	0.350385022	0.523356045	**14:23:24**	-0.012103605	0.345996259	0.518219568
14:23:28	-0.00118924	0.349901177	0.512373502	**14:23:32**	0.006425827	0.353713006	0.506527436
14:23:36	0.014479593	0.357786338	0.500681369	**14:23:40**	0.024462413	0.364193424	0.494835303
14:23:44	0.034445233	0.37178435	0.488989237	**14:23:48**	0.044428052	0.379375275	0.483143171
14:23:52	0.054410872	0.387831235	0.477297105	**14:23:56**	0.035550687	0.379094328	0.471451038
14:24:00	0.014003555	0.368755807	0.465604972	**14:24:04**	-0.009144632	0.357462888	0.459758906
14:24:08	-0.032292819	0.346169969	0.45391284	**14:24:12**	-0.036265861	0.344906025	0.448066774
14:24:16	-0.029194813	0.350225292	0.442220707	**14:24:20**	-0.022123764	0.354570023	0.436374641
14:24:24	-0.015052716	0.357940219	0.430528575	**14:24:28**	-0.007981668	0.361310414	0.424682509
14:24:32	-0.000910619	0.362867543	0.418836443	**14:24:36**	0.006160429	0.364424638	0.412990376
14:24:40	-0.01400293	0.349038344	0.40714431	**14:24:44**	-0.046494161	0.325594216	0.401298244
14:24:48	-0.044484136	0.322715752	0.413706318	**14:24:52**	-0.03967292	0.31858897	0.429909768
14:24:56	-0.029325952	0.317761927	0.455445965	**14:25:00**	-0.016723979	0.322098861	0.485723723
14:25:04	-0.024602122	0.318047716	0.48580672	**14:25:08**	-0.032480266	0.313996535	0.485889717
14:25:12	-0.040358409	0.30860984	0.485972714	**14:25:16**	-0.048236553	0.303223144	0.486055711
14:25:20	-0.056114697	0.296656233	0.486138707	**14:25:24**	-0.06399284	0.288909035	0.486221704
14:25:28	-0.070704124	0.281857384	0.486304701	**14:25:32**	-0.066943856	0.278490114	0.486387698
14:25:36	-0.063183588	0.275122845	0.486470695	**14:25:40**	-0.05942332	0.271167172	0.486553691
14:25:44	-0.055663052	0.266623026	0.486636688	**14:25:48**	-0.051902784	0.26207888	0.486719685
14:25:52	-0.048142516	0.257030981	0.486802682	**14:25:56**	-0.044382248	0.251983081	0.486885679
14:26:00	-0.040621981	0.245993546	0.486968675	**14:26:04**	-0.039774323	0.237326212	0.487051672
14:26:08	-0.038926666	0.228658897	0.487134669	**14:26:12**	-0.038079009	0.217548597	0.487217666
14:26:16	-0.037231351	0.206438297	0.487300663	**14:26:20**	-0.036383694	0.19532798	0.487383659
14:26:24	-0.035536037	0.18421768	0.487466656	**14:26:28**	-0.036573212	0.171983862	0.487549653
14:26:32	-0.040043367	0.158299781	0.48763265	**14:26:36**	-0.043513522	0.1446157	0.487715647
14:26:40	-0.046983677	0.13033421	0.487798643	**14:26:44**	-0.050453833	0.115455329	0.48788164
14:26:48	-0.053923988	0.100576447	0.487964637	**14:26:52**	-0.057394143	0.08417419	0.488047634
14:26:56	-0.060864298	0.067771923	0.488130631	**14:27:00**	-0.064334454	0.051879166	0.488213627
14:27:04	-0.064196791	0.038646482	0.488296624	**14:27:08**	-0.064059129	0.025413794	0.488379621
14:27:12	-0.063921466	0.013848008	0.488462618	**14:27:16**	-0.063783803	0.002282222	0.488545615
14:27:20	-0.063646141	-0.008533228	0.488628611	**14:27:24**	-0.063508478	-0.018598343	0.488711608
14:27:28	-0.063370816	-0.028663459	0.488794605	**14:27:32**	-0.063233153	-0.038728573	0.488877602
14:27:36	-0.063095491	-0.048793688	0.488960599	**14:27:40**	-0.062957828	-0.059387943	0.489043595
14:27:44	-0.062820166	-0.070511334	0.489126592	**14:27:48**	-0.062682503	-0.081634728	0.489209589
14:27:52	-0.062544841	-0.115878072	0.489292586	**14:27:56**	-0.062407178	-0.150121415	0.489375583
14:28:00	-0.062284261	-0.188875755	0.4894386	**14:28:04**	-0.063607896	-0.232994585	0.488527518
14:28:08	-0.064931531	-0.277113398	0.487616437	**14:28:12**	-0.066255165	-0.294075488	0.486705355
14:28:16	-0.0675788	-0.311037577	0.485794273	**14:28:20**	-0.068902435	-0.32302722	0.484883191
14:28:24	-0.070226069	-0.330044399	0.483972109	**14:28:28**	-0.071549704	-0.337061577	0.483061028
14:28:32	-0.072873339	-0.340824138	0.482149946	**14:28:36**	-0.074196974	-0.344586681	0.481238864
14:28:40	-0.075520608	-0.348349241	0.480327782	**14:28:44**	-0.076844243	-0.352111802	0.4794167
14:28:48	-0.078167878	-0.355874363	0.478505619	**14:28:52**	-0.079491512	-0.3594478	0.477594537
14:28:56	-0.080815147	-0.363021238	0.476683455	**14:29:00**	-0.082138782	-0.365316754	0.475772373
14:29:04	-0.083374899	-0.366282216	0.474861291	**14:29:08**	-0.084611016	-0.367247642	0.47395021
14:29:12	-0.085847134	-0.357526677	0.473039128	**14:29:16**	-0.087083251	-0.347805746	0.472128046
14:29:20	-0.088319368	-0.338612747	0.471216964	**14:29:24**	-0.089555485	-0.329947716	0.470305882
14:29:28	-0.090791602	-0.321282684	0.469394801	**14:29:32**	-0.09202772	-0.318472827	0.468483719
14:29:36	-0.093263837	-0.315662952	0.467572637	**14:29:40**	-0.094499954	-0.315400234	0.466661555
14:29:44	-0.095736071	-0.317684636	0.465750474	**14:29:48**	-0.096972188	-0.319969056	0.464839392
14:29:52	-0.098208306	-0.325028412	0.46392831	**14:29:56**	-0.099444423	-0.330087767	0.463017228
14:30:00	0.399578309	0.164457444	0.962106146	**14:30:04**	0.399639908	0.15907218	0.961195065
14:30:08	0.399701508	0.153686934	0.960283983	**14:30:12**	-0.100236893	-0.349247973	0.459372901
14:30:16	-0.100175293	-0.352182881	0.458461819	**14:30:20**	-0.100113693	-0.354506381	0.457550737

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:30:24	-0.100052094	-0.356218437	0.456639656	**14:30:28**	-0.099990494	-0.357930476	0.455728574
14:30:32	-0.099928895	-0.35964255	0.454817492	**14:30:36**	-0.099867295	-0.361354624	0.45390641
14:30:40	-0.099805695	-0.363259161	0.452995328	**14:30:44**	-0.098210255	-0.364441898	0.454162471
14:30:48	-0.096027089	-0.3652743	0.456125932	**14:30:52**	-0.093843922	-0.374368	0.458089393
14:30:56	-0.091660756	-0.383461735	0.460052854	**14:31:00**	-0.08947759	-0.393914114	0.462016315
14:31:04	-0.088469879	-0.406425809	0.463979777	**14:31:08**	-0.087462168	-0.41893754	0.465943238
14:31:12	-0.086454457	-0.418847878	0.467906699	**14:31:16**	-0.085446747	-0.418758217	0.46987016
14:31:20	-0.084439036	-0.37983886	0.471833621	**14:31:24**	-0.083431325	-0.302089736	0.473797082
14:31:28	-0.082423615	-0.224340613	0.475760544	**14:31:32**	-0.081415904	-0.121062004	0.477724005
14:31:36	-0.080408193	-0.0177834	0.479687466	**14:31:40**	-0.079400482	0.065519809	0.481650927
14:31:44	-0.078392772	0.128847601	0.483614388	**14:31:48**	-0.077385061	0.19217541	0.48557785
14:31:52	-0.07637735	0.228887325	0.487541311	**14:31:56**	-0.07536964	0.265599258	0.489504772
14:32:00	-0.074361929	0.285216591	0.491468233	**14:32:04**	-0.072535514	0.29962377	0.493431694
14:32:08	-0.070709098	0.31403095	0.495395156	**14:32:12**	-0.068882683	0.319660377	0.497358617
14:32:16	-0.067056267	0.325289804	0.499322078	**14:32:20**	-0.065229852	0.330226052	0.501285539
14:32:24	-0.063403437	0.334469086	0.503249	**14:32:28**	-0.061892494	0.338524071	0.504785023
14:32:32	-0.060432328	0.337234337	0.506252247	**14:32:36**	-0.058972162	0.335944567	0.507719471
14:32:40	-0.057511996	0.33292384	0.509186696	**14:32:44**	-0.05605183	0.328172156	0.51065392
14:32:48	-0.054591664	0.323420436	0.512121144	**14:32:52**	-0.053131498	0.317246972	0.513588369
14:32:56	-0.051671332	0.311073507	0.515055593	**14:33:00**	-0.050211166	0.304900079	0.516522817
14:33:04	-0.049516401	0.298270371	0.517990042	**14:33:08**	-0.048821636	0.291640663	0.519457266
14:33:12	-0.048126871	0.285792459	0.52092449	**14:33:16**	-0.047432106	0.279944292	0.522391715
14:33:20	-0.046737341	0.274510504	0.523858939	**14:33:24**	-0.046042576	0.269491166	0.525326163
14:33:28	-0.045347811	0.264471828	0.526793388	**14:33:32**	-0.044653046	0.25858385	0.528260612
14:33:36	-0.043958281	0.252695872	0.529727836	**14:33:40**	-0.043263516	0.246179307	0.531195061
14:33:44	-0.042568751	0.239034156	0.532662285	**14:33:48**	-0.041873986	0.231889006	0.534129509
14:33:52	-0.041179221	0.258129025	0.535596734	**14:33:56**	-0.040484456	0.284369026	0.537063958
14:34:00	-0.039789691	0.285017836	0.538531182	**14:34:04**	-0.039868575	0.259614224	0.539998407
14:34:08	-0.039947459	0.234210612	0.541465631	**14:34:12**	-0.040372852	0.208600453	0.542463367
14:34:16	-0.041042921	0.182844463	0.543129586	**14:34:20**	-0.04171299	0.160203602	0.543795805
14:34:24	-0.042383059	0.140677906	0.544462025	**14:34:28**	-0.043053127	0.121152193	0.545128244
14:34:32	-0.043723196	0.105612807	0.545794464	**14:34:36**	-0.044393265	0.090073422	0.546460683
14:34:40	-0.045063334	0.076858406	0.547126903	**14:34:44**	-0.045733403	0.065967759	0.547793122
14:34:48	-0.046403472	0.055077112	0.548459341	**14:34:52**	-0.047073541	0.04879812	0.549125561
14:34:56	-0.04774361	0.042519132	0.54979178	**14:35:00**	-0.048413679	0.038083965	0.550458
14:35:04	-0.047386318	0.036504434	0.551124219	**14:35:08**	-0.046358956	0.034924904	0.551790438
14:35:12	-0.045331595	0.035300996	0.552456658	**14:35:16**	-0.044304234	0.035677089	0.553122877
14:35:20	-0.043276873	0.036929141	0.553789097	**14:35:24**	-0.042249511	0.039057162	0.554455316
14:35:28	-0.041308263	0.041133847	0.555121536	**14:35:32**	-0.040394927	0.045028732	0.555787755
14:35:36	-0.03948159	0.048923611	0.556453974	**14:35:40**	-0.038568254	0.053374833	0.557120194
14:35:44	-0.037654917	0.058382391	0.557786413	**14:35:48**	-0.036741581	0.06338995	0.558452633
14:35:52	-0.035828244	0.069087454	0.559118852	**14:35:56**	-0.034914908	0.074784958	0.559785071
14:36:00	-0.034001571	0.079393192	0.560451291	**14:36:04**	-0.032810586	0.083077651	0.56111751
14:36:08	-0.0316196	0.08676211	0.56178373	**14:36:12**	-0.030428614	0.085034143	0.562449949
14:36:16	-0.029237628	0.083306177	0.563116168	**14:36:20**	-0.028046643	0.0792858	0.563782388
14:36:24	-0.026855657	0.072973031	0.564448607	**14:36:28**	-0.025664671	0.066660261	0.565114827
14:36:32	-0.024473686	0.059269911	0.565781046	**14:36:36**	-0.0232827	0.051879557	0.566447266
14:36:40	-0.022091714	0.045346461	0.567113485	**14:36:44**	-0.020900728	0.039670613	0.567779704
14:36:48	-0.019709743	0.033994766	0.568445924	**14:36:52**	-0.018518757	0.048980165	0.569112143
14:36:56	-0.017327771	0.063965563	0.569778363	**14:37:00**	-0.016136786	0.092739658	0.570444582
14:37:04	-0.015716283	0.134843179	0.571110801	**14:37:08**	-0.01529578	0.1769467	0.571777021
14:37:12	-0.014875277	0.195070724	0.57244324	**14:37:16**	-0.014454774	0.213194749	0.57310946
14:37:20	-0.014034271	0.22280035	0.573775679	**14:37:24**	-0.013613768	0.223887562	0.574441899
14:37:28	-0.013193265	0.224974775	0.575108118	**14:37:32**	-0.012592473	0.218296495	0.576018615
14:37:36	-0.011921343	0.211660142	0.577024412	**14:37:40**	-0.011250214	0.20324428	0.578030209
14:37:44	-0.010579085	0.193048875	0.579036006	**14:37:48**	-0.009907955	0.182853488	0.580041803
14:37:52	-0.009236826	0.169502415	0.5810476	**14:37:56**	-0.008565697	0.156151324	0.582053397

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:38:00	-0.007894568	0.143255595	0.583059193	**14:38:04**	-0.006977627	0.130961736	0.58406499
14:38:08	-0.006060686	0.118667877	0.585070787	**14:38:12**	-0.005143745	0.107328088	0.586076584
14:38:16	-0.004226804	0.095988309	0.587082381	**14:38:20**	-0.003309864	0.08543643	0.588088178
14:38:24	-0.002392923	0.075672469	0.589093975	**14:38:28**	-0.001475982	0.065908507	0.590099772
14:38:32	-0.000559041	0.059244135	0.591105569	**14:38:36**	0.000357899	0.052579764	0.592111366
14:38:40	0.00127484	0.04755729	0.593117163	**14:38:44**	0.002191781	0.044176724	0.59412296
14:38:48	0.003108722	0.040796158	0.595128757	**14:38:52**	0.004025663	0.040580875	0.596134554
14:38:56	0.004942603	0.040365596	0.59714035	**14:39:00**	0.005859544	0.041156666	0.598146147
14:39:04	0.00635721	0.04270417	0.599151944	**14:39:08**	0.006854877	0.044251674	0.600157741
14:39:12	0.007352543	0.045799178	0.601163538	**14:39:16**	0.007850209	0.047346681	0.602169335
14:39:20	0.008347876	0.049609854	0.603175132	**14:39:24**	0.008845542	0.0525887	0.604180929
14:39:28	0.009343208	0.055567546	0.605186726	**14:39:32**	0.009840875	0.058546387	0.606192523
14:39:36	0.010338541	0.061525233	0.60719832	**14:39:40**	0.010836207	0.064932035	0.608204117
14:39:44	0.011333873	0.068766789	0.609209914	**14:39:48**	0.01183154	0.072601547	0.610215711
14:39:52	0.012329206	0.090478498	0.611221508	**14:39:56**	0.012826872	0.108355454	0.612227304
14:40:00	0.013324539	0.119926056	0.613233101	**14:40:04**	0.015616499	0.126259864	0.614238898
14:40:08	0.017908459	0.132593663	0.615244695	**14:40:12**	0.020200419	0.138428159	0.616250492
14:40:16	0.022492379	0.144262654	0.617256289	**14:40:20**	0.02478434	0.149276882	0.618262086
14:40:24	0.0270763	0.15347086	0.619267883	**14:40:28**	0.02936826	0.15766483	0.62027368
14:40:32	0.03166022	0.15906649	0.621279477	**14:40:36**	0.033343214	0.160105155	0.621460176
14:40:40	0.033099857	0.157386335	0.619030834	**14:40:44**	0.032856501	0.152058289	0.616601491
14:40:48	0.032613144	0.146730242	0.614172149	**14:40:52**	0.032369787	0.133928515	0.611742806
14:40:56	0.03212643	0.121126787	0.609313464	**14:41:00**	0.031717858	0.105533954	0.606884122
14:41:04	0.028523022	0.08558765	0.604454779	**14:41:08**	0.025328186	0.065641342	0.602025437
14:41:12	0.02213335	0.044765198	0.599596094	**14:41:16**	0.018938514	0.023889052	0.597166752
14:41:20	0.015743678	0.004256941	0.59473741	**14:41:24**	0.012548842	-0.014131137	0.592308067
14:41:28	0.009354006	-0.032519214	0.589878725	**14:41:32**	0.00615917	-0.048176262	0.587449382
14:41:36	0.002964333	-0.06383331	0.58502004	**14:41:40**	-0.000230503	-0.077296048	0.582590697
14:41:44	-0.003425339	-0.088564481	0.580161355	**14:41:48**	-0.006323438	-0.099656034	0.578134066
14:41:52	-0.0060377	-0.103804878	0.580420606	**14:41:56**	-0.005751962	-0.107953731	0.582707146
14:42:00	-0.005466224	-0.109585316	0.584993686	**14:42:04**	-0.005366747	-0.108810679	0.587280226
14:42:08	-0.00526727	-0.108036042	0.589566766	**14:42:12**	-0.005167792	-0.104210051	0.591853306
14:42:16	-0.005068315	-0.10038406	0.594139846	**14:42:20**	-0.004968838	-0.095389382	0.596426386
14:42:24	-0.00486936	-0.089226018	0.598712926	**14:42:28**	-0.004769883	-0.083062663	0.600999466
14:42:32	-0.003779549	-0.074003129	0.603286006	**14:42:36**	-0.002737607	-0.064912833	0.605572545
14:42:40	-0.001695665	-0.053973528	0.607859085	**14:42:44**	-0.000653723	-0.041185212	0.610145625
14:42:48	0.000388219	-0.028396902	0.612432165	**14:42:52**	0.001430161	0.018372659	0.614718705
14:42:56	0.002472103	0.065142218	0.617005245	**14:43:00**	0.003514045	0.105387032	0.619291785
14:43:04	0.005766763	0.139828823	0.621578325	**14:43:08**	0.008019481	0.174270613	0.623864865
14:43:12	0.010272199	0.186300704	0.626151405	**14:43:16**	0.012524917	0.198330777	0.628437945
14:43:20	0.014777635	0.205184429	0.630724485	**14:43:24**	0.017030353	0.206861625	0.633011025
14:43:28	0.019283071	0.208538838	0.635297564	**14:43:32**	0.02153579	0.204633351	0.637584104
14:43:36	0.023788508	0.200727847	0.639870644	**14:43:40**	0.026041226	0.195954821	0.642157184
14:43:44	0.028293944	0.190314238	0.644443724	**14:43:48**	0.030546662	0.184673672	0.646730264
14:43:52	0.03279938	0.181622224	0.649016804	**14:43:56**	0.035052098	0.178570775	0.651303344
14:44:00	0.037304816	0.175519344	0.653589884	**14:44:04**	0.040792559	0.173204075	0.655876424
14:44:08	0.030841093	0.162877901	0.639953976	**14:44:12**	0.020280766	0.152813046	0.623206572
14:44:16	0.009720439	0.1427482	0.606459169	**14:44:20**	-0.000839888	0.133712295	0.589711765
14:44:24	-0.011400216	0.12570533	0.572964362	**14:44:28**	-0.021960543	0.117698374	0.556216959
14:44:32	-0.03252087	0.112699755	0.539469555	**14:44:36**	-0.031963014	0.114328512	0.537786347
14:44:40	-0.022869176	0.122814259	0.54766867	**14:44:44**	-0.013775338	0.133068846	0.557550993
14:44:48	-0.0046815	0.143323424	0.567433316	**14:44:52**	0.004412338	0.155769713	0.577315639
14:44:56	0.013506176	0.168216029	0.587197962	**14:45:00**	-0.477399986	-0.324113163	0.097080286
14:45:04	-0.470169525	-0.322328574	0.106962609	**14:45:08**	-0.47147084	-0.325629644	0.105285098
14:45:12	0.010988274	0.178092657	0.581604346	**14:45:16**	0.009953611	0.191654061	0.582692923
14:45:20	0.011132039	0.207210175	0.593912349	**14:45:24**	0.012310467	0.223441828	0.605131774
14:45:28	0.013488895	0.239673463	0.616351199	**14:45:32**	0.014667323	0.251577261	0.627570624

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:45:36	0.015845751	0.263481077	0.638790049	**14:45:40**	0.017024179	0.272759821	0.650009474
14:45:44	0.085946815	0.319794764	0.661228899	**14:45:48**	0.081916296	0.323343463	0.672448324
14:45:52	0.077885778	0.326892162	0.683667749	**14:45:56**	0.073855259	0.330440861	0.694887174
14:46:00	0.072278482	0.346990851	0.706106599	**14:46:04**	0.142561752	0.417914172	0.717326025
14:46:08	0.200666535	0.481578051	0.72854545	**14:46:12**	0.217587414	0.513068873	0.739764875
14:46:16	0.166283303	0.5038918	0.658545225	**14:46:20**	0.116448708	0.487739146	0.606966293
14:46:24	0.012583345	0.431528052	0.555387361	**14:46:28**	0.025143874	0.444716592	0.503808429
14:46:32	0.058325188	0.45768298	0.452413951	**14:46:36**	0.013506885	0.424155006	0.462213365
14:46:40	-0.031311417	0.387477314	0.472012779	**14:46:44**	-0.033687153	0.372949261	0.481812194
14:46:48	-0.029608374	0.362268644	0.491611608	**14:46:52**	-0.026006782	0.349259187	0.500764476
14:46:56	-0.02810286	0.332853436	0.502197483	**14:47:00**	-0.030198939	0.31580343	0.503630489
14:47:04	-0.03190548	0.298341296	0.505063496	**14:47:08**	-0.033612021	0.280879197	0.506496502
14:47:12	-0.035318562	0.263992124	0.507929509	**14:47:16**	-0.037025103	0.24710505	0.509362515
14:47:20	-0.038731645	0.232177211	0.510795522	**14:47:24**	-0.040438186	0.219208605	0.512228528
14:47:28	-0.042144727	0.206240016	0.513661535	**14:47:32**	-0.041929477	0.195062831	0.515094542
14:47:36	-0.04149284	0.184017594	0.516527548	**14:47:40**	-0.041056202	0.170623259	0.517960555
14:47:44	-0.040619565	0.154879809	0.519393561	**14:47:48**	-0.040182927	0.139136359	0.520826568
14:47:52	-0.03974629	0.118727809	0.522259574	**14:47:56**	-0.039309652	0.098319251	0.523692581
14:48:00	-0.038873015	0.076468118	0.525125588	**14:48:04**	-0.038774278	0.052972995	0.526558594
14:48:08	-0.038675541	0.029477871	0.527991601	**14:48:12**	-0.038576804	0.004202503	0.529424607
14:48:16	-0.038478067	-0.021072866	0.530857614	**14:48:20**	-0.03837933	-0.046348235	0.53229062
14:48:24	-0.038280593	-0.071623604	0.533723627	**14:48:28**	-0.038181856	-0.096898972	0.535156634
14:48:32	-0.038083119	-0.120269503	0.53658964	**14:48:36**	-0.037984382	-0.143640043	0.538022647
14:48:40	-0.037885645	-0.165134239	0.539455653	**14:48:44**	-0.036519964	-0.183996904	0.542605262
14:48:48	-0.035128547	-0.202844219	0.54578974	**14:48:52**	-0.03373713	-0.256009209	0.548974217
14:48:56	-0.032345714	-0.309174217	0.552158695	**14:49:00**	-0.030954297	-0.370976227	0.555343173
14:49:04	-0.02989218	-0.441611513	0.558527651	**14:49:08**	-0.025945131	-0.510527136	0.561712129
14:49:12	-0.019525823	-0.546517957	0.564896607	**14:49:16**	-0.013106514	-0.582508777	0.568081085
14:49:20	-0.006687205	-0.598886869	0.571265563	**14:49:24**	-0.000439575	-0.595754638	0.574217431
14:49:28	0.003214021	-0.59416867	0.573654603	**14:49:32**	0.006867618	-0.591990818	0.573091775
14:49:36	0.010521214	-0.589812966	0.572528948	**14:49:40**	0.01417481	-0.587635113	0.57196612
14:49:44	0.017828407	-0.585457261	0.571403292	**14:49:48**	0.021482003	-0.583279409	0.570840464
14:49:52	0.025135599	-0.581101557	0.570277636	**14:49:56**	0.028789196	-0.578923705	0.569714809
14:50:00	0.032442792	-0.576745853	0.569151981	**14:50:04**	0.037394957	-0.573793944	0.568589153
14:50:08	0.042347123	-0.570842035	0.568026325	**14:50:12**	0.047299289	-0.567890126	0.567463497
14:50:16	0.052251454	-0.564938216	0.56690067	**14:50:20**	0.05720362	-0.55766682	0.566337842
14:50:24	0.062155785	-0.546075972	0.565775014	**14:50:28**	0.067107951	-0.534485088	0.565212186
14:50:32	0.072060116	-0.518731152	0.564649358	**14:50:36**	0.077012282	-0.502977217	0.564086531
14:50:40	0.081964447	-0.486552949	0.563523703	**14:50:44**	0.086916613	-0.469458347	0.562960875
14:50:48	0.091868778	-0.452363709	0.562398047	**14:50:52**	0.096820944	-0.435269108	0.561835219
14:50:56	0.101773109	-0.418174506	0.561272392	**14:51:00**	0.106725275	-0.402503034	0.560709564
14:51:04	0.110479154	-0.388968937	0.560146736	**14:51:08**	0.114233034	-0.37543484	0.559583908
14:51:12	0.117986914	-0.363455972	0.55902108	**14:51:16**	0.121740793	-0.351477103	0.558458252
14:51:20	0.125494673	-0.339863477	0.557895425	**14:51:24**	0.129248552	-0.328615128	0.557332597
14:51:28	0.133002432	-0.31736678	0.556769769	**14:51:32**	0.136756312	-0.306611935	0.556206941
14:51:36	0.140510191	-0.29585709	0.555644113	**14:51:40**	0.088751228	-0.317467862	0.555081286
14:51:44	0.052530529	-0.329091786	0.554518458	**14:51:48**	0.01630983	-0.340715745	0.55395563
14:51:52	0.038110836	-0.291190591	0.553392802	**14:51:56**	0.065486916	-0.238342185	0.552829974
14:52:00	0.092862996	-0.165693793	0.552267147	**14:52:04**	0.121112924	-0.072724493	0.551704319
14:52:08	0.077212232	-0.022763062	0.551141491	**14:52:12**	-0.007401687	-0.022641776	0.550578663
14:52:16	0.004726383	0.035145909	0.562155322	**14:52:20**	0.061679438	0.107591778	0.607231218
14:52:24	0.124048503	0.171204762	0.652307115	**14:52:28**	0.144247544	0.20968084	0.667146142
14:52:32	0.115754809	0.204733192	0.616011942	**14:52:36**	0.087262073	0.199785543	0.564877742
14:52:40	0.058769337	0.190969587	0.513743542	**14:52:44**	0.030276602	0.178285331	0.462609341
14:52:48	0.038409853	0.187433257	0.461100245	**14:52:52**	0.106439037	0.227489475	0.540745058
14:52:56	0.174468221	0.267545674	0.620389871	**14:53:00**	0.122574081	0.234720264	0.612551395
14:53:04	0.103634321	0.220141272	0.597335591	**14:53:08**	0.00787464	0.159771116	0.478035311

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
14:53:12	0.00222052	0.152007287	0.480820421	**14:53:16**	-0.003433601	0.144243476	0.483605531
14:53:20	-0.009087721	0.137146952	0.486390641	**14:53:24**	-0.014741842	0.130717741	0.489175752
14:53:28	-0.020395962	0.12428853	0.491960862	**14:53:32**	-0.026050083	0.120200324	0.494745972
14:53:36	-0.031704203	0.11611211	0.497531082	**14:53:40**	-0.037358324	0.113227153	0.500316192
14:53:44	-0.043012445	0.111545452	0.503101303	**14:53:48**	-0.048666565	0.109863751	0.505886413
14:53:52	-0.047200127	0.113829188	0.508671523	**14:53:56**	-0.045594367	0.117877672	0.511456633
14:54:00	-0.043988607	0.121318941	0.514241744	**14:54:04**	-0.042939551	0.123821162	0.517026854
14:54:08	-0.041890495	0.126323364	0.519811964	**14:54:12**	-0.040841438	0.126398873	0.522597074
14:54:16	-0.039792382	0.126474364	0.525382184	**14:54:20**	-0.038743325	0.126549873	0.528167295
14:54:24	-0.037694269	0.126625364	0.530952405	**14:54:28**	-0.036645212	0.126700872	0.533737515
14:54:32	-0.035596156	0.130428822	0.536522625	**14:54:36**	-0.0345471	0.134156771	0.539307735
14:54:40	-0.033498043	0.139512393	0.542092846	**14:54:44**	-0.032448987	0.146495689	0.544877956
14:54:48	-0.03139993	0.153479002	0.547663066	**14:54:52**	-0.030350874	0.184475983	0.550448176
14:54:56	-0.029301817	0.215472963	0.553233286	**14:55:00**	-0.028252761	0.251188391	0.556018397
14:55:04	-0.02584338	0.292433152	0.558803507	**14:55:08**	-0.023433999	0.333677878	0.561588617
14:55:12	-0.021024618	0.347485624	0.564373727	**14:55:16**	-0.018615236	0.361293335	0.567158838
14:55:20	-0.016205855	0.376464559	0.569943948	**14:55:24**	-0.013796474	0.392999258	0.572729058
14:55:28	-0.011387093	0.409533958	0.575514168	**14:55:32**	-0.008977712	0.418306797	0.578299278
14:55:36	-0.006568331	0.427079636	0.581084389	**14:55:40**	-0.004158949	0.433465539	0.583869499
14:55:44	-0.001749568	0.437464505	0.586654609	**14:55:48**	0.000659813	0.441463507	0.589439719
14:55:52	0.003069194	0.443249666	0.592224829	**14:55:56**	0.005478575	0.445035861	0.59500994
14:56:00	0.007887956	0.446822021	0.59779505	**14:56:04**	0.011008725	0.449032263	0.60058016
14:56:08	0.014129495	0.45124247	0.60336527	**14:56:12**	0.017250264	0.455384303	0.60615038
14:56:16	0.020371033	0.459526137	0.608935491	**14:56:20**	0.023491802	0.463968195	0.611720601
14:56:24	0.026612571	0.468710404	0.614505711	**14:56:28**	0.02973334	0.473452614	0.617290821
14:56:32	0.032854109	0.47629695	0.620075932	**14:56:36**	0.035974879	0.47914125	0.622861042
14:56:40	0.039095648	0.479308907	0.625646152	**14:56:44**	0.04185633	0.476585278	0.628431262
14:56:48	0.044019379	0.473505374	0.631216372	**14:56:52**	0.043353049	0.462659875	0.630167913
14:56:56	0.042232068	0.451543366	0.628503439	**14:57:00**	0.041111086	0.438745107	0.626838965
14:57:04	0.038579443	0.423424156	0.625174491	**14:57:08**	0.036047801	0.408103205	0.623510017
14:57:12	0.033516158	0.393766098	0.621845543	**14:57:16**	0.030984516	0.379429027	0.62018107
14:57:20	0.028452873	0.364356426	0.618516596	**14:57:24**	0.025921231	0.348548367	0.616852122
14:57:28	0.023389588	0.332740272	0.615187648	**14:57:32**	0.020857946	0.314154346	0.613523174
14:57:36	0.018326303	0.295568438	0.6118587	**14:57:40**	0.015794661	0.276140856	0.610194226
14:57:44	0.013263018	0.255871636	0.608529752	**14:57:48**	0.010731376	0.235602397	0.606865278
14:57:52	0.008199733	0.167619105	0.605200804	**14:57:56**	0.005668091	0.099635795	0.60353633
14:58:00	0.003136448	0.050679525	0.601871856	**14:58:04**	0.003890663	0.02270893	0.60318592
14:58:08	0.006391181	-0.004220722	0.606866078	**14:58:12**	0.0088917	-0.005370417	0.610546236
14:58:16	0.011392218	-0.006520111	0.614226394	**14:58:20**	0.013892737	-0.009463888	0.617906552
14:58:24	0.016393255	-0.014201747	0.62158671	**14:58:28**	0.018893774	-0.018939607	0.625266868
14:58:32	0.022727103	-0.028064943	0.628947026	**14:58:36**	0.028268628	-0.036172052	0.632627184
14:58:40	0.033810153	-0.045035457	0.636307342	**14:58:44**	0.039351677	-0.054655173	0.639987501
14:58:48	0.044893202	-0.06427488	0.643667659	**14:58:52**	0.050434727	-0.073894596	0.647347817
14:58:56	0.055976252	-0.083514303	0.651027975	**14:59:00**	0.061517777	-0.092187337	0.654708133
14:59:04	0.068651859	-0.098964401	0.658388291	**14:59:08**	0.075785941	-0.105741456	0.662068449
14:59:12	0.082920023	-0.101821016	0.665748607	**14:59:16**	0.090054105	-0.097900576	0.669428765
14:59:20	0.097188188	-0.091515994	0.673108923	**14:59:24**	0.10432227	-0.082667279	0.676789081
14:59:28	0.111456352	-0.073818563	0.680469239	**14:59:32**	0.118590434	-0.064969848	0.684149397
14:59:36	0.125724516	-0.056121133	0.687829555	**14:59:40**	0.132858598	-0.047272418	0.691509713
14:59:44	0.135799053	-0.04092346	0.689507861	**14:59:48**	0.137702967	-0.035487429	0.686984641
14:59:52	0.136926774	-0.032534176	0.68446142	**14:59:56**	0.136150581	-0.029580922	0.6819382
15:00:00	0.635374388	0.476753265	1.179414979	**15:00:04**	0.630827738	0.484220884	1.176891759
15:00:08	0.626281087	0.491688485	1.174368538	**15:00:12**	0.121734437	-0.000843901	0.671845317
15:00:16	0.117187786	0.006623709	0.669322097	**15:00:20**	0.112641136	0.01323232	0.666798876
15:00:24	0.108094485	0.018981927	0.664275656	**15:00:28**	0.103547834	0.024731537	0.661752435
15:00:32	0.099001184	0.025978828	0.659229215	**15:00:36**	0.094454533	0.027226118	0.656705994
15:00:40	0.089907883	0.027003939	0.654182773	**15:00:44**	0.085361232	0.025312288	0.651659553

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:00:48	0.088821965	0.028393716	0.649136332	**15:00:52**	0.117960104	0.032625338	0.646613112
15:00:56	0.143467648	0.034692819	0.644089891	**15:01:00**	0.131804475	0.017810087	0.637637237
15:01:04	0.111899932	-0.000778513	0.617066444	**15:01:08**	0.091995389	-0.019367113	0.596495651
15:01:12	0.072090847	-0.030323434	0.575924858	**15:01:16**	0.052186304	-0.041279754	0.555354066
15:01:20	0.032281761	-0.051549113	0.534783273	**15:01:24**	0.012377219	-0.061131516	0.51421248
15:01:28	0.011559319	-0.059336662	0.519502469	**15:01:32**	0.019520058	-0.056454075	0.539157009
15:01:36	0.025943389	-0.05448791	0.558811548	**15:01:40**	0.00729963	-0.067463852	0.544502308
15:01:44	0.01494666	-0.064768258	0.565814856	**15:01:48**	0.02259369	-0.062072669	0.587127404
15:01:52	0.045939215	-0.046084293	0.608439952	**15:01:56**	0.053209702	-0.039677999	0.600218937
15:02:00	0.056198259	-0.035272405	0.58619627	**15:02:04**	0.061222002	-0.029101971	0.572173603
15:02:08	0.066245744	-0.022931538	0.558150936	**15:02:12**	0.071269487	-0.017788642	0.544128269
15:02:16	0.07629323	-0.01264575	0.530105602	**15:02:20**	0.081316973	-0.004020874	0.516082935
15:02:24	0.086340716	0.008085985	0.502060268	**15:02:28**	0.091364459	0.020192844	0.4880376
15:02:32	0.096388201	0.0242316	0.474014933	**15:02:36**	0.101411944	0.028270355	0.459992266
15:02:40	0.106435687	0.032309111	0.445969599	**15:02:44**	0.11145943	0.036347867	0.431946932
15:02:48	0.123170556	0.044372868	0.417924265	**15:02:52**	0.056480338	0.009696237	0.403901598
15:02:56	0.06794359	0.021605679	0.389878931	**15:03:00**	0.089981601	0.039332393	0.390184164
15:03:04	0.115121869	0.058422142	0.398137532	**15:03:08**	0.07298481	0.037408918	0.406090899
15:03:12	0.005028137	0.000472972	0.414044267	**15:03:16**	0.047414685	0.02931091	0.421997634
15:03:20	-0.033229129	-0.015884511	0.326053193	**15:03:24**	0.018687635	0.017240507	0.371859156
15:03:28	0.062485381	0.045525904	0.417665119	**15:03:32**	0.075519759	0.057457724	0.463471082
15:03:36	0.205840309	0.139302012	0.668189859	**15:03:40**	0.18215023	0.130709993	0.655219479
15:03:44	0.149335833	0.118046149	0.620344494	**15:03:48**	0.116521436	0.105382306	0.58546951
15:03:52	0.083707039	0.10415412	0.550594525	**15:03:56**	0.050892643	0.102925936	0.51571954
15:04:00	0.139874295	0.168065774	0.645867869	**15:04:04**	0.086059173	0.141853967	0.642473847
15:04:08	0.087708405	0.148703593	0.639079825	**15:04:12**	0.089357637	0.135623115	0.635685802
15:04:16	0.09100687	0.122542633	0.63229178	**15:04:20**	0.092656102	0.110611056	0.628897758
15:04:24	0.094305334	0.09982838	0.625503735	**15:04:28**	0.095954566	0.089045706	0.622109713
15:04:32	0.094010843	0.076121325	0.618715691	**15:04:36**	0.090138805	0.062047505	0.615321668
15:04:40	0.086266766	0.04591882	0.611927646	**15:04:44**	0.082394727	0.027735271	0.608533623
15:04:48	0.078522689	0.00955172	0.605139601	**15:04:52**	0.07465065	0.00269398	0.601745579
15:04:56	0.07079	-0.004156972	0.598366987	**15:05:00**	0.067058832	-0.014801239	0.595163833
15:05:04	0.064963104	-0.028341134	0.591960679	**15:05:08**	0.062867376	-0.04188103	0.588757524
15:05:12	0.060771648	-0.058373317	0.58555437	**15:05:16**	0.058675921	-0.074865613	0.582351216
15:05:20	0.056580193	-0.08982955	0.579148062	**15:05:24**	0.054484465	-0.103265127	0.575944908
15:05:28	0.052388737	-0.116700704	0.572741754	**15:05:32**	0.050293009	-0.127783186	0.5695386
15:05:36	0.024302487	-0.153108975	0.533960027	**15:05:40**	0.024114498	-0.162046679	0.533341698
15:05:44	0.023926509	-0.169976786	0.532723368	**15:05:48**	0.02373852	-0.177906894	0.532105038
15:05:52	0.023550531	-0.184523497	0.531486708	**15:05:56**	0.023362542	-0.191140118	0.530868379
15:06:00	0.023174553	-0.19676625	0.530250049	**15:06:04**	0.020453544	-0.202911823	0.529631719
15:06:08	0.017732535	-0.209057396	0.52901339	**15:06:12**	0.015011525	-0.217970337	0.52839506
15:06:16	0.012290516	-0.226883295	0.52777673	**15:06:20**	0.009569506	-0.236672515	0.5271584
15:06:24	0.006848497	-0.247338033	0.526540071	**15:06:28**	0.004127488	-0.258003532	0.525921741
15:06:32	0.001406478	-0.26866905	0.525303411	**15:06:36**	-0.001314531	-0.279334567	0.524685081
15:06:40	-0.004323958	-0.290371094	0.524066752	**15:06:44**	-0.007541142	-0.30173057	0.523448422
15:06:48	-0.010758326	-0.313090045	0.522830092	**15:06:52**	-0.01397551	-0.279094707	0.522211762
15:06:56	-0.017192695	-0.245099387	0.521593433	**15:07:00**	-0.020409879	-0.224656759	0.520975103
15:07:04	-0.022244138	-0.216942518	0.520356773	**15:07:08**	-0.024078398	-0.209228258	0.519738443
15:07:12	-0.025912658	-0.210707215	0.519120114	**15:07:16**	-0.027746917	-0.212186172	0.518501784
15:07:20	-0.029581177	-0.214943583	0.517883454	**15:07:24**	-0.031415436	-0.218979449	0.517265125
15:07:28	-0.033249696	-0.223015332	0.516646795	**15:07:32**	-0.035083956	-0.225643842	0.516028465
15:07:36	-0.036918215	-0.228272353	0.515410135	**15:07:40**	-0.038752475	-0.230002343	0.514791806
15:07:44	-0.040586734	-0.230833776	0.514173476	**15:07:48**	-0.042420994	-0.231665227	0.513555146
15:07:52	-0.044255254	-0.23249666	0.512936816	**15:07:56**	-0.045433045	-0.2329368	0.512318487
15:08:00	-0.045335993	-0.232617008	0.511700157	**15:08:04**	-0.045948441	-0.232720156	0.511081827
15:08:08	-0.046560889	-0.232823286	0.510463497	**15:08:12**	-0.047173336	-0.232475531	0.509845168
15:08:16	-0.04225895	-0.228833314	0.51671523	**15:08:20**	-0.036134244	-0.223597417	0.525225172

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:08:24	-0.030009538	-0.217489307	0.533735114	**15:08:28**	-0.023884832	-0.211381198	0.542245056
15:08:32	-0.017760126	-0.203095296	0.550754999	**15:08:36**	-0.01163542	-0.194809377	0.559264941
15:08:40	-0.005510714	-0.186043455	0.567774883	**15:08:44**	0.000613992	-0.176797548	0.576284825
15:08:48	0.006738698	-0.167551607	0.584794767	**15:08:52**	0.012863404	-0.1583057	0.593304709
15:08:56	0.01898811	-0.149059758	0.601814652	**15:09:00**	0.025112816	-0.140149054	0.610324594
15:09:04	0.03219773	-0.131001205	0.618834536	**15:09:08**	0.039282644	-0.121853338	0.627344478
15:09:12	0.046646801	-0.114397632	0.63585442	**15:09:16**	0.056221757	-0.105624104	0.644364362
15:09:20	0.065796713	-0.100783255	0.652874305	**15:09:24**	0.075371668	-0.099875093	0.661384247
15:09:28	0.084946624	-0.098966931	0.669894189	**15:09:32**	0.064788422	-0.113719522	0.638118225
15:09:36	0.036376586	-0.133391976	0.595159288	**15:09:40**	0.007964751	-0.150984911	0.552200351
15:09:44	0.009611375	-0.148580946	0.549968077	**15:09:48**	0.015745236	-0.14350221	0.553815627
15:09:52	0.019044726	-0.098309011	0.557663177	**15:09:56**	0.019339919	-0.054906627	0.561510728
15:10:00	0.019635112	-0.024059622	0.565358278	**15:10:04**	0.019392556	-0.006088537	0.569205828
15:10:08	0.019150001	0.011882546	0.573053378	**15:10:12**	0.018907445	0.022708087	0.576900928
15:10:16	0.022086416	0.028427604	0.580748479	**15:10:20**	0.026679556	0.032263535	0.584596029
15:10:24	0.031272696	0.033372915	0.588443579	**15:10:28**	0.035865837	0.034482296	0.592291129
15:10:32	0.039250249	0.031106541	0.594500956	**15:10:36**	0.040094268	0.026216496	0.593268766
15:10:40	0.040938287	0.021326452	0.592036575	**15:10:44**	0.041782306	0.016436407	0.590804384
15:10:48	0.042626325	0.011546363	0.589572193	**15:10:52**	0.043470344	0.007894297	0.588340003
15:10:56	0.042503819	0.003162994	0.587107812	**15:11:00**	0.039343402	-0.002185249	0.585875621
15:11:04	0.036658846	-0.006559034	0.584643431	**15:11:08**	0.033974291	-0.010932819	0.58341124
15:11:12	0.031289736	-0.012488136	0.582179049	**15:11:16**	0.028605181	-0.014043453	0.580946858
15:11:20	0.025920626	-0.013809072	0.579714668	**15:11:24**	0.02323607	-0.011784992	0.578482477
15:11:28	0.020551515	-0.009760913	0.577250286	**15:11:32**	0.01786696	-0.004861022	0.576018096
15:11:36	0.015182405	3.88676E-05	0.574785905	**15:11:40**	0.01249785	0.004938758	0.573553714
15:11:44	0.009813295	0.009838648	0.572321523	**15:11:48**	0.007128739	0.014738538	0.571089333
15:11:52	0.004444184	0.01655254	0.569857142	**15:11:56**	0.001759629	0.018366542	0.568624951
15:12:00	-0.000924926	0.018201699	0.567392761	**15:12:04**	-0.004170042	0.015723871	0.56616057
15:12:08	-0.007415159	0.013246043	0.564928379	**15:12:12**	-0.010404224	0.007780311	0.563696188
15:12:16	-0.01248992	0.002853063	0.562463998	**15:12:20**	-0.014575616	-0.002727524	0.561231807
15:12:24	-0.016661311	-0.008961448	0.559999616	**15:12:28**	-0.018747007	-0.015195373	0.558767426
15:12:32	-0.019035396	-0.019421434	0.559970433	**15:12:36**	-0.018780044	-0.023323379	0.561910162
15:12:40	-0.018524693	-0.026568585	0.563849892	**15:12:44**	-0.018269341	-0.029157053	0.565789621
15:12:48	-0.018013989	-0.03174552	0.567729351	**15:12:52**	-0.017758638	0.022659682	0.56966908
15:12:56	-0.017503286	0.077064881	0.57160881	**15:13:00**	-0.017247935	0.113584218	0.573548539
15:13:04	-0.01689459	0.132276109	0.575488269	**15:13:08**	-0.016541246	0.150967992	0.577427998
15:13:12	-0.016187901	0.147520224	0.579367728	**15:13:16**	-0.015834556	0.144072437	0.581307457
15:13:20	-0.015481212	0.138383003	0.583247187	**15:13:24**	-0.015127867	0.130451912	0.585186916
15:13:28	-0.014774523	0.122520821	0.587126646	**15:13:32**	-0.014449083	0.111325398	0.589028567
15:13:36	-0.014124072	0.100129719	0.590929906	**15:13:40**	-0.013799062	0.089502547	0.592831245
15:13:44	-0.013474051	0.079443889	0.594732584	**15:13:48**	-0.013149041	0.069385222	0.596633924
15:13:52	-0.01282403	0.062562835	0.598535263	**15:13:56**	-0.01210637	0.055974501	0.600436602
15:14:00	-0.011088663	0.051642442	0.602337941	**15:14:04**	-0.010356841	0.049217398	0.604239281
15:14:08	-0.009625018	0.046792355	0.60614062	**15:14:12**	-0.008893195	0.048127779	0.608041959
15:14:16	-0.008161373	0.049463207	0.609943298	**15:14:20**	-0.00742955	0.052541735	0.611844638
15:14:24	-0.006697727	0.057363367	0.613745977	**15:14:28**	-0.005965905	0.062184998	0.615647316
15:14:32	-0.005234082	0.071287052	0.617548655	**15:14:36**	-0.004502259	0.080389102	0.619449995
15:14:40	-0.003770436	0.091493931	0.621351334	**15:14:44**	-0.003453939	0.104353949	0.622689943
15:14:48	-0.003536189	0.116976287	0.623488282	**15:14:52**	-0.003618439	0.129598626	0.624286622
15:14:56	-0.003700689	0.142220956	0.625084961	**15:15:00**	-0.50378294	-0.345975347	0.125883301
15:15:04	-0.502854736	-0.334387994	0.12668164	**15:15:08**	-0.501926533	-0.322800624	0.12747998
15:15:12	-0.00099833	0.189610301	0.628278319	**15:15:16**	-7.01263E-05	0.202021225	0.629076659
15:15:20	0.000858077	0.214432167	0.629874998	**15:15:24**	0.00178628	0.226843092	0.630673338
15:15:28	0.002714484	0.239254016	0.631471678	**15:15:32**	0.003642687	0.244190922	0.632270017
15:15:36	0.00457089	0.24912781	0.633068357	**15:15:40**	0.005499094	0.253464179	0.633866696
15:15:44	0.006427297	0.257200013	0.634665036	**15:15:48**	0.0073555	0.260935847	0.635463375
15:15:52	0.008283704	0.293786146	0.636261715	**15:15:56**	0.009211907	0.326636462	0.637060054

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:16:00	0.01014011	0.351474239	0.637858394	**15:16:04**	0.01075632	0.368113522	0.638656733
15:16:08	0.011372529	0.384752805	0.639455073	**15:16:12**	0.011988738	0.385826656	0.640253412
15:16:16	0.012604948	0.386900506	0.641051752	**15:16:20**	0.013221157	0.386418382	0.641850091
15:16:24	0.013837366	0.384380248	0.642648431	**15:16:28**	0.014453576	0.382342113	0.64344677
15:16:32	0.015069785	0.380304014	0.64424511	**15:16:36**	0.015685994	0.37826588	0.645043449
15:16:40	0.016302204	0.376571563	0.645841789	**15:16:44**	0.016918413	0.375221065	0.646640128
15:16:48	0.017534622	0.373870567	0.647438468	**15:16:52**	0.018150832	0.372520068	0.648236807
15:16:56	0.018767041	0.37116957	0.649035147	**15:17:00**	0.01938325	0.369525386	0.649833486
15:17:04	0.019655547	0.367382585	0.650631826	**15:17:08**	0.019927843	0.365239749	0.651430165
15:17:12	0.02020014	0.364338594	0.652228505	**15:17:16**	0.020472436	0.36343744	0.653026844
15:17:20	0.020744732	0.36343692	0.653825184	**15:17:24**	0.021017029	0.364337	0.654623524
15:17:28	0.021289325	0.36523708	0.655421863	**15:17:32**	0.021561622	0.368503098	0.656220203
15:17:36	0.021833918	0.371769152	0.657018542	**15:17:40**	0.022106214	0.377175391	0.657816882
15:17:44	0.022378511	0.384721885	0.658615221	**15:17:48**	0.022650807	0.392268344	0.659413561
15:17:52	0.022923104	0.400470889	0.6602119	**15:17:56**	0.023235129	0.408697151	0.661064069
15:18:00	0.02359199	0.415345383	0.661976986	**15:18:04**	0.024783759	0.420886605	0.662889904
15:18:08	0.025975529	0.426427791	0.663802822	**15:18:12**	0.027167298	0.427379893	0.66471574
15:18:16	0.028359068	0.428331994	0.665628658	**15:18:20**	0.029550837	0.427286704	0.666541576
15:18:24	0.030742606	0.424244022	0.667454493	**15:18:28**	0.031934376	0.421201339	0.668367411
15:18:32	0.033126145	0.414659828	0.669280329	**15:18:36**	0.034317915	0.408118316	0.670193247
15:18:40	0.035509684	0.40157684	0.671106165	**15:18:44**	0.036701453	0.395035329	0.672019083
15:18:48	0.037893223	0.388493817	0.672932	**15:18:52**	0.039084992	0.326228485	0.673844918
15:18:56	0.040276762	0.263963117	0.674757836	**15:19:00**	0.041468531	0.211172108	0.675670754
15:19:04	0.041345207	0.167071509	0.676583672	**15:19:08**	0.041221883	0.122970918	0.67749659
15:19:12	0.041098559	0.103134557	0.678409507	**15:19:16**	0.040975235	0.083298205	0.679322425
15:19:20	0.040851911	0.069660069	0.680235343	**15:19:24**	0.040728587	0.062220162	0.681148261
15:19:28	0.040761711	0.05487351	0.682061179	**15:19:32**	0.041469013	0.053985632	0.682974097
15:19:36	0.042176314	0.053097752	0.683887014	**15:19:40**	0.042883616	0.054033794	0.684799932
15:19:44	0.043590917	0.056793753	0.68571285	**15:19:48**	0.044298219	0.059553712	0.686625768
15:19:52	0.04500552	0.061703572	0.687538686	**15:19:56**	0.045712822	0.063853433	0.688451603
15:20:00	0.046420123	0.065385077	0.689364521	**15:20:04**	0.048915761	0.067364503	0.690277439
15:20:08	0.051411398	0.069343929	0.691190357	**15:20:12**	0.053907035	0.068491442	0.692103275
15:20:16	0.056402672	0.067638956	0.693016193	**15:20:20**	0.058898309	0.064780043	0.69392911
15:20:24	0.061555993	0.060011301	0.695061588	**15:20:28**	0.064363636	0.055331948	0.696397247
15:20:32	0.06717128	0.047694827	0.697732907	**15:20:36**	0.069978923	0.040057706	0.699068567
15:20:40	0.072786566	0.031443586	0.700404226	**15:20:44**	0.075594209	0.021852465	0.701739886
15:20:48	0.078401853	0.012261344	0.703075546	**15:20:52**	0.081209496	-0.000402761	0.704411205
15:20:56	0.084017139	-0.013066873	0.705746865	**15:21:00**	0.086824782	-0.026599289	0.707082525
15:21:04	0.088530263	-0.041657007	0.708418184	**15:21:08**	0.090235743	-0.056714717	0.709753844
15:21:12	0.091941223	-0.071772435	0.711089503	**15:21:16**	0.093646703	-0.086830153	0.712425163
15:21:20	0.095352184	-0.101452255	0.713760823	**15:21:24**	0.097057664	-0.115638766	0.715096482
15:21:28	0.098763144	-0.129825259	0.716432142	**15:21:32**	0.100468624	-0.141771534	0.717767802
15:21:36	0.102174105	-0.153717809	0.719103461	**15:21:40**	0.103879585	-0.164837582	0.720439121
15:21:44	0.105585065	-0.175130887	0.721774781	**15:21:48**	0.107290545	-0.185424174	0.72311044
15:21:52	0.108996026	-0.228614155	0.7244461	**15:21:56**	0.110701506	-0.271804136	0.72578176
15:22:00	0.112406986	-0.324683608	0.727117419	**15:22:04**	0.115826186	-0.38623103	0.728453079
15:22:08	0.119245385	-0.447778453	0.729788738	**15:22:12**	0.122664585	-0.476630616	0.731124398
15:22:16	0.126083785	-0.505482779	0.732460058	**15:22:20**	0.129502984	-0.518889777	0.733795717
15:22:24	0.132922184	-0.516851645	0.735131377	**15:22:28**	0.136341384	-0.514813513	0.736467037
15:22:32	0.139760583	-0.512775381	0.737802696	**15:22:36**	0.143179783	-0.510737249	0.739138356
15:22:40	0.146598983	-0.508699117	0.740474016	**15:22:44**	0.150018182	-0.506660985	0.741809675
15:22:48	0.153437382	-0.504622853	0.743145335	**15:22:52**	0.156856582	-0.502584721	0.744480994
15:22:56	0.160275782	-0.500546589	0.745816654	**15:23:00**	0.163694981	-0.492271768	0.747152314
15:23:04	0.165832312	-0.478524323	0.748487973	**15:23:08**	0.167969643	-0.464776879	0.749823633
15:23:12	0.170106974	-0.451029434	0.751159293	**15:23:16**	0.247857835	-0.392209936	0.854944872
15:23:20	0.220867765	-0.396715322	0.820834348	**15:23:24**	0.203229154	-0.396536815	0.803924777
15:23:28	0.189531787	-0.394008993	0.792355257	**15:23:32**	0.179307302	-0.388594041	0.785491199

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:23:36	0.169082818	-0.383179089	0.778627141	**15:23:40**	0.158858333	-0.37701866	0.771763083
15:23:44	0.139595877	-0.375500182	0.764899024	**15:23:48**	0.15449723	-0.353617188	0.758034966
15:23:52	0.169398583	-0.329947739	0.751170908	**15:23:56**	0.184299937	-0.30627829	0.744306849
15:24:00	0.19920129	-0.28141381	0.737442791	**15:24:04**	0.178108271	-0.276810021	0.730578733
15:24:08	0.14717945	-0.278069166	0.723714674	**15:24:12**	0.218882296	-0.21496201	0.716850616
15:24:16	0.160611351	-0.229330216	0.709986558	**15:24:20**	0.102016972	-0.242807676	0.702684273
15:24:24	0.143343536	-0.195640306	0.694712416	**15:24:28**	0.240653055	-0.115102364	0.686740559
15:24:32	0.217781379	-0.10620257	0.678768702	**15:24:36**	0.258518082	-0.059386807	0.670796845
15:24:40	0.153956654	-0.098957385	0.551992351	**15:24:44**	0.138153092	-0.085397118	0.553447234
15:24:48	0.122349529	-0.071836878	0.554902118	**15:24:52**	0.106545967	-0.082402462	0.556357002
15:24:56	0.076872883	-0.101235444	0.557811885	**15:25:00**	0.145119292	-0.063021536	0.559266769
15:25:04	0.150878508	-0.063376648	0.560721653	**15:25:08**	0.182692286	-0.048201058	0.562176537
15:25:12	0.214506063	-0.034947076	0.56363142	**15:25:16**	0.225844759	-0.033897955	0.565086304
15:25:20	0.224054999	-0.036299252	0.566541188	**15:25:24**	0.22226524	-0.034325298	0.567996071
15:25:28	0.11455061	-0.095491499	0.569450955	**15:25:32**	0.136406054	-0.074644372	0.570905839
15:25:36	0.158261497	-0.053797263	0.572360722	**15:25:40**	0.180116941	-0.032286323	0.573815606
15:25:44	0.201972385	-0.010111568	0.57527049	**15:25:48**	0.212338919	0.005214825	0.576725373
15:25:52	0.214716137	0.015778911	0.578180257	**15:25:56**	0.217093355	0.026342997	0.579635141
15:26:00	0.221912893	0.037443002	0.584399161	**15:26:04**	0.227704935	0.048202783	0.590220071
15:26:08	0.233496976	0.058962565	0.596040981	**15:26:12**	0.239289018	0.066291369	0.601861891
15:26:16	0.24508106	0.073620182	0.607682802	**15:26:20**	0.250873102	0.079771063	0.613503712
15:26:24	0.259012528	0.086143254	0.622505128	**15:26:28**	0.277178618	0.098492188	0.645091824
15:26:32	0.295344708	0.110841123	0.66767852	**15:26:36**	0.313510798	0.123190053	0.690265216
15:26:40	0.331676888	0.137549037	0.712851911	**15:26:44**	0.349842978	0.153918066	0.735438607
15:26:48	0.368009068	0.170287099	0.758025303	**15:26:52**	0.386175159	0.19123514	0.780611999
15:26:56	0.404341249	0.212183179	0.803198695	**15:27:00**	0.399340385	0.220976249	0.794396133
15:27:04	0.395456934	0.23208988	0.784952576	**15:27:08**	0.391573482	0.243203513	0.775509018
15:27:12	0.387690031	0.255649694	0.76606546	**15:27:16**	0.384006979	0.268215333	0.756893427
15:27:20	0.383774932	0.282112846	0.752397212	**15:27:24**	0.383542884	0.295285143	0.747900997
15:27:28	0.383310837	0.308457444	0.743404782	**15:27:32**	0.38307879	0.319592693	0.738908567
15:27:36	0.382846742	0.330727951	0.734412353	**15:27:40**	0.382614695	0.34119292	0.729916138
15:27:44	0.382382648	0.350987601	0.725419923	**15:27:48**	0.3839325	0.361844444	0.720923708
15:27:52	0.386751609	0.413537429	0.716427493	**15:27:56**	0.389570717	0.465230414	0.711931278
15:28:00	0.392389826	0.522311699	0.707435064	**15:28:04**	0.393097021	0.583522354	0.702781476
15:28:08	0.391869136	0.643579572	0.696264084	**15:28:12**	0.38433005	0.664541925	0.689746691
15:28:16	0.376790964	0.685504278	0.683229299	**15:28:20**	0.369251878	0.703489445	0.676711906
15:28:24	0.361712791	0.718497496	0.670194514	**15:28:28**	0.354173705	0.733505512	0.663677121
15:28:32	0.350755382	0.734543257	0.662743014	**15:28:36**	0.337297251	0.729596428	0.661856411
15:28:40	0.324379183	0.719361962	0.660969808	**15:28:44**	0.315290462	0.70580055	0.660083205
15:28:48	0.436155735	0.7697027	0.659196602	**15:28:52**	0.448718711	0.76175519	0.658309999
15:28:56	0.461281687	0.75380768	0.657423396	**15:29:00**	0.473844662	0.744664285	0.656536793
15:29:04	0.462626733	0.720149578	0.65565019	**15:29:08**	0.450181876	0.694903518	0.654763587
15:29:12	0.489884223	0.70414599	0.653876984	**15:29:16**	0.450384755	0.666177488	0.652990381
15:29:20	0.43880224	0.646523354	0.652103778	**15:29:24**	0.451955672	0.643287513	0.651217175
15:29:28	0.376510858	0.58723963	0.650330572	**15:29:32**	0.375833199	0.57575929	0.649443969
15:29:36	0.376046908	0.56481028	0.648557366	**15:29:40**	0.175946222	0.433402842	0.647670763
15:29:44	0.161043609	0.411335019	0.64678416	**15:29:48**	0.119253259	0.373239832	0.645897558
15:29:52	0.093270378	0.343158012	0.645010955	**15:29:56**	0.088297773	0.325600092	0.644124352
15:30:00	0.583325168	0.808912127	1.143237749	**15:30:04**	0.579248111	0.793627958	1.142351146
15:30:08	0.575171054	0.778343788	1.141464543	**15:30:12**	0.071093996	0.265908579	0.64057794
15:30:16	0.067016939	0.25347337	0.639691337	**15:30:20**	0.062939882	0.241585456	0.638804734
15:30:24	0.058862825	0.230244855	0.637918131	**15:30:28**	0.054785768	0.218904254	0.637031528
15:30:32	0.050708711	0.208170762	0.636144925	**15:30:36**	0.046631653	0.197437287	0.635258322
15:30:40	0.042554596	0.187053386	0.634371719	**15:30:44**	0.038477539	0.177019059	0.633485116
15:30:48	0.01780025	0.157089609	0.610106608	**15:30:52**	-0.019942274	0.108317338	0.563606153
15:30:56	-0.022685258	0.080407752	0.564527106	**15:31:00**	-0.019681127	0.058908387	0.573234912
15:31:04	-0.016921154	0.040247932	0.581942718	**15:31:08**	-0.014161182	0.021587479	0.590650524

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:31:12	-0.011401209	0.006548128	0.59935833	**15:31:16**	-0.009349473	-0.008913392	0.607106536
15:31:20	-0.007359777	-0.022486883	0.614770682	**15:31:24**	-0.005370082	-0.034135363	0.622434828
15:31:28	0.000779386	-0.043304267	0.630098974	**15:31:32**	0.009500913	-0.042509068	0.63776312
15:31:36	0.018222439	-0.041713873	0.645427266	**15:31:40**	0.026943966	-0.037847859	0.653091413
15:31:44	0.035665492	-0.030911025	0.660755559	**15:31:48**	0.044387019	-0.023974195	0.668419705
15:31:52	0.053108546	-0.024402695	0.676083851	**15:31:56**	0.061830072	-0.024831191	0.683747997
15:32:00	0.070551599	-0.025259691	0.691412143	**15:32:04**	0.079430977	-0.025594094	0.698015068
15:32:08	0.08276694	-0.029232845	0.697107133	**15:32:12**	0.086102903	-0.033610213	0.696199199
15:32:16	0.089438865	-0.037987581	0.695291264	**15:32:20**	0.092774828	-0.03916366	0.69438333
15:32:24	0.096110791	-0.037138452	0.693475395	**15:32:28**	0.099446753	-0.035113252	0.692567461
15:32:32	0.102782716	-0.034494013	0.691659526	**15:32:36**	0.106118678	-0.033874774	0.690751592
15:32:40	0.101046169	-0.039727074	0.689843658	**15:32:44**	0.122711845	-0.031100518	0.688935723
15:32:48	0.311708156	0.077269227	0.688027789	**15:32:52**	0.286448873	0.057924543	0.687119854
15:32:56	0.26118959	0.038579859	0.68621192	**15:33:00**	0.235930307	0.020486778	0.685303985
15:33:04	0.144146067	-0.036009196	0.684396051	**15:33:08**	0.116784251	-0.054103952	0.683488116
15:33:12	0.350795079	0.086305367	0.682580182	**15:33:16**	0.352181031	0.088050604	0.681672247
15:33:20	0.353566983	0.089795842	0.680764313	**15:33:24**	0.354952935	0.091541079	0.679856379
15:33:28	0.343937962	0.085894316	0.678948444	**15:33:32**	0.372481474	0.10505239	0.696444742
15:33:36	0.41851155	0.134633934	0.737633851	**15:33:40**	0.464541626	0.164215477	0.77882296
15:33:44	0.510571702	0.193797021	0.820012068	**15:33:48**	0.556601779	0.223378564	0.861201177
15:33:52	0.597330722	0.232937219	0.895207701	**15:33:56**	0.63311816	0.239550319	0.922518903
15:34:00	0.475472242	0.117243465	0.902702435	**15:34:04**	0.441838077	0.055240794	0.876009535
15:34:08	0.408203913	-0.006761878	0.849316634	**15:34:12**	0.311182528	-0.091879592	0.736739428
15:34:16	0.498038476	-0.007782429	0.740015353	**15:34:20**	0.292635042	-0.149430128	0.743291277
15:34:24	0.161760395	-0.238577428	0.746567202	**15:34:28**	0.125978133	-0.271041665	0.749843126
15:34:32	0.474000458	-0.062848814	0.75311905	**15:34:36**	0.535072985	-0.025702289	0.756394975
15:34:40	0.27710011	-0.174400297	0.759670899	**15:34:44**	0.414748825	-0.082940957	0.762946824
15:34:48	0.552397541	0.008518419	0.766222748	**15:34:52**	0.637180115	0.071876711	0.75882742
15:34:56	0.616147808	0.072160429	0.74758779	**15:35:00**	0.595115501	0.073357591	0.736348159
15:35:04	0.573881593	0.075348042	0.725108529	**15:35:08**	0.476275278	0.031814085	0.713868898
15:35:12	0.421860911	0.015278253	0.702629268	**15:35:16**	0.367446544	-0.001257579	0.691389637
15:35:20	0.313032178	-0.017793412	0.680150007	**15:35:24**	0.258617811	-0.034329244	0.668910376
15:35:28	0.48135979	0.114343526	0.657670746	**15:35:32**	0.37537796	0.066444877	0.646431115
15:35:36	0.404002392	0.098782933	0.635191485	**15:35:40**	0.432626824	0.129493433	0.623951854
15:35:44	0.386226064	0.113855011	0.612712224	**15:35:48**	0.260257965	0.050787733	0.601472593
15:35:52	0.134289867	-0.015699428	0.590232963	**15:35:56**	0.051039994	-0.056722917	0.578993332
15:36:00	0.081286447	-0.031189052	0.567753702	**15:36:04**	0.113032276	-0.005857479	0.556514071
15:36:08	0.148363991	0.021611586	0.479930606	**15:36:12**	0.260132782	0.094003317	0.615385435
15:36:16	0.326758201	0.139485789	0.689674824	**15:36:20**	0.31724512	0.139583276	0.660803005
15:36:24	0.307732038	0.139680768	0.631931185	**15:36:28**	0.182102101	0.070562798	0.445730877
15:36:32	0.219774506	0.099657155	0.480791389	**15:36:36**	0.16750277	0.075137202	0.515851901
15:36:40	0.08337214	0.031972757	0.550912413	**15:36:44**	0.011749514	-0.003389764	0.585972925
15:36:48	0.073547693	0.040777791	0.621033436	**15:36:52**	0.135345871	0.108897962	0.656093948
15:36:56	0.174919578	0.163770475	0.661042187	**15:37:00**	0.212867008	0.227017558	0.663786958
15:37:04	0.249270794	0.298688474	0.666531729	**15:37:08**	0.28567458	0.37035939	0.669276499
15:37:12	0.322078365	0.422876724	0.67202127	**15:37:16**	0.358482151	0.475394041	0.674766041
15:37:20	0.394885936	0.510456382	0.677510812	**15:37:24**	0.431289722	0.528063731	0.680255583
15:37:28	0.185961707	0.377735121	0.683000354	**15:37:32**	0.185350181	0.381883296	0.685745125
15:37:36	0.184738654	0.386031453	0.688489896	**15:37:40**	0.184127128	0.388734345	0.691234667
15:37:44	0.183515602	0.389991972	0.693979437	**15:37:48**	0.17458183	0.38628882	0.696724208
15:37:52	0.236635793	0.421067869	0.699468979	**15:37:56**	0.235250448	0.418031714	0.70221375
15:38:00	0.233865103	0.413313809	0.704958521	**15:38:04**	0.233264294	0.407381806	0.707703292
15:38:08	0.232663486	0.401449784	0.710448063	**15:38:12**	0.232062677	0.395517763	0.713192834
15:38:16	0.231461868	0.389585759	0.715937605	**15:38:20**	0.230861059	0.384029177	0.718682375
15:38:24	0.230260251	0.378848052	0.721427146	**15:38:28**	0.229659442	0.373666909	0.724171917
15:38:32	0.229058633	0.370636485	0.726916688	**15:38:36**	0.228457824	0.367606062	0.729661459
15:38:40	0.227857016	0.364188243	0.73240623	**15:38:44**	0.227256207	0.360382994	0.735151001

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:38:48	0.226655398	0.356577763	0.737895772	**15:38:52**	0.226054589	0.351751701	0.740640543
15:38:56	0.22545378	0.346925639	0.743385313	**15:39:00**	0.224852972	0.341692481	0.746130084
15:39:04	0.222224475	0.334843536	0.748874855	**15:39:08**	0.219595979	0.327994592	0.751619626
15:39:12	0.216967483	0.319377935	0.754364397	**15:39:16**	0.214332567	0.310757434	0.757109168
15:39:20	0.210937554	0.301683868	0.758830661	**15:39:24**	0.203632577	0.290279616	0.755254486
15:39:28	0.196327601	0.278875381	0.75167831	**15:39:32**	0.189022624	0.269173218	0.748102134
15:39:36	0.178160089	0.25735045	0.744525958	**15:39:40**	0.16616527	0.244852754	0.740949783
15:39:44	0.154170452	0.232355058	0.737373607	**15:39:48**	0.142175634	0.219857354	0.733797431
15:39:52	0.130180816	0.176686777	0.730221255	**15:39:56**	0.118185998	0.133516199	0.726645079
15:40:00	0.106360563	0.108100169	0.71624802	**15:40:04**	0.096891477	0.101742305	0.690729332
15:40:08	0.104795282	0.105740152	0.688749438	**15:40:12**	0.114783387	0.122471139	0.689593595
15:40:16	0.124771492	0.139202122	0.690437752	**15:40:20**	0.134759598	0.151807718	0.691281908
15:40:24	0.144747703	0.160287929	0.692126065	**15:40:28**	0.154735809	0.16876814	0.692970221
15:40:32	0.164723914	0.171346543	0.693814378	**15:40:36**	0.174712019	0.173924947	0.694658535
15:40:40	0.184700125	0.174688295	0.695502691	**15:40:44**	0.19468823	0.173636589	0.696346848
15:40:48	0.204676335	0.172584882	0.697191004	**15:40:52**	0.214664441	0.171533175	0.698035161
15:40:56	0.224652546	0.170481466	0.698879318	**15:41:00**	0.234640652	0.168590542	0.699723474
15:41:04	0.242609657	0.164656847	0.700567631	**15:41:08**	0.236824194	0.152524326	0.701411787
15:41:12	0.187981092	0.111513334	0.702255944	**15:41:16**	0.237853794	0.129345303	0.703100101
15:41:20	0.234423292	0.117671671	0.703944257	**15:41:24**	0.23099279	0.108265651	0.704788414
15:41:28	0.227562288	0.098859631	0.70563257	**15:41:32**	0.224131786	0.094135296	0.706476727
15:41:36	0.220701284	0.089410964	0.707320884	**15:41:40**	0.217270782	0.079091869	0.70816504
15:41:44	0.21384028	0.063178017	0.709009197	**15:41:48**	0.210409778	0.047264165	0.709853354
15:41:52	0.206979276	0.033437212	0.71069751	**15:41:56**	0.203548774	0.019610259	0.711541667
15:42:00	0.200118272	0.006903265	0.712385823	**15:42:04**	0.195912065	-0.005146149	0.71322998
15:42:08	0.191705858	-0.017195571	0.714074137	**15:42:12**	0.187499652	-0.026161112	0.714918293
15:42:16	0.183323538	-0.035108707	0.715803224	**15:42:20**	0.179649069	-0.042394708	0.71736784
15:42:24	0.175974601	-0.048318129	0.718932457	**15:42:28**	0.172300132	-0.054241551	0.720497074
15:42:32	0.168625664	-0.060164972	0.722061691	**15:42:36**	0.170405618	-0.062837097	0.723626307
15:42:40	0.172984388	-0.064488163	0.725190924	**15:42:44**	0.175563158	-0.065594369	0.726755541
15:42:48	0.178141928	-0.066700574	0.728320158	**15:42:52**	0.180720698	-0.149675392	0.729884775
15:42:56	0.183299468	-0.23265021	0.731449391	**15:43:00**	0.185878238	-0.312376326	0.733014008
15:43:04	0.189150499	-0.38844029	0.734578625	**15:43:08**	0.192183182	-0.464647098	0.736143242
15:43:12	0.194709862	-0.469892991	0.737707859	**15:43:16**	0.197236543	-0.475138849	0.739272475
15:43:20	0.199763223	-0.477008738	0.740837092	**15:43:24**	0.202289904	-0.475502622	0.742401709
15:43:28	0.204816584	-0.473996507	0.743966326	**15:43:32**	0.207343265	-0.472490392	0.745530943
15:43:36	0.209869945	-0.470984277	0.747095559	**15:43:40**	0.212396626	-0.469478162	0.748660176
15:43:44	0.214923306	-0.467972047	0.750224793	**15:43:48**	0.217449987	-0.466465932	0.75178941
15:43:52	0.219976667	-0.464959817	0.753354027	**15:43:56**	0.222503348	-0.463453702	0.754918643
15:44:00	0.225030028	-0.450541831	0.75648326	**15:44:04**	0.228005368	-0.425956729	0.758047877
15:44:08	0.230980708	-0.401371627	0.759612494	**15:44:12**	0.233956048	-0.373602807	0.761177111
15:44:16	0.236931387	-0.345833986	0.762741727	**15:44:20**	0.239906727	-0.318065201	0.764306344
15:44:24	0.242882067	-0.29029638	0.765870961	**15:44:28**	0.245129502	-0.262961453	0.766449329
15:44:32	0.247260499	-0.237090994	0.766869933	**15:44:36**	0.249391497	-0.211220535	0.767290537
15:44:40	0.251522494	-0.183966134	0.767711142	**15:44:44**	0.253653491	-0.155327792	0.768131746
15:44:48	0.255784489	-0.126689468	0.76855235	**15:44:52**	0.257915486	-0.093636314	0.768972955
15:44:56	0.260046483	-0.060583177	0.769393559	**15:45:00**	-0.237822519	-0.525618132	0.269814163
15:45:04	-0.235162193	-0.488425689	0.270234768	**15:45:08**	-0.233179273	-0.451637038	0.270655372
15:45:12	0.267724542	0.086330559	0.771075976	**15:45:16**	0.268628356	0.124298153	0.771496581
15:45:20	0.269532171	0.162265749	0.771917185	**15:45:24**	0.270435985	0.200233344	0.77233779
15:45:28	0.2713398	0.238200941	0.772758394	**15:45:32**	0.272243614	0.273879924	0.773178998
15:45:36	0.273147429	0.309558916	0.773599603	**15:45:40**	0.274051243	0.343005595	0.774020207
15:45:44	0.274955057	0.374219954	0.774440811	**15:45:48**	0.275858872	0.405434312	0.774861416
15:45:52	0.276762686	0.466634546	0.77528202	**15:45:56**	0.277666501	0.527834745	0.775702624
15:46:00	0.278570315	0.599390593	0.776123229	**15:46:04**	0.277053598	0.679859177	0.776543833
15:46:08	0.275536881	0.760327762	0.776964437	**15:46:12**	0.274020165	0.75942367	0.777385042
15:46:16	0.272503448	0.758519579	0.777805646	**15:46:20**	0.270986731	0.757615488	0.778226251

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:46:24	0.269470014	0.756711396	0.778646855	**15:46:28**	0.266925298	0.755194531	0.777674609
15:46:32	0.263796671	0.753329605	0.775911212	**15:46:36**	0.260668044	0.751464679	0.774147814
15:46:40	0.257539417	0.749599752	0.772384417	**15:46:44**	0.25441079	0.747734826	0.77062102
15:46:48	0.251282163	0.7458699	0.768857623	**15:46:52**	0.248153536	0.744004974	0.767094226
15:46:56	0.245024909	0.742140048	0.765330829	**15:47:00**	0.241896282	0.740275122	0.763567432
15:47:04	0.241243297	0.739885888	0.761804035	**15:47:08**	0.240590312	0.739496654	0.760040638
15:47:12	0.239937327	0.739107419	0.758277241	**15:47:16**	0.239668986	0.738947465	0.756513844
15:47:20	0.240222652	0.739277497	0.754750447	**15:47:24**	0.240776318	0.739607529	0.75298705
15:47:28	0.241329985	0.739937561	0.751223653	**15:47:32**	0.241883651	0.740267593	0.749460255
15:47:36	0.242437317	0.740597625	0.747696858	**15:47:40**	0.242990983	0.740927657	0.745933461
15:47:44	0.243544649	0.741257688	0.744170064	**15:47:48**	0.244098316	0.74158772	0.742406667
15:47:52	0.244651982	0.741917752	0.74064327	**15:47:56**	0.245205648	0.742247784	0.738879873
15:48:00	0.245759314	0.742577816	0.737116476	**15:48:04**	0.2450753	0.742170085	0.735353079
15:48:08	0.244391285	0.741762355	0.733589682	**15:48:12**	0.24370727	0.741354624	0.731826285
15:48:16	0.243023255	0.740946893	0.730062888	**15:48:20**	0.241933858	0.727604711	0.727750231
15:48:24	0.240689029	0.701477035	0.725226979	**15:48:28**	0.239444201	0.675349359	0.722703727
15:48:32	0.238199372	0.63617255	0.720180475	**15:48:36**	0.236954544	0.596995776	0.717657223
15:48:40	0.235709715	0.559319303	0.715133971	**15:48:44**	0.234464887	0.523143129	0.712610719
15:48:48	0.233220058	0.486966956	0.710087467	**15:48:52**	0.23197523	0.369896546	0.707564215
15:48:56	0.230730401	0.252826135	0.705040963	**15:49:00**	0.231541988	0.129248004	0.705205426
15:49:04	0.232773664	-0.001813233	0.705757866	**15:49:08**	0.234005339	-0.132874463	0.706310307
15:49:12	0.235237014	-0.233979386	0.706862747	**15:49:16**	0.236468689	-0.335084308	0.707415188
15:49:20	0.237700364	-0.399094756	0.707967628	**15:49:24**	0.23893204	-0.426010694	0.708520069
15:49:28	0.240163715	-0.452926631	0.709072509	**15:49:32**	0.24139539	-0.452192448	0.709624949
15:49:36	0.242627065	-0.451458266	0.71017739	**15:49:40**	0.24385874	-0.450724083	0.71072983
15:49:44	0.245090416	-0.449989901	0.711282271	**15:49:48**	0.246322091	-0.449255718	0.711834711
15:49:52	0.247553766	-0.448521536	0.712387152	**15:49:56**	0.248785441	-0.447787353	0.712939592
15:50:00	0.250017116	-0.439437727	0.713492033	**15:50:04**	0.25195987	-0.423048759	0.714044473
15:50:08	0.254956169	-0.406031824	0.714596914	**15:50:12**	0.257952467	-0.384151163	0.715149354
15:50:16	0.260948765	-0.362270502	0.715701794	**15:50:20**	0.263945063	-0.341697927	0.716254235
15:50:24	0.266941361	-0.322433474	0.716806675	**15:50:28**	0.26993766	-0.303169021	0.717359116
15:50:32	0.272933958	-0.284732083	0.717911556	**15:50:36**	0.275930256	-0.266295145	0.718463997
15:50:40	0.278926554	-0.247652136	0.719016437	**15:50:44**	0.281922853	-0.228802986	0.719568878
15:50:48	0.284919151	-0.209953836	0.720121318	**15:50:52**	0.287915449	-0.191104686	0.720673759
15:50:56	0.290911747	-0.172255535	0.721226199	**15:51:00**	0.293908046	-0.154055934	0.721778639
15:51:04	0.297258055	-0.136295039	0.72233108	**15:51:08**	0.300608064	-0.118534109	0.72288352
15:51:12	0.303958073	-0.099428284	0.723435961	**15:51:16**	0.307308082	-0.080322442	0.723988401
15:51:20	0.310658091	-0.061216617	0.724540842	**15:51:24**	0.3140081	-0.042110775	0.725093282
15:51:28	0.317358109	-0.02300495	0.725645723	**15:51:32**	0.320708119	-0.001139574	0.726198163
15:51:36	0.324058128	0.020725801	0.726750604	**15:51:40**	0.327408137	0.044092667	0.727303044
15:51:44	0.330758146	0.068961024	0.727855485	**15:51:48**	0.334108155	0.093829372	0.728407925
15:51:52	0.337458164	0.05358154	0.728960365	**15:51:56**	0.340808173	0.0133337	0.729512806
15:52:00	0.344158182	-0.016822137	0.730065246	**15:52:04**	0.348011356	-0.036586042	0.730617687
15:52:08	0.35186453	-0.056349948	0.731170127	**15:52:12**	0.355203727	-0.059166988	0.731026173
15:52:16	0.357371619	-0.062682207	0.7292952	**15:52:20**	0.359539511	-0.058064497	0.727564227
15:52:24	0.361707404	-0.045313839	0.725833254	**15:52:28**	0.363875296	-0.032563181	0.724102281
15:52:32	0.366043188	-0.011316999	0.722371308	**15:52:36**	0.36821108	0.009929183	0.720640335
15:52:40	0.370378973	0.032976689	0.718909362	**15:52:44**	0.372546865	0.057825535	0.717178388
15:52:48	0.374714757	0.082674382	0.715447415	**15:52:52**	0.376882649	0.106384137	0.713716442
15:52:56	0.379050542	0.130093893	0.711985469	**15:53:00**	0.381218434	0.155099238	0.710254496
15:53:04	0.383330371	0.180503097	0.708523523	**15:53:08**	0.385442308	0.204745322	0.70679255
15:53:12	0.387554244	0.22550265	0.705061577	**15:53:16**	0.389666181	0.246259979	0.703330604
15:53:20	0.391778118	0.260721411	0.701599631	**15:53:24**	0.393890055	0.273084211	0.699868658
15:53:28	0.396001992	0.283919793	0.698137685	**15:53:32**	0.398113929	0.290173716	0.696406712
15:53:36	0.400225866	0.296427644	0.694675739	**15:53:40**	0.402337803	0.299540128	0.692944766
15:53:44	0.40444974	0.301605471	0.691213793	**15:53:48**	0.407233451	0.303913717	0.690393018
15:53:52	0.4203223	0.311892109	0.70353483	**15:53:56**	0.433411149	0.319870502	0.716676641

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
15:54:00	0.446499998	0.3287552	0.729818453	**15:54:04**	0.456823016	0.336293327	0.742960265
15:54:08	0.467146034	0.343831455	0.756102076	**15:54:12**	0.477469051	0.351369586	0.769243888
15:54:16	0.487792069	0.358907714	0.7823857	**15:54:20**	0.478392345	0.352500977	0.78530968
15:54:24	0.445480074	0.331349291	0.772914937	**15:54:28**	0.412567804	0.309297002	0.760520193
15:54:32	0.344603704	0.26364904	0.74812545	**15:54:36**	0.339035961	0.255194584	0.735730707
15:54:40	0.333468218	0.24509929	0.723335963	**15:54:44**	0.327900475	0.234457053	0.71094122
15:54:48	0.320639814	0.225815403	0.698546477	**15:54:52**	0.244518764	0.185156279	0.686151733
15:54:56	0.168397714	0.144497155	0.67375699	**15:55:00**	0.372192241	0.270691367	0.661362247
15:55:04	0.300004769	0.232376988	0.648967503	**15:55:08**	0.227817297	0.19243092	0.63657276
15:55:12	0.088053776	0.107308772	0.530074295	**15:55:16**	0.092427442	0.108104566	0.536614912
15:55:20	0.096801108	0.106655826	0.543155529	**15:55:24**	0.101174773	0.104458911	0.549696146
15:55:28	0.105548439	0.100279732	0.556236763	**15:55:32**	0.109922105	0.090153754	0.56277738
15:55:36	0.114295771	0.080027778	0.569317997	**15:55:40**	0.121469497	0.072257043	0.579652458
15:55:44	0.129936871	0.065486155	0.591739702	**15:55:48**	0.138404245	0.059522526	0.603826946
15:55:52	0.146871618	0.055980674	0.61591419	**15:55:56**	0.155338992	0.052438824	0.628001434
15:56:00	0.163806366	0.052928577	0.640088677	**15:56:04**	0.174416387	0.056039398	0.652175921
15:56:08	0.185026408	0.06041337	0.664263165	**15:56:12**	0.195636429	0.068576792	0.676350409
15:56:16	0.20624645	0.07674021	0.688437653	**15:56:20**	0.216856471	0.085499722	0.700524897
15:56:24	0.227466492	0.094457937	0.71261214	**15:56:28**	0.238076513	0.103117718	0.724699384
15:56:32	0.242562491	0.107231769	0.72848907	**15:56:36**	0.242102466	0.108397582	0.725577341
15:56:40	0.241642441	0.110063268	0.722665611	**15:56:44**	0.241182417	0.111895575	0.719753882
15:56:48	0.240722392	0.113897828	0.716842153	**15:56:52**	0.240262367	0.116409914	0.713930424
15:56:56	0.239802342	0.118922001	0.711018695	**15:57:00**	0.239342317	0.120861966	0.708106965
15:57:04	0.236441505	0.12115631	0.705195236	**15:57:08**	0.233540694	0.121750874	0.702283507
15:57:12	0.232496632	0.124352883	0.701887516	**15:57:16**	0.232291581	0.127455014	0.702628314
15:57:20	0.23208653	0.130557144	0.703369113	**15:57:24**	0.23188148	0.133659274	0.704109911
15:57:28	0.231676429	0.136277689	0.704850709	**15:57:32**	0.231471378	0.137444958	0.705591507
15:57:36	0.231266327	0.138612228	0.706332305	**15:57:40**	0.231061276	0.13683212	0.707073103
15:57:44	0.230856226	0.134069551	0.707813901	**15:57:48**	0.230651175	0.127560928	0.708554699
15:57:52	0.230446124	0.109814138	0.709295497	**15:57:56**	0.230241073	0.09206735	0.710036295
15:58:00	0.230036022	0.030687947	0.710777093	**15:58:04**	0.227492618	-0.046629509	0.711517891
15:58:08	0.224949214	-0.117934439	0.712258689	**15:58:12**	0.22240581	-0.171201766	0.712999487
15:58:16	0.219862406	-0.224469092	0.713740285	**15:58:20**	0.217319001	-0.257523136	0.714481083
15:58:24	0.214775597	-0.28383942	0.715221881	**15:58:28**	0.212232193	-0.305767395	0.71596268
15:58:32	0.209688789	-0.314530518	0.716703478	**15:58:36**	0.207145385	-0.323293641	0.717444276
15:58:40	0.204601981	-0.324398792	0.718185074	**15:58:44**	0.202058577	-0.322951262	0.718925872
15:58:48	0.199515172	-0.320057294	0.71966667	**15:58:52**	0.196971768	-0.312823977	0.720407468
15:58:56	0.194428364	-0.305590661	0.721148266	**15:59:00**	0.19188496	-0.295219814	0.721889064
15:59:04	0.192628083	-0.281844075	0.722629862	**15:59:08**	0.193371206	-0.266892465	0.72337066
15:59:12	0.194114329	-0.247213171	0.724111458	**15:59:16**	0.194857453	-0.227533876	0.724852256
15:59:20	0.195600576	-0.205923807	0.725593054	**15:59:24**	0.196343699	-0.183670123	0.726333852
15:59:28	0.197086822	-0.163264021	0.72707465	**15:59:32**	0.197829945	-0.148400684	0.727815448
15:59:36	0.199521534	-0.132972	0.729841337	**15:59:40**	0.20195435	-0.12059729	0.732871525
15:59:44	0.204387166	-0.109387838	0.735901714	**15:59:48**	0.206819982	-0.098599392	0.738931903
15:59:52	0.209252799	-0.089073927	0.741962092	**15:59:56**	0.211685615	-0.079548462	0.744992281
16:00:00	0.714118431	0.713618491	1.24802247	**16:00:04**	0.714606695	0.70520503	1.251052658
16:00:08	0.715757364	0.709685173	1.254082847	**16:00:12**	0.216962077	0.214197531	0.757113036
16:00:16	0.217731396	0.218450366	0.759553304	**16:00:20**	0.217137753	0.221890752	0.760146873
16:00:24	0.21654411	0.225331138	0.760740442	**16:00:28**	0.215950467	0.2181453	0.761334011
16:00:32	0.215356823	0.210959472	0.76192758	**16:00:36**	0.21476318	0.195687915	0.762521149
16:00:40	0.214169537	0.177721119	0.763114718	**16:00:44**	0.213575894	0.159754321	0.763708287
16:00:48	0.212982251	0.146102365	0.764301856	**16:00:52**	0.212388607	0.132450408	0.764895425
16:00:56	0.211794964	0.12325922	0.765488994	**16:01:00**	0.211201321	0.1185288	0.766082563
16:01:04	0.211567466	0.114370495	0.766676132	**16:01:08**	0.21193361	0.122966793	0.767269702
16:01:12	0.212299755	0.13156309	0.767863271	**16:01:16**	0.212665899	0.136384856	0.76845684
16:01:20	0.213032044	0.137432089	0.769050409	**16:01:24**	0.213398189	0.138479323	0.769643978
16:01:28	0.213764333	0.131882196	0.770237547	**16:01:32**	0.214130478	0.125285069	0.770831116

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:01:36	0.214496623	0.117762178	0.771424685	**16:01:40**	0.214862767	0.109930698	0.772018254
16:01:44	0.215228912	0.102099219	0.772611823	**16:01:48**	0.215595057	0.089255268	0.773205392
16:01:52	0.215961201	0.076411318	0.773798961	**16:01:56**	0.216327346	0.067742628	0.77439253
16:02:00	0.216693491	0.060465686	0.774986099	**16:02:04**	0.215600685	0.052319092	0.775579668
16:02:08	0.214507879	0.046626811	0.776173238	**16:02:12**	0.213415074	0.04093453	0.776766807
16:02:16	0.229865227	0.036819498	0.777360376	**16:02:20**	0.229204737	0.013625229	0.777953945
16:02:24	0.228544246	-0.00956903	0.778547514	**16:02:28**	0.227883756	-0.034726583	0.779141083
16:02:32	0.227223265	-0.059884144	0.779734652	**16:02:36**	0.226562775	-0.08655572	0.780328221
16:02:40	0.225902284	-0.11474131	0.78092179	**16:02:44**	0.225241793	-0.142677874	0.781515359
16:02:48	0.224581303	-0.169867327	0.782108928	**16:02:52**	0.223920812	-0.197056779	0.782702497
16:02:56	0.223260322	-0.22631184	0.783296066	**16:03:00**	0.222599831	-0.257632509	0.783889635
16:03:04	0.22399457	-0.287728088	0.784483205	**16:03:08**	0.225389309	-0.295372566	0.785076774
16:03:12	0.226784047	-0.303017043	0.785670343	**16:03:16**	0.228178786	-0.303713638	0.786263912
16:03:20	0.255184384	-0.282196045	0.786857481	**16:03:24**	0.29082188	-0.25553311	0.791529317
16:03:28	0.343535235	-0.210893777	0.819337491	**16:03:32**	0.369524103	-0.174386714	0.810936255
16:03:36	0.395512972	-0.131489369	0.802535018	**16:03:40**	0.374777469	-0.110053448	0.794133781
16:03:44	0.315179457	-0.111782833	0.785732545	**16:03:48**	0.272402338	-0.096823744	0.777331308
16:03:52	0.277683009	-0.053218169	0.768930072	**16:03:56**	0.334963504	0.021017866	0.760528835
16:04:00	0.392244	0.094888055	0.752127598	**16:04:04**	0.449841729	0.168947342	0.743726362
16:04:08	0.507439458	0.226831885	0.735325125	**16:04:12**	0.458960658	0.221485845	0.726923888
16:04:16	0.428717744	0.21814648	0.718522652	**16:04:20**	0.426221023	0.222482727	0.710121415
16:04:24	0.345331394	0.180090177	0.595504438	**16:04:28**	0.37314611	0.203725339	0.628172627
16:04:32	0.400960826	0.227360498	0.660840817	**16:04:36**	0.415014536	0.24651205	0.674864011
16:04:40	0.38874425	0.245346207	0.685381001	**16:04:44**	0.327395083	0.223270385	0.695897991
16:04:48	0.401570758	0.273606058	0.706414982	**16:04:52**	0.387798169	0.271517138	0.716931972
16:04:56	0.374025581	0.27107181	0.727448962	**16:05:00**	0.360252992	0.272270072	0.737965953
16:05:04	0.342470165	0.271077898	0.744621322	**16:05:08**	0.321076972	0.275920548	0.746384953
16:05:12	0.29968378	0.280763189	0.748148583	**16:05:16**	0.266050656	0.273116598	0.749912214
16:05:20	0.260982061	0.280765806	0.751675844	**16:05:24**	0.372691318	0.358024482	0.753439475
16:05:28	0.524326957	0.462855185	0.755203105	**16:05:32**	0.508997466	0.468160536	0.756966736
16:05:36	0.493667975	0.470794413	0.758730367	**16:05:40**	0.478338484	0.470756799	0.760493997
16:05:44	0.463008993	0.470719167	0.762257628	**16:05:48**	0.447679502	0.46734106	0.764021258
16:05:52	0.432350011	0.463962953	0.765784889	**16:05:56**	0.41702052	0.459693272	0.767548519
16:06:00	0.401691029	0.455126387	0.76931215	**16:06:04**	0.385919013	0.450295719	0.77107578
16:06:08	0.370146997	0.448478194	0.772839411	**16:06:12**	0.354374981	0.446660687	0.774603042
16:06:16	0.338602965	0.448413512	0.776366672	**16:06:20**	0.322830949	0.453736704	0.778130303
16:06:24	0.307058933	0.459059879	0.779893933	**16:06:28**	0.291286917	0.4665566	0.781657564
16:06:32	0.275514901	0.474053322	0.783421194	**16:06:36**	0.259742886	0.474076327	0.785184825
16:06:40	0.24397087	0.466625543	0.786948455	**16:06:44**	0.228198854	0.459174796	0.788712086
16:06:48	0.212426838	0.440092645	0.790475717	**16:06:52**	0.196654822	0.421010458	0.792239347
16:06:56	0.195644883	0.405792167	0.794002978	**16:07:00**	0.227577018	0.405274568	0.795766608
16:07:04	0.258677413	0.404261182	0.797530239	**16:07:08**	0.275989946	0.402326895	0.799293869
16:07:12	0.29330248	0.400392624	0.8010575	**16:07:16**	0.310615013	0.400152254	0.80282113
16:07:20	0.327927546	0.401605784	0.804584761	**16:07:24**	0.34524008	0.403059314	0.806348392
16:07:28	0.362552613	0.401797846	0.808112022	**16:07:32**	0.369439176	0.394321601	0.795749347
16:07:36	0.372296414	0.379293729	0.777927279	**16:07:40**	0.529670576	0.451221163	0.969462533
16:07:44	0.53451247	0.432226487	0.954329506	**16:07:48**	0.539354365	0.41189546	0.939196479
16:07:52	0.54419626	0.391564438	0.924063452	**16:07:56**	0.549038154	0.369421683	0.908930425
16:08:00	0.535325482	0.334407106	0.868657534	**16:08:04**	0.59854118	0.34524834	0.934396221
16:08:08	0.597929126	0.316593008	0.913653719	**16:08:12**	0.369816116	0.152327885	0.892911218
16:08:16	0.363107705	0.127592609	0.872168716	**16:08:20**	0.356399294	0.105375336	0.851426214
16:08:24	0.349690884	0.083158064	0.830683713	**16:08:28**	0.342982473	0.069377702	0.809941211
16:08:32	0.417544499	0.104041378	0.789198709	**16:08:36**	0.513850679	0.151226109	0.768456207
16:08:40	0.430805482	0.091061975	0.747713706	**16:08:44**	0.439385081	0.085513962	0.726971204
16:08:48	0.387456368	0.024835646	0.706228702	**16:08:52**	0.136065623	-0.154738913	0.685486201
16:08:56	0.119764492	-0.176865972	0.664743699	**16:09:00**	0.10461637	-0.192534362	0.645563427
16:09:04	0.091859623	-0.206777272	0.629644981	**16:09:08**	0.079102877	-0.241877204	0.613726536

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:09:12	0.096930331	-0.258746369	0.639247087	**16:09:16**	0.119654593	-0.265053056	0.671402398
16:09:20	0.142378855	-0.263716161	0.703557709	**16:09:24**	0.165103117	-0.262379266	0.73571302
16:09:28	0.149351998	-0.283976949	0.715737453	**16:09:32**	0.135099307	-0.304681442	0.697792129
16:09:36	0.139261466	-0.306742487	0.704797365	**16:09:40**	0.143423625	-0.301136926	0.711802602
16:09:44	0.147585784	-0.295531365	0.718807838	**16:09:48**	0.151747943	-0.278273226	0.725813074
16:09:52	0.155910103	-0.26101505	0.73281831	**16:09:56**	0.168201986	-0.245140669	0.739823546
16:10:00	0.225804634	-0.204333795	0.746828782	**16:10:04**	0.28443308	-0.162915459	0.753834018
16:10:08	0.346843581	-0.11159407	0.760839254	**16:10:12**	0.372684587	-0.082071191	0.76784449
16:10:16	0.424481127	-0.03597805	0.774849727	**16:10:20**	0.538920759	0.048554253	0.781854963
16:10:24	0.341335713	-0.052906499	0.788860199	**16:10:28**	0.359710355	-0.027956496	0.795865435
16:10:32	0.378084996	-0.003006475	0.802870671	**16:10:36**	0.395129402	0.023458514	0.809875907
16:10:40	0.40483291	0.047855628	0.816881143	**16:10:44**	0.414536419	0.072252741	0.823886379
16:10:48	0.41231483	0.096868683	0.830891616	**16:10:52**	0.401803648	0.116543335	0.837896852
16:10:56	0.391292466	0.135755332	0.844902088	**16:11:00**	0.380781284	0.15481311	0.851907324
16:11:04	0.369384339	0.173342902	0.85891256	**16:11:08**	0.357987394	0.194535325	0.865917796
16:11:12	0.346590448	0.21572775	0.872923032	**16:11:16**	0.335193503	0.221170329	0.879928268
16:11:20	0.286236213	0.198973821	0.836042423	**16:11:24**	0.330715151	0.232473199	0.918754741
16:11:28	0.300401115	0.227703937	0.900128925	**16:11:32**	0.27008708	0.222934674	0.88150311
16:11:36	0.239773045	0.222341777	0.862877294	**16:11:40**	0.231338713	0.238967394	0.850355466
16:11:44	0.228840609	0.259131505	0.8385177	**16:11:48**	0.226342506	0.283923063	0.826679934
16:11:52	0.223844402	0.308714621	0.814842168	**16:11:56**	0.221346298	0.330041369	0.803004402
16:12:00	0.218848194	0.347903307	0.791166636	**16:12:04**	0.214900789	0.36490134	0.779328869
16:12:08	0.210953384	0.37822874	0.767491103	**16:12:12**	0.207005979	0.391556141	0.755653337
16:12:16	0.203058574	0.400286356	0.743815571	**16:12:20**	0.199111169	0.404419351	0.731977805
16:12:24	0.195163764	0.408552364	0.720140039	**16:12:28**	0.191216359	0.41727073	0.708302273
16:12:32	0.187268954	0.425989061	0.696464506	**16:12:36**	0.160070751	0.420847987	0.653123881
16:12:40	0.173914881	0.440171576	0.665392135	**16:12:44**	0.18775901	0.457983104	0.677660389
16:12:48	0.20160314	0.47125838	0.689928643	**16:12:52**	0.215447269	0.484533621	0.702196897
16:12:56	0.229291399	0.497095609	0.714465151	**16:13:00**	0.243135529	0.508944344	0.726733405
16:13:04	0.258746523	0.52184628	0.739001659	**16:13:08**	0.268499747	0.531256489	0.743813871
16:13:12	0.275422903	0.538979739	0.745817655	**16:13:16**	0.282346059	0.553110256	0.747821439
16:13:20	0.20437034	0.523041135	0.749825222	**16:13:24**	0.226747141	0.552790631	0.751829006
16:13:28	0.249123942	0.58119804	0.753832789	**16:13:32**	0.271500743	0.609605413	0.755836573
16:13:36	0.293877544	0.630423563	0.757840356	**16:13:40**	0.316254345	0.643652454	0.75984414
16:13:44	0.338631146	0.656881345	0.761847924	**16:13:48**	0.315602246	0.630214473	0.763851707
16:13:52	0.272741721	0.591726275	0.765855491	**16:13:56**	0.229881195	0.550282991	0.767859274
16:14:00	0.187020669	0.505884583	0.769863058	**16:14:04**	0.163563544	0.473052242	0.771866842
16:14:08	0.167522496	0.458241745	0.773870625	**16:14:12**	0.171481448	0.443431213	0.775874409
16:14:16	0.175440399	0.437734079	0.777878192	**16:14:20**	0.179399351	0.441150345	0.779881976
16:14:24	0.183358303	0.444566575	0.78188576	**16:14:28**	0.187319969	0.435998152	0.783889543
16:14:32	0.191950582	0.427828478	0.785893327	**16:14:36**	0.196581195	0.424911577	0.78789711
16:14:40	0.201211808	0.427247415	0.789900894	**16:14:44**	0.20584242	0.429583253	0.791904677
16:14:48	0.210473033	0.43338244	0.793908461	**16:14:52**	0.215103646	0.437181663	0.795912245
16:14:56	0.219734259	0.439403807	0.797916028	**16:15:00**	-0.275635129	-0.059951058	0.299919812
16:15:04	-0.27422122	-0.061223385	0.301923595	**16:15:08**	-0.277477535	-0.073699284	0.303927379
16:15:12	0.21926615	0.413824836	0.805931163	**16:15:16**	0.198921181	0.391162656	0.784781269
16:15:20	0.187719917	0.373950915	0.77602032	**16:15:24**	0.182879307	0.360530643	0.775877519
16:15:28	0.178038698	0.34475502	0.775734718	**16:15:32**	0.173198088	0.328979398	0.775591916
16:15:36	0.168357479	0.313485897	0.775449115	**16:15:40**	0.163516869	0.298274534	0.775306314
16:15:44	0.15867626	0.283063172	0.775163512	**16:15:48**	0.15383565	0.252796669	0.775020711
16:15:52	0.148995041	0.222530183	0.77487791	**16:15:56**	0.14839968	0.196225776	0.774735108
16:16:00	0.150331936	0.171905227	0.774592307	**16:16:04**	0.15249664	0.147723233	0.774449505
16:16:08	0.154661345	0.125605862	0.774306704	**16:16:12**	0.156826049	0.10348849	0.774163903
16:16:16	0.158990754	0.085437786	0.774021101	**16:16:20**	0.161155458	0.071453748	0.7738783
16:16:24	0.163320163	0.05746971	0.773735499	**16:16:28**	0.165484868	0.058175225	0.773592697
16:16:32	0.167649572	0.058880745	0.773449896	**16:16:36**	0.169814277	0.054965372	0.773307095
16:16:40	0.171978981	0.046429107	0.773164293	**16:16:44**	0.174143686	0.037892842	0.773021492

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:16:48	0.176308391	0.023447433	0.77287869	**16:16:52**	0.178473095	0.009002038	0.772735889
16:16:56	0.1806378	-0.002926863	0.772593088	**16:17:00**	0.182802504	-0.012339252	0.772450286
16:17:04	0.18350393	-0.022623879	0.772307485	**16:17:08**	0.18377732	-0.042353598	0.772164684
16:17:12	0.18405071	-0.062083317	0.772021882	**16:17:16**	0.1843241	-0.073940946	0.771879081
16:17:20	0.18459749	-0.077926467	0.77173628	**16:17:24**	0.18487088	-0.081911988	0.771593478
16:17:28	0.185144269	-0.094518488	0.771450677	**16:17:32**	0.185417659	-0.107124988	0.771307875
16:17:36	0.185691049	-0.124735734	0.771165074	**16:17:40**	0.185964439	-0.14735069	0.771022273
16:17:44	0.186237829	-0.169965663	0.770879471	**16:17:48**	0.186511219	-0.189377448	0.77073667
16:17:52	0.186784609	-0.208789232	0.770593869	**16:17:56**	0.187057998	-0.226340342	0.770451067
16:18:00	0.187331388	-0.242030812	0.770308266	**16:18:04**	0.188117723	-0.257415524	0.770165465
16:18:08	0.188904057	-0.266109267	0.770022663	**16:18:12**	0.189690391	-0.274802975	0.769879862
16:18:16	0.190476726	-0.288684544	0.76973706	**16:18:20**	0.19126306	-0.307753939	0.769594259
16:18:24	0.192049394	-0.326823335	0.769451458	**16:18:28**	0.192835729	-0.313516595	0.769308656
16:18:32	0.193622063	-0.300209856	0.769165855	**16:18:36**	0.194408398	-0.300920746	0.769023054
16:18:40	0.195194732	-0.315649266	0.768880252	**16:18:44**	0.195981066	-0.33037782	0.768737451
16:18:48	0.196767401	-0.334994565	0.76859465	**16:18:52**	0.199003279	-0.338747258	0.770415858
16:18:56	0.202655173	-0.339967103	0.774155646	**16:19:00**	0.206307067	-0.34062402	0.777895435
16:19:04	0.209453695	-0.341582153	0.781635223	**16:19:08**	0.212600324	-0.330711872	0.785375012
16:19:12	0.215746953	-0.319841556	0.7891148	**16:19:16**	0.218893581	-0.304423654	0.792854589
16:19:20	0.221652351	-0.284689291	0.796068862	**16:19:24**	0.221718073	-0.266560212	0.795634283
16:19:28	0.221783795	-0.240801371	0.795199705	**16:19:32**	0.221849517	-0.215042566	0.794765126
16:19:36	0.221915239	-0.195261903	0.794330547	**16:19:40**	0.221980961	-0.181459417	0.793895968
16:19:44	0.222046682	-0.167656931	0.793461389	**16:19:48**	0.222112404	-0.151634693	0.793026811
16:19:52	0.222178126	-0.135612455	0.792592232	**16:19:56**	0.222243848	-0.115913847	0.792157653
16:20:00	0.22230957	-0.092538869	0.791723074	**16:20:04**	0.221811871	-0.069499755	0.791288495
16:20:08	0.221314173	-0.043245319	0.790853917	**16:20:12**	0.220816474	-0.016990901	0.790419338
16:20:16	0.220318775	0.002974644	0.789984759	**16:20:20**	0.219821077	0.016651306	0.78955018
16:20:24	0.219323378	0.03032796	0.789115602	**16:20:28**	0.21882568	0.032090902	0.788681023
16:20:32	0.218327981	0.033853845	0.788246444	**16:20:36**	0.216959369	0.034038358	0.787811865
16:20:40	0.205813214	0.02733532	0.787377286	**16:20:44**	0.194667059	0.020632283	0.786942708
16:20:48	0.193019149	0.026856498	0.786508129	**16:20:52**	0.191932782	0.033415432	0.78607355
16:20:56	0.190846415	0.03997437	0.785638971	**16:21:00**	0.189760048	0.046533308	0.785204392
16:21:04	0.189724063	0.053718362	0.784769814	**16:21:08**	0.189688077	0.065771465	0.784335235
16:21:12	0.189652092	0.077824569	0.783900656	**16:21:16**	0.189616107	0.087881468	0.783466077
16:21:20	0.189580121	0.095942161	0.783031499	**16:21:24**	0.189544136	0.104002855	0.78259692
16:21:28	0.18950815	0.102323866	0.782162341	**16:21:32**	0.189472165	0.100644878	0.781727762
16:21:36	0.18943618	0.098965888	0.781293183	**16:21:40**	0.189400194	0.0972869	0.780858605
16:21:44	0.189364209	0.095607911	0.780424026	**16:21:48**	0.189328223	0.088912275	0.779989447
16:21:52	0.189292238	0.082216637	0.779554868	**16:21:56**	0.189256253	0.076551665	0.779120289
16:22:00	0.189220267	0.071917357	0.778685711	**16:22:04**	0.19001605	0.067778853	0.778251132
16:22:08	0.190811833	0.067581102	0.777816553	**16:22:12**	0.191607617	0.06738335	0.777381974
16:22:16	0.1924034	0.066809809	0.776947396	**16:22:20**	0.193199183	0.065860486	0.776512817
16:22:24	0.193994966	0.064911164	0.776078238	**16:22:28**	0.194790749	0.066931193	0.775643659
16:22:32	0.195586532	0.068951223	0.77520908	**16:22:36**	0.196382316	0.070971253	0.774774502
16:22:40	0.197178099	0.072991282	0.774339923	**16:22:44**	0.197973882	0.075011312	0.773905344
16:22:48	0.199129184	0.084416841	0.773957883	**16:22:52**	0.200860587	0.094165774	0.77479099
16:22:56	0.20259199	0.096212731	0.775624096	**16:23:00**	0.204323393	0.090557714	0.776457203
16:23:04	0.205029236	0.084291373	0.777290309	**16:23:08**	0.20573508	0.087098304	0.778123416
16:23:12	0.206440923	0.089905234	0.778956522	**16:23:16**	0.207146767	0.091418604	0.779789628
16:23:20	0.207852611	0.091638412	0.780622735	**16:23:24**	0.208558454	0.09185822	0.781455841
16:23:28	0.209264298	0.093308906	0.782288948	**16:23:32**	0.209970141	0.094759591	0.783122054
16:23:36	0.210675985	0.093849706	0.783955161	**16:23:40**	0.211381828	0.090579252	0.784788267
16:23:44	0.212087672	0.087308798	0.785621374	**16:23:48**	0.212793515	0.073211133	0.78645448
16:23:52	0.213499359	0.059113468	0.787287586	**16:23:56**	0.214205203	0.04957622	0.788120693
16:24:00	0.214911046	0.044599397	0.788953799	**16:24:04**	0.215511204	0.039559568	0.789786906
16:24:08	0.216111361	0.043615355	0.790620012	**16:24:12**	0.216711519	0.047671142	0.791453119
16:24:16	0.217311677	0.046664824	0.792286225	**16:24:20**	0.217911834	0.04059641	0.793119332

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:24:24	0.218511992	0.034527987	0.793952438	**16:24:28**	0.219112149	0.025672299	0.794785544
16:24:32	0.219712307	0.016816612	0.795618651	**16:24:36**	0.220312465	0.008448708	0.796451757
16:24:40	0.220912622	0.000568596	0.797284864	**16:24:44**	0.22151278	-0.007311525	0.79811797
16:24:48	0.222112938	-0.002607442	0.798951077	**16:24:52**	0.222713095	0.002096642	0.799784183
16:24:56	0.223313253	0.007757612	0.80061729	**16:25:00**	0.22391341	0.014375487	0.801450396
16:25:04	0.224671654	0.021087594	0.802283502	**16:25:08**	0.225429898	0.03322466	0.803116609
16:25:12	0.226188142	0.045361717	0.803949715	**16:25:16**	0.226946386	0.060199577	0.804782822
16:25:20	0.227696695	0.077733506	0.805594677	**16:25:24**	0.228393747	0.095235689	0.806325474
16:25:28	0.2290908	0.092679938	0.80705627	**16:25:32**	0.229787852	0.090124192	0.807787067
16:25:36	0.230484904	0.093878681	0.808517864	**16:25:40**	0.231181956	0.103943407	0.80924866
16:25:44	0.231879008	0.114008136	0.809979457	**16:25:48**	0.232576061	0.129913084	0.810710254
16:25:52	0.233273113	0.145818032	0.811441051	**16:25:56**	0.233970165	0.160657842	0.812171847
16:26:00	0.234667217	0.174432515	0.812902644	**16:26:04**	0.23606553	0.188625197	0.813633441
16:26:08	0.237463842	0.180617879	0.814364237	**16:26:12**	0.238862155	0.172610561	0.815095034
16:26:16	0.240260467	0.16219281	0.815825831	**16:26:20**	0.24165878	0.149364629	0.816556628
16:26:24	0.243057092	0.136536447	0.817287424	**16:26:28**	0.244455405	0.144031986	0.818018221
16:26:32	0.245853717	0.151527525	0.818749018	**16:26:36**	0.24725203	0.161050218	0.819479814
16:26:40	0.248650342	0.172600065	0.820210611	**16:26:44**	0.250048655	0.184149912	0.820941408
16:26:48	0.251446967	0.190862211	0.821672204	**16:26:52**	0.252845279	0.197574512	0.822403001
16:26:56	0.254243592	0.198832228	0.823133798	**16:27:00**	0.255641904	0.198271753	0.823864595
16:27:04	0.255971703	0.197074349	0.824595391	**16:27:08**	0.256301502	0.197754878	0.825326188
16:27:12	0.2566313	0.198435408	0.826056985	**16:27:16**	0.256961099	0.197258544	0.826787781
16:27:20	0.257290897	0.195462545	0.827518578	**16:27:24**	0.257620696	0.193666546	0.828249375
16:27:28	0.257950494	0.206096827	0.828980171	**16:27:32**	0.258280293	0.218527109	0.829710968
16:27:36	0.258610091	0.221165912	0.830441765	**16:27:40**	0.25893989	0.214013247	0.831172562
16:27:44	0.259269689	0.206860582	0.831903358	**16:27:48**	0.259599487	0.195658146	0.832634155
16:27:52	0.259929286	0.184455715	0.833364952	**16:27:56**	0.260259084	0.164522896	0.834095748
16:28:00	0.260588883	0.135859693	0.834826545	**16:28:04**	0.261580411	0.11043483	0.835557342
16:28:08	0.262571939	0.093541653	0.836288138	**16:28:12**	0.263563467	0.076648481	0.837018935
16:28:16	0.264554996	0.068307601	0.837749732	**16:28:20**	0.265546524	0.068519013	0.838480529
16:28:24	0.266538052	0.068730433	0.839211325	**16:28:28**	0.26752958	0.064415435	0.839942122
16:28:32	0.268521109	0.060100436	0.840672919	**16:28:36**	0.269512637	0.063129631	0.841403715
16:28:40	0.270504165	0.07350303	0.842134512	**16:28:44**	0.271495693	0.083876429	0.842865309
16:28:48	0.272672339	0.094360169	0.843846924	**16:28:52**	0.273972796	0.104917716	0.844996293
16:28:56	0.275273253	0.117855062	0.846145662	**16:29:00**	0.27657371	0.131585673	0.847295032
16:29:04	0.277643385	0.145178719	0.848444401	**16:29:08**	0.27871306	0.155070585	0.849593771
16:29:12	0.279782735	0.164962451	0.85074314	**16:29:16**	0.280852409	0.176965284	0.851892509
16:29:20	0.281922084	0.191079085	0.853041879	**16:29:24**	0.282991759	0.205192884	0.854191248
16:29:28	0.284061434	0.210063388	0.855340617	**16:29:32**	0.285131108	0.214933897	0.856489987
16:29:36	0.286200783	0.218741878	0.857639356	**16:29:40**	0.287270458	0.221487343	0.858788726
16:29:44	0.288340133	0.224232808	0.859938095	**16:29:48**	0.289409807	0.223275035	0.861087464
16:29:52	0.290479482	0.222317261	0.862236834	**16:29:56**	0.291549157	0.221359487	0.863386203
16:30:00	0.792618831	0.720401714	1.364535573	**16:30:04**	0.796151711	0.720912218	1.365684942
16:30:08	0.799684182	0.72395466	1.366834311	**16:30:12**	0.303216654	0.226997102	0.867983681
16:30:16	0.306749125	0.233776971	0.86913305	**16:30:20**	0.310281597	0.244294276	0.87028242
16:30:24	0.313814068	0.254811576	0.871431789	**16:30:28**	0.31734654	0.257362771	0.872581158
16:30:32	0.320879012	0.259913966	0.873730528	**16:30:36**	0.324411483	0.258771155	0.874879897
16:30:40	0.327943955	0.253934347	0.876029266	**16:30:44**	0.331476426	0.247962264	0.877178636
16:30:48	0.335008898	0.238584364	0.878328005	**16:30:52**	0.338541369	0.229206467	0.879477375
16:30:56	0.342073841	0.221524501	0.880626744	**16:31:00**	0.345606313	0.215538468	0.881776113
16:31:04	0.346530411	0.207997625	0.882925483	**16:31:08**	0.34745451	0.193856714	0.884074852
16:31:12	0.348378609	0.1797158	0.885224222	**16:31:16**	0.349302707	0.163916484	0.886373591
16:31:20	0.350226806	0.146458758	0.88752296	**16:31:24**	0.351150905	0.129001036	0.88867233
16:31:28	0.352075003	0.115430635	0.889821699	**16:31:32**	0.351600549	0.101026578	0.889076147
16:31:36	0.350810125	0.087717153	0.887902485	**16:31:40**	0.350019702	0.075690703	0.886728823
16:31:44	0.349229279	0.063664263	0.88555516	**16:31:48**	0.348438856	0.060646045	0.884381498
16:31:52	0.347648433	0.057627837	0.883207836	**16:31:56**	0.34685801	0.054609628	0.882034174

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:32:00	0.346067587	0.051591402	0.880860512	**16:32:04**	0.346770861	0.049463562	0.879686849
16:32:08	0.347474135	0.047335723	0.878513187	**16:32:12**	0.348177409	0.045207884	0.877339525
16:32:16	0.348880683	0.046689122	0.876165863	**16:32:20**	0.349583956	0.051779455	0.874992201
16:32:24	0.35028723	0.056869787	0.873818538	**16:32:28**	0.350990504	0.06915383	0.872644876
16:32:32	0.351693778	0.081437863	0.871471214	**16:32:36**	0.352397052	0.08948211	0.870297552
16:32:40	0.353100326	0.093286554	0.86912389	**16:32:44**	0.3538036	0.097091006	0.867950227
16:32:48	0.354506874	0.107752198	0.866776565	**16:32:52**	0.355210148	0.118413391	0.865602903
16:32:56	0.355913422	0.124310525	0.864429241	**16:33:00**	0.356616695	0.125443583	0.863255579
16:33:04	0.355300011	0.127766192	0.862081916	**16:33:08**	0.353983326	0.137269649	0.860908254
16:33:12	0.352666642	0.14677311	0.859734592	**16:33:16**	0.351349957	0.154706198	0.85856093
16:33:20	0.350033273	0.161068918	0.857387268	**16:33:24**	0.348716588	0.167431637	0.856213605
16:33:28	0.347399904	0.161839258	0.855039943	**16:33:32**	0.346083219	0.156246879	0.853866281
16:33:36	0.344766535	0.153970513	0.852692619	**16:33:40**	0.34344985	0.15501015	0.851518957
16:33:44	0.342133166	0.156049788	0.850345294	**16:33:48**	0.340816481	0.151809471	0.849171632
16:33:52	0.339499797	0.147569155	0.84799797	**16:33:56**	0.338183112	0.149766709	0.846824308
16:34:00	0.337568229	0.158820467	0.846601527	**16:34:04**	0.337519811	0.168211885	0.846530376
16:34:08	0.337471393	0.166565119	0.846459224	**16:34:12**	0.337422975	0.164918353	0.846388073
16:34:16	0.337374557	0.169339248	0.846316922	**16:34:20**	0.337326139	0.179827803	0.84624577
16:34:24	0.337277721	0.19031636	0.846174619	**16:34:28**	0.337229303	0.208804957	0.846103468
16:34:32	0.337180885	0.227293555	0.846032316	**16:34:36**	0.337132467	0.242849165	0.845961165
16:34:40	0.337084049	0.255471783	0.845890013	**16:34:44**	0.337035631	0.268094401	0.845818862
16:34:48	0.336987212	0.269603452	0.845747711	**16:34:52**	0.336938794	0.271112503	0.845676559
16:34:56	0.336890376	0.271051866	0.845605408	**16:35:00**	0.336841958	0.269421534	0.845534257
16:35:04	0.338420542	0.268916985	0.845463105	**16:35:08**	0.339998451	0.26887989	0.845391954
16:35:12	0.341556534	0.268830972	0.845320803	**16:35:16**	0.343114616	0.268782058	0.845249651
16:35:20	0.344672699	0.277170796	0.8451785	**16:35:24**	0.346230781	0.285559529	0.845107349
16:35:28	0.347788864	0.2881189	0.845036197	**16:35:32**	0.349346947	0.29067828	0.844965046
16:35:36	0.350905029	0.290023412	0.844893895	**16:35:40**	0.352463112	0.28829712	0.844822743
16:35:44	0.354021194	0.285596629	0.844751592	**16:35:48**	0.355579277	0.279973489	0.844680441
16:35:52	0.35713736	0.274350358	0.844609289	**16:35:56**	0.358695442	0.265747585	0.844538138
16:36:00	0.360253525	0.256151596	0.844466987	**16:36:04**	0.359995888	0.248582152	0.844395835
16:36:08	0.359738251	0.250339301	0.844324684	**16:36:12**	0.359480615	0.25209645	0.844253533
16:36:16	0.359222978	0.2496118	0.844182381	**16:36:20**	0.358965341	0.245713216	0.84411123
16:36:24	0.358707704	0.242677955	0.844040079	**16:36:28**	0.358450068	0.242232659	0.843968927
16:36:32	0.358192431	0.241787365	0.843897776	**16:36:36**	0.357934794	0.244429451	0.843826625
16:36:40	0.357677158	0.248100667	0.843755473	**16:36:44**	0.357419521	0.253954308	0.843684322
16:36:48	0.357161884	0.266355237	0.843613171	**16:36:52**	0.356904247	0.278756165	0.843542019
16:36:56	0.356646611	0.288906386	0.843470868	**16:37:00**	0.356388974	0.298306367	0.843399717
16:37:04	0.355329753	0.30472073	0.843328565	**16:37:08**	0.354270532	0.303611661	0.843257414
16:37:12	0.353211311	0.302502591	0.843186262	**16:37:16**	0.351918728	0.310451018	0.842798924
16:37:20	0.350474125	0.32137436	0.842205614	**16:37:24**	0.349029523	0.326544806	0.841612304
16:37:28	0.347584921	0.314456596	0.841018994	**16:37:32**	0.346140319	0.302368386	0.840425683
16:37:36	0.344695717	0.289169961	0.839832373	**16:37:40**	0.343251114	0.275601463	0.839239063
16:37:44	0.341806512	0.255751574	0.838645753	**16:37:48**	0.34036191	0.217057522	0.838052442
16:37:52	0.338917308	0.178363468	0.837459132	**16:37:56**	0.337472706	0.150717102	0.836865822
16:38:00	0.336028104	0.123070743	0.836272512	**16:38:04**	0.33812674	0.097997679	0.835679201
16:38:08	0.340225377	0.074308316	0.835085891	**16:38:12**	0.342324014	0.050618954	0.834492581
16:38:16	0.344422651	0.048109575	0.833899271	**16:38:20**	0.346521288	0.052660173	0.83330596
16:38:24	0.348619924	0.057210772	0.83271265	**16:38:28**	0.350718561	0.061761379	0.83211934
16:38:32	0.352817198	0.066311978	0.83152603	**16:38:36**	0.354915835	0.066091146	0.830932719
16:38:40	0.357014472	0.064279831	0.830339409	**16:38:44**	0.359113108	0.06114732	0.829746099
16:38:48	0.361211745	0.054051256	0.829152789	**16:38:52**	0.363310382	0.046955191	0.828559478
16:38:56	0.365409019	0.047078292	0.827966168	**16:39:00**	0.367507656	0.049607818	0.827372858
16:39:04	0.367705983	0.048483344	0.826779548	**16:39:08**	0.36790431	0.039795139	0.826186237
16:39:12	0.368102637	0.031106934	0.825592927	**16:39:16**	0.368300964	0.027070132	0.824999617
16:39:20	0.368499292	0.024583815	0.824406307	**16:39:24**	0.368697619	0.026647661	0.823812996
16:39:28	0.368895946	0.033261633	0.823219686	**16:39:32**	0.369094273	0.039875623	0.822626376

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:39:36	0.3692926	0.049806513	0.822033066	**16:39:40**	0.369490928	0.060843043	0.821439755
16:39:44	0.369689255	0.071365969	0.820846445	**16:39:48**	0.370862743	0.081956596	0.821574395
16:39:52	0.373416532	0.093369999	0.824193726	**16:39:56**	0.375954033	0.112424018	0.826813057
16:40:00	0.378491535	0.134028151	0.829432388	**16:40:04**	0.378386469	0.142698659	0.832051719
16:40:08	0.378281402	0.140010753	0.83467105	**16:40:12**	0.378176335	0.137322839	0.837290381
16:40:16	0.378071268	0.129387365	0.839909712	**16:40:20**	0.377966202	0.11970269	0.842529043
16:40:24	0.377861135	0.118898474	0.845148374	**16:40:28**	0.377756068	0.126974708	0.847767705
16:40:32	0.376848413	0.134572532	0.849299597	**16:40:36**	0.374289359	0.149753951	0.848593983
16:40:40	0.371730304	0.167791357	0.847888368	**16:40:44**	0.369171249	0.186326419	0.847182754
16:40:48	0.366612194	0.20635444	0.846477139	**16:40:52**	0.364053139	0.22638246	0.845771525
16:40:56	0.361494085	0.240654911	0.84506591	**16:41:00**	0.35893503	0.253008841	0.844360296
16:41:04	0.360745946	0.267251553	0.843654681	**16:41:08**	0.362556862	0.279346003	0.842949066
16:41:12	0.364367778	0.291440452	0.842243452	**16:41:16**	0.366178694	0.301256187	0.841537837
16:41:20	0.36798961	0.310312362	0.840832223	**16:41:24**	0.369800526	0.317917578	0.840126608
16:41:28	0.371611442	0.321169962	0.839420994	**16:41:32**	0.373422358	0.324422346	0.838715379
16:41:36	0.375233274	0.339987845	0.838009765	**16:41:40**	0.37704419	0.359657719	0.83730415
16:41:44	0.378855106	0.37355513	0.836598535	**16:41:48**	0.380666023	0.370135145	0.835892921
16:41:52	0.382476939	0.36671516	0.835187306	**16:41:56**	0.384287855	0.360750701	0.834481692
16:42:00	0.386098771	0.353938076	0.833776077	**16:42:04**	0.389691648	0.346555287	0.833070463
16:42:08	0.393284526	0.334275401	0.832364848	**16:42:12**	0.396877404	0.321995505	0.831659234
16:42:16	0.400470282	0.314169336	0.830953619	**16:42:20**	0.40406316	0.307827754	0.830248004
16:42:24	0.407656038	0.302033956	0.82954239	**16:42:28**	0.411248915	0.297883517	0.828836775
16:42:32	0.414841793	0.293733078	0.828131161	**16:42:36**	0.418434671	0.287601689	0.827425546
16:42:40	0.422027549	0.280809978	0.826719932	**16:42:44**	0.425620427	0.27297397	0.826014317
16:42:48	0.429213304	0.262005061	0.825308703	**16:42:52**	0.432806182	0.251036153	0.824603088
16:42:56	0.43639906	0.244747403	0.823897473	**16:43:00**	0.439991938	0.240018706	0.823191859
16:43:04	0.43845285	0.232061055	0.822486244	**16:43:08**	0.436913762	0.223593803	0.82178063
16:43:12	0.435374674	0.215126547	0.821075015	**16:43:16**	0.433835586	0.205905468	0.820369401
16:43:20	0.432296498	0.196433112	0.819663786	**16:43:24**	0.43075741	0.1874016	0.818958172
16:43:28	0.429218323	0.17969263	0.818252557	**16:43:32**	0.427679235	0.171983651	0.817546942
16:43:36	0.426140147	0.162618185	0.816841328	**16:43:40**	0.424601059	0.152700565	0.816135713
16:43:44	0.423061971	0.143540068	0.815430099	**16:43:48**	0.421573492	0.136681124	0.814793055
16:43:52	0.420981575	0.130356615	0.815370776	**16:43:56**	0.420389657	0.13910289	0.815948497
16:44:00	0.419797739	0.147849173	0.816526217	**16:44:04**	0.421934074	0.159946216	0.817103938
16:44:08	0.424070408	0.177216784	0.817681659	**16:44:12**	0.426206743	0.194487347	0.81825938
16:44:16	0.428343077	0.207490572	0.8188371	**16:44:20**	0.430479411	0.219071345	0.819414821
16:44:24	0.432615746	0.228624889	0.819992542	**16:44:28**	0.43475208	0.232096742	0.820570263
16:44:32	0.436888414	0.235568596	0.821147983	**16:44:36**	0.438922579	0.242442145	0.821725704
16:44:40	0.440950224	0.250466009	0.822303425	**16:44:44**	0.442977868	0.257961548	0.822881146
16:44:48	0.445005513	0.263872115	0.823458866	**16:44:52**	0.447033158	0.269782681	0.824036587
16:44:56	0.449060802	0.281731296	0.824614308	**16:45:00**	-0.048911553	-0.204307406	0.325192029
16:45:04	-0.049164048	-0.193569657	0.325769749	**16:45:08**	-0.049416542	-0.188425085	0.32634747
16:45:12	0.450330963	0.316719488	0.826925191	**16:45:16**	0.450078469	0.322824824	0.827502912
16:45:20	0.449825974	0.329250409	0.828080632	**16:45:24**	0.449573479	0.334650073	0.828658353
16:45:28	0.449320985	0.336971985	0.829236074	**16:45:32**	0.44906849	0.339293897	0.829813795
16:45:36	0.448815995	0.342688007	0.830391515	**16:45:40**	0.448563501	0.347154305	0.830969236
16:45:44	0.448311006	0.351620603	0.831546957	**16:45:48**	0.448058512	0.350545034	0.832124678
16:45:52	0.447806017	0.349469473	0.832702398	**16:45:56**	0.447553522	0.352593977	0.833280119
16:46:00	0.447301028	0.359918554	0.83385784	**16:46:04**	0.446957844	0.367189072	0.834435561
16:46:08	0.446614661	0.375928181	0.835013281	**16:46:12**	0.446271478	0.38466729	0.835591002
16:46:16	0.445928295	0.388239979	0.836168723	**16:46:20**	0.445585111	0.386646257	0.836746444
16:46:24	0.445241928	0.385052536	0.837324164	**16:46:28**	0.444898745	0.36821797	0.837901885
16:46:32	0.444555562	0.351383404	0.838479606	**16:46:36**	0.444212378	0.333636687	0.839057326
16:46:40	0.443869195	0.314977824	0.839635047	**16:46:44**	0.443526012	0.296318958	0.840212768
16:46:48	0.443182829	0.275040782	0.840790489	**16:46:52**	0.442839646	0.253762605	0.841368209
16:46:56	0.442496462	0.238650816	0.84194593	**16:47:00**	0.442153279	0.229705412	0.842523651
16:47:04	0.441763911	0.220732478	0.843101372	**16:47:08**	0.441374543	0.221619643	0.843679092

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:47:12	0.441193827	0.222631181	0.844539518	**16:47:16**	0.441065712	0.221957884	0.845471214
16:47:20	0.440937598	0.219568389	0.846402911	**16:47:24**	0.440809483	0.217178897	0.847334608
16:47:28	0.440681369	0.211032869	0.848266304	**16:47:32**	0.440553254	0.20488684	0.849198001
16:47:36	0.440425139	0.204452337	0.850129698	**16:47:40**	0.440297025	0.209729358	0.851061394
16:47:44	0.44016891	0.21500638	0.851993091	**16:47:48**	0.440040796	0.220283401	0.852924787
16:47:52	0.439912681	0.225560425	0.853856484	**16:47:56**	0.439784566	0.235467521	0.854788181
16:48:00	0.439656452	0.250004694	0.855719877	**16:48:04**	0.438607009	0.263992677	0.856651574
16:48:08	0.437557567	0.265094389	0.857583271	**16:48:12**	0.436508124	0.266196102	0.858514967
16:48:16	0.435458682	0.26897946	0.859446664	**16:48:20**	0.434409239	0.273444464	0.860378361
16:48:24	0.433359797	0.277909469	0.861310057	**16:48:28**	0.432310355	0.282374473	0.862241754
16:48:32	0.431260912	0.286839476	0.86317345	**16:48:36**	0.43021147	0.293239617	0.864105147
16:48:40	0.429162027	0.301574899	0.865036844	**16:48:44**	0.428112585	0.309910178	0.86596854
16:48:48	0.427063142	0.303414294	0.866900237	**16:48:52**	0.4260137	0.296918405	0.867831934
16:48:56	0.424964257	0.295036195	0.86876363	**16:49:00**	0.423914815	0.297767661	0.869695327
16:49:04	0.426092312	0.302422656	0.870627023	**16:49:08**	0.42826981	0.317268373	0.87155872
16:49:12	0.430447308	0.332114085	0.872490417	**16:49:16**	0.432624805	0.337900443	0.873422113
16:49:20	0.434802303	0.340667006	0.87435381	**16:49:24**	0.4369798	0.343433568	0.875285507
16:49:28	0.439157298	0.345027599	0.876217203	**16:49:32**	0.441334796	0.346621629	0.8771489
16:49:36	0.443512293	0.347627994	0.878080596	**16:49:40**	0.445689791	0.348046676	0.879012293
16:49:44	0.448090894	0.348598655	0.87994399	**16:49:48**	0.450496977	0.351903755	0.880875686
16:49:52	0.452903061	0.355208865	0.881807383	**16:49:56**	0.455309144	0.365483343	0.88273908
16:50:00	0.4575678	0.382639328	0.883471025	**16:50:04**	0.456679197	0.397919271	0.883076167
16:50:08	0.455790593	0.408880846	0.882681309	**16:50:12**	0.45490199	0.419842421	0.88228645
16:50:16	0.454013387	0.431730238	0.881891592	**16:50:20**	0.453124783	0.444544299	0.881496734
16:50:24	0.45223618	0.457358359	0.881101875	**16:50:28**	0.451347577	0.460948844	0.880707017
16:50:32	0.450458973	0.464539328	0.880312159	**16:50:36**	0.44957037	0.471360111	0.879917301
16:50:40	0.448681767	0.481411209	0.879522442	**16:50:44**	0.447793163	0.491462308	0.879127584
16:50:48	0.44690456	0.508867087	0.878732726	**16:50:52**	0.446015956	0.526271884	0.878337867
16:50:56	0.445127353	0.546243183	0.877943009	**16:51:00**	0.44423875	0.56878102	0.877548151
16:51:04	0.443667326	0.591507905	0.877153292	**16:51:08**	0.443095903	0.603626349	0.876758434
16:51:12	0.442524479	0.615744793	0.876363576	**16:51:16**	0.441953055	0.621679593	0.875968717
16:51:20	0.441381632	0.621430748	0.875573859	**16:51:24**	0.440810208	0.621181904	0.875179001
16:51:28	0.440238785	0.624391243	0.874784142	**16:51:32**	0.439667361	0.627600547	0.874389284
16:51:36	0.439095938	0.628302683	0.873994426	**16:51:40**	0.438524514	0.626497651	0.873599567
16:51:44	0.43795309	0.624692618	0.873204709	**16:51:48**	0.437381667	0.61950906	0.872809851
16:51:52	0.436810243	0.614325465	0.872414993	**16:51:56**	0.43623882	0.601817342	0.872020134
16:52:00	0.435667396	0.581984654	0.871625276	**16:52:04**	0.434838371	0.561998414	0.871230418
16:52:08	0.434009346	0.526632294	0.870835559	**16:52:12**	0.433180321	0.491266174	0.870440701
16:52:16	0.432351296	0.463311666	0.870045843	**16:52:20**	0.43152227	0.437827712	0.869650984
16:52:24	0.430693245	0.412343741	0.869256126	**16:52:28**	0.42986422	0.383628006	0.868861268
16:52:32	0.429035195	0.354912271	0.868466409	**16:52:36**	0.42820617	0.333562617	0.868071551
16:52:40	0.427387758	0.31958537	0.867691074	**16:52:44**	0.42685016	0.305775511	0.867691074
16:52:48	0.426312561	0.289471635	0.867691074	**16:52:52**	0.425774963	0.273167758	0.867691074
16:52:56	0.425237364	0.258581399	0.867691074	**16:53:00**	0.424699766	0.244567545	0.867691074
16:53:04	0.425082903	0.231102528	0.867691074	**16:53:08**	0.425466041	0.214121823	0.867691074
16:53:12	0.425849178	0.197141116	0.867691074	**16:53:16**	0.426232316	0.189265615	0.867691074
16:53:20	0.426615453	0.190495318	0.867691074	**16:53:24**	0.426998591	0.191725021	0.867691074
16:53:28	0.427381729	0.194618984	0.867691074	**16:53:32**	0.427764866	0.20250572	0.867691074
16:53:36	0.428148004	0.207270794	0.867691074	**16:53:40**	0.428531141	0.208914211	0.867691074
16:53:44	0.428914279	0.210557627	0.867691074	**16:53:48**	0.429297416	0.219611882	0.867691074
16:53:52	0.429680554	0.228666138	0.867691074	**16:53:56**	0.430063691	0.236987965	0.867691074
16:54:00	0.430496304	0.244606856	0.867691074	**16:54:04**	0.429292221	0.25125014	0.867691074
16:54:08	0.428088139	0.24984877	0.867691074	**16:54:12**	0.426884056	0.248447401	0.867691074
16:54:16	0.425679973	0.243045243	0.867691074	**16:54:20**	0.424475891	0.233642292	0.867691074
16:54:24	0.423271808	0.224239343	0.867691074	**16:54:28**	0.422067726	0.206220345	0.867691074
16:54:32	0.420863643	0.188201344	0.867691074	**16:54:36**	0.41965956	0.167493043	0.867691074
16:54:40	0.418455478	0.145888299	0.867691074	**16:54:44**	0.417251395	0.124283564	0.867691074

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
16:54:48	0.416047312	0.108911469	0.867691074	**16:54:52**	0.41484323	0.093539364	0.867691074
16:54:56	0.413639147	0.081952953	0.867691074	**16:55:00**	0.412435064	0.074152236	0.867691074
16:55:04	0.411672187	0.066614515	0.867691074	**16:55:08**	0.410909311	0.055390742	0.867691074
16:55:12	0.410146434	0.044166969	0.867691074	**16:55:16**	0.409383557	0.027143128	0.867691074
16:55:20	0.40862068	0.004319236	0.867691074	**16:55:24**	0.407857803	-0.018504675	0.867691074
16:55:28	0.407094926	-0.042486133	0.867691074	**16:55:32**	0.40633205	-0.066467573	0.867691074
16:55:36	0.405569173	-0.083738522	0.867691074	**16:55:40**	0.404806296	-0.098772681	0.867691074
16:55:44	0.404043419	-0.111099357	0.867691074	**16:55:48**	0.403280542	-0.115303763	0.867691074
16:55:52	0.402517665	-0.119508205	0.867691074	**16:55:56**	0.401754789	-0.126968561	0.867691074
16:56:00	0.400991912	-0.135514198	0.867691074	**16:56:04**	0.399924409	-0.142555654	0.867691074
16:56:08	0.398856906	-0.144539678	0.867691074	**16:56:12**	0.397789402	-0.146523701	0.867691074
16:56:16	0.396721899	-0.150772156	0.867691074	**16:56:20**	0.395654396	-0.155775433	0.867691074
16:56:24	0.394586893	-0.163338177	0.867691074	**16:56:28**	0.39351939	-0.178579429	0.867691074
16:56:32	0.392451887	-0.193820681	0.867691074	**16:56:36**	0.391384384	-0.198449727	0.867691074
16:56:40	0.390052783	-0.199698783	0.867333244	**16:56:44**	0.388691518	-0.199417398	0.866935222
16:56:48	0.387330253	-0.194491468	0.8665372	**16:56:52**	0.385968989	-0.189565573	0.866139178
16:56:56	0.384607724	-0.178412297	0.865741156	**16:57:00**	0.383268248	-0.165170227	0.865343134
16:57:04	0.384132973	-0.146810348	0.864945112	**16:57:08**	0.384997697	-0.117038779	0.86454709
16:57:12	0.385862421	-0.087267211	0.864149068	**16:57:16**	0.386727146	-0.056305087	0.863751046
16:57:20	0.38759187	-0.024946083	0.863353024	**16:57:24**	0.388456594	-0.000342515	0.862955002
16:57:28	0.389321319	0.017505635	0.86255698	**16:57:32**	0.390186043	0.035353784	0.862158958
16:57:36	0.391050767	0.064943388	0.861760936	**16:57:40**	0.391915492	0.098446797	0.861362914
16:57:44	0.392780216	0.128871769	0.860964892	**16:57:48**	0.39364494	0.150061414	0.86056687
16:57:52	0.394509664	0.171251055	0.860168849	**16:57:56**	0.395374389	0.186856588	0.859770827
16:58:00	0.396239113	0.202462124	0.859372805	**16:58:04**	0.395588963	0.217836992	0.858974783
16:58:08	0.394938814	0.235228846	0.858576761	**16:58:12**	0.394288664	0.252620701	0.858178739
16:58:16	0.393638515	0.269630868	0.857780717	**16:58:20**	0.392988365	0.286513808	0.857382695
16:58:24	0.392338215	0.301261754	0.856984673	**16:58:28**	0.391688066	0.309604727	0.856586651
16:58:32	0.391037916	0.317947699	0.856188629	**16:58:36**	0.390387767	0.33179533	0.855790607
16:58:40	0.389737617	0.347477852	0.855392585	**16:58:44**	0.389087467	0.366497019	0.854994563
16:58:48	0.388437318	0.395526152	0.854596541	**16:58:52**	0.387787168	0.424555285	0.854198519
16:58:56	0.387137018	0.442072803	0.853800497	**16:59:00**	0.386486869	0.455753144	0.853402475
16:59:04	0.386190656	0.46698489	0.853004453	**16:59:08**	0.385894443	0.470238011	0.852606432
16:59:12	0.385830149	0.473629376	0.852522639	**16:59:16**	0.386021203	0.475214746	0.852784823
16:59:20	0.386212257	0.476147352	0.853047006	**16:59:24**	0.386403311	0.480146999	0.85330919
16:59:28	0.386594365	0.493347713	0.853571373	**16:59:32**	0.386817108	0.506567316	0.853833556
16:59:36	0.387075305	0.516491721	0.85409574	**16:59:40**	0.387333502	0.525310664	0.854357923
16:59:44	0.387591699	0.533868803	0.854620107	**16:59:48**	0.387849896	0.541644478	0.85488229
16:59:52	0.388108093	0.549420153	0.855144473	**16:59:56**	0.38836629	0.572265554	0.855406657
17:00:00	0.888624487	1.100134174	1.35566884	**17:00:04**	0.890765367	1.12447139	1.355931024
17:00:08	0.892906247	1.13484754	1.356193207	**17:00:12**	0.395047127	0.64522369	0.85645539
17:00:16	0.397188008	0.653193504	0.856717574	**17:00:20**	0.399328888	0.660361207	0.856979757
17:00:24	0.401469768	0.664674192	0.857241941	**17:00:28**	0.403610649	0.660422957	0.857504124
17:00:32	0.405751529	0.656171722	0.857766307	**17:00:36**	0.407892409	0.643746664	0.858028491
17:00:40	0.410033289	0.628596961	0.858290674	**17:00:44**	0.41217417	0.614286286	0.858552858
17:00:48	0.41431505	0.602492656	0.858815041	**17:00:52**	0.41645593	0.590699025	0.859077224
17:00:56	0.41859681	0.579304284	0.859339408	**17:01:00**	0.420737691	0.568042564	0.859601591
17:01:04	0.421835195	0.559601455	0.859863775	**17:01:08**	0.4229327	0.56148807	0.860125958
17:01:12	0.424030205	0.563374719	0.860388141	**17:01:16**	0.42512771	0.565774414	0.860650325
17:01:20	0.426225215	0.568345111	0.860912508	**17:01:24**	0.42732272	0.569340967	0.861174692
17:01:28	0.428420225	0.56561223	0.861436875	**17:01:32**	0.42951773	0.561883493	0.861699058
17:01:36	0.430615235	0.550521849	0.861961242	**17:01:40**	0.431668117	0.536589293	0.862223425
17:01:44	0.432655653	0.521824945	0.862485609	**17:01:48**	0.433643189	0.504682082	0.862747792
17:01:52	0.434630724	0.487539219	0.863009975	**17:01:56**	0.43561826	0.475558867	0.863272159
17:02:00	0.436605796	0.465299365	0.863534342	**17:02:04**	0.43781859	0.453698332	0.863796526
17:02:08	0.439031384	0.437669909	0.864058709	**17:02:12**	0.440244177	0.421641486	0.864320892
17:02:16	0.441456971	0.399161065	0.864583076	**17:02:20**	0.442669765	0.37452997	0.864845259

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:02:24	0.443882559	0.352105544	0.865107443	**17:02:28**	0.444936154	0.336206202	0.865153926
17:02:32	0.445965417	0.320292357	0.86516744	**17:02:36**	0.446994679	0.304378515	0.865180954
17:02:40	0.448023942	0.28846467	0.865194468	**17:02:44**	0.449053204	0.273872048	0.865207983
17:02:48	0.450082467	0.263243091	0.865221497	**17:02:52**	0.45111173	0.252614133	0.865235011
17:02:56	0.452140992	0.249009937	0.865248525	**17:03:00**	0.453170255	0.24774733	0.86526204
17:03:04	0.452225626	0.243604278	0.865275554	**17:03:08**	0.451280997	0.234349703	0.865289068
17:03:12	0.450336369	0.225095128	0.865302582	**17:03:16**	0.44939174	0.233286433	0.865316097
17:03:20	0.448447111	0.247293033	0.865329611	**17:03:24**	0.447502482	0.261299633	0.865343125
17:03:28	0.446557854	0.270353757	0.865356639	**17:03:32**	0.445613225	0.274455405	0.865370154
17:03:36	0.444668596	0.272813924	0.865383668	**17:03:40**	0.443723968	0.269258068	0.865397182
17:03:44	0.442779339	0.265850011	0.865410696	**17:03:48**	0.44183471	0.262885356	0.865424211
17:03:52	0.440890081	0.259920702	0.865437725	**17:03:56**	0.439945453	0.269218506	0.865451239
17:04:00	0.439000824	0.282603798	0.865464753	**17:04:04**	0.440556745	0.29965492	0.865478268
17:04:08	0.442112667	0.323231925	0.865491782	**17:04:12**	0.443668588	0.346808933	0.865505296
17:04:16	0.44522451	0.360300106	0.86551881	**17:04:20**	0.446780432	0.370429345	0.865532324
17:04:24	0.448336353	0.378419972	0.865545839	**17:04:28**	0.449892275	0.379994769	0.865559353
17:04:32	0.451448196	0.381569567	0.865572867	**17:04:36**	0.453004118	0.367975458	0.865586381
17:04:40	0.454560039	0.349325044	0.865599896	**17:04:44**	0.456115961	0.329855247	0.86561341
17:04:48	0.457671882	0.307927285	0.865626924	**17:04:52**	0.459227804	0.285999322	0.865640438
17:04:56	0.460783725	0.264475646	0.865653953	**17:05:00**	0.462339647	0.243086734	0.865667467
17:05:04	0.462114607	0.224446812	0.865680981	**17:05:08**	0.461889473	0.217238624	0.865694495
17:05:12	0.46166434	0.210030437	0.86570801	**17:05:16**	0.461439206	0.209047849	0.865721524
17:05:20	0.461214073	0.210140458	0.865735038	**17:05:24**	0.460988939	0.212065824	0.865748552
17:05:28	0.460763805	0.216489444	0.865762067	**17:05:32**	0.460538672	0.220913068	0.865775581
17:05:36	0.460313538	0.230532255	0.865789095	**17:05:40**	0.460088404	0.245347011	0.865802609
17:05:44	0.459863271	0.260161767	0.865816124	**17:05:48**	0.459638137	0.268293303	0.865829638
17:05:52	0.459413003	0.276424841	0.865843152	**17:05:56**	0.45918787	0.275077214	0.865856666
17:06:00	0.458962736	0.264250425	0.86587018	**17:06:04**	0.461690805	0.255183994	0.865883695
17:06:08	0.464418875	0.216996915	0.865897209	**17:06:12**	0.467146944	0.178809837	0.865910723
17:06:16	0.470238966	0.1421075	0.866417363	**17:06:20**	0.473561779	0.106810549	0.867236705
17:06:24	0.476884592	0.071513579	0.868056046	**17:06:28**	0.480207405	0.05852268	0.868875388
17:06:32	0.483530218	0.045531782	0.86969473	**17:06:36**	0.486853031	0.029900675	0.870514071
17:06:40	0.490175844	0.011629396	0.871333413	**17:06:44**	0.493498657	-0.006641882	0.872152755
17:06:48	0.49682147	-0.010904823	0.872972096	**17:06:52**	0.500144283	-0.015167763	0.873791438
17:06:56	0.503467096	-0.021855301	0.87461078	**17:07:00**	0.506789909	-0.030967437	0.875430122
17:07:04	0.508189456	-0.041226038	0.876249463	**17:07:08**	0.509589003	-0.038475405	0.877068805
17:07:12	0.510988549	-0.035724736	0.877888147	**17:07:16**	0.512388096	-0.034567455	0.878707488
17:07:20	0.513787643	-0.035003525	0.87952683	**17:07:24**	0.515187189	-0.035439595	0.880346172
17:07:28	0.516586736	-0.034497195	0.881165513	**17:07:32**	0.517986283	-0.03355476	0.881984855
17:07:36	0.51938583	-0.028941178	0.882804197	**17:07:40**	0.520785376	-0.020656379	0.883623539
17:07:44	0.522184923	-0.012371579	0.88444288	**17:07:48**	0.52358447	-0.005983943	0.885262222
17:07:52	0.524984016	0.000403658	0.886081564	**17:07:56**	0.526383563	0.00770241	0.886900905
17:08:00	0.52778311	0.015912279	0.887720247	**17:08:04**	0.527675105	0.023223537	0.888539589
17:08:08	0.5275671	0.037102547	0.88935893	**17:08:12**	0.527459095	0.050981558	0.890178272
17:08:16	0.527351091	0.065561244	0.890997614	**17:08:20**	0.527243086	0.080374482	0.891816956
17:08:24	0.527135081	0.095187739	0.892636297	**17:08:28**	0.526769488	0.117561222	0.893106629
17:08:32	0.526159264	0.139788884	0.893268845	**17:08:36**	0.525544411	0.162388907	0.893431061
17:08:40	0.524929558	0.185364058	0.893593277	**17:08:44**	0.524314705	0.2083392	0.893755493
17:08:48	0.523699853	0.243733095	0.893917709	**17:08:52**	0.523085	0.279126992	0.894079925
17:08:56	0.522470147	0.315362645	0.894242142	**17:09:00**	0.521855295	0.351878886	0.894404358
17:09:04	0.522236187	0.388988672	0.894566574	**17:09:08**	0.52261708	0.416501597	0.89472879
17:09:12	0.522997972	0.444014523	0.894891006	**17:09:16**	0.523378865	0.471222224	0.895053222
17:09:20	0.523759757	0.498124709	0.895215438	**17:09:24**	0.52414065	0.525027195	0.895377654
17:09:28	0.524521543	0.548572134	0.89553987	**17:09:32**	0.524902435	0.572117074	0.895702086
17:09:36	0.525283328	0.585913561	0.895864303	**17:09:40**	0.52566422	0.589961562	0.896026519
17:09:44	0.526045113	0.594009563	0.896188735	**17:09:48**	0.526426005	0.58345409	0.896350951
17:09:52	0.526806898	0.572898617	0.896513167	**17:09:56**	0.527187791	0.569845391	0.896675383

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:10:00	0.527568683	0.574294412	0.896837599	**17:10:04**	0.528241021	0.578917141	0.896999815
17:10:08	0.528913358	0.581406081	0.897162031	**17:10:12**	0.529585696	0.583895038	0.897324247
17:10:16	0.530258033	0.582601606	0.897486464	**17:10:20**	0.530930371	0.577525821	0.89764868
17:10:24	0.531602708	0.572450035	0.897810896	**17:10:28**	0.532275046	0.570722664	0.897973112
17:10:32	0.532947383	0.568995276	0.898135328	**17:10:36**	0.533619721	0.571752783	0.898297544
17:10:40	0.534292058	0.578995148	0.89845976	**17:10:44**	0.534964396	0.586237514	0.898621976
17:10:48	0.535636733	0.582536663	0.898784192	**17:10:52**	0.536309071	0.578835811	0.898946408
17:10:56	0.536981408	0.575956258	0.899108624	**17:11:00**	0.537653746	0.573898002	0.899270841
17:11:04	0.538451582	0.571914555	0.899433057	**17:11:08**	0.539249418	0.560384889	0.899595273
17:11:12	0.540047254	0.548855223	0.899757489	**17:11:16**	0.54084509	0.5397056	0.899919705
17:11:20	0.541642926	0.532936022	0.900081921	**17:11:24**	0.542440763	0.527125844	0.900244137
17:11:28	0.543238599	0.524193832	0.900406353	**17:11:32**	0.544036435	0.521261838	0.900568569
17:11:36	0.544834271	0.51332336	0.900730785	**17:11:40**	0.545632107	0.500378398	0.900893002
17:11:44	0.546429943	0.487433453	0.901055218	**17:11:48**	0.54722778	0.476775022	0.901217434
17:11:52	0.548025616	0.46611659	0.90137965	**17:11:56**	0.548812758	0.45270966	0.901541866
17:12:00	0.549588659	0.436553896	0.901704082	**17:12:04**	0.550153992	0.420272616	0.901866298
17:12:08	0.550719325	0.423530359	0.902028514	**17:12:12**	0.551284658	0.426788102	0.90219073
17:12:16	0.552023697	0.429565792	0.902588304	**17:12:20**	0.553051291	0.431931887	0.903376844
17:12:24	0.554078884	0.434297991	0.904165384	**17:12:28**	0.555106478	0.431355434	0.904953923
17:12:32	0.556134071	0.428412876	0.905742463	**17:12:36**	0.557161664	0.428230101	0.906531002
17:12:40	0.558189258	0.430807099	0.907319542	**17:12:44**	0.559216851	0.433384096	0.908108082
17:12:48	0.560244444	0.428390693	0.908896621	**17:12:52**	0.561272038	0.42339728	0.909685161
17:12:56	0.562299631	0.412458652	0.910473701	**17:13:00**	0.563327224	0.395574809	0.91126224
17:13:04	0.56361947	0.378252633	0.91205078	**17:13:08**	0.563911716	0.375960322	0.91283932
17:13:12	0.564203962	0.373668017	0.913627859	**17:13:16**	0.564496207	0.368969449	0.914416399
17:13:20	0.564788453	0.36186462	0.915204939	**17:13:24**	0.565080699	0.354759792	0.915993478
17:13:28	0.565372945	0.347654964	0.916782018	**17:13:32**	0.565665191	0.332725914	0.917570558
17:13:36	0.565957436	0.319208054	0.918359097	**17:13:40**	0.566249682	0.309923763	0.919147637
17:13:44	0.566541928	0.300639473	0.919936176	**17:13:48**	0.566834174	0.288601371	0.920724716
17:13:52	0.56712642	0.27656327	0.921513256	**17:13:56**	0.567418666	0.264803417	0.922301795
17:14:00	0.567710911	0.253321808	0.923090335	**17:14:04**	0.566585974	0.240995447	0.923878875
17:14:08	0.565461036	0.232168625	0.924667414	**17:14:12**	0.564336098	0.223341804	0.925455954
17:14:16	0.56321116	0.209913205	0.926244494	**17:14:20**	0.559551737	0.190372062	0.923599021
17:14:24	0.555371945	0.170520734	0.920248492	**17:14:28**	0.551192154	0.155781707	0.916897964
17:14:32	0.547012362	0.141042679	0.913547435	**17:14:36**	0.54283257	0.130378767	0.910196907
17:14:40	0.538652778	0.123789954	0.906846379	**17:14:44**	0.534472986	0.117201158	0.90349585
17:14:48	0.530293195	0.113073236	0.900145322	**17:14:52**	0.526113403	0.108945295	0.896794793
17:14:56	0.521933611	0.105866361	0.893444265	**17:15:00**	0.017753819	-0.396163603	0.390093737
17:15:04	0.01661833	-0.396378906	0.386743208	**17:15:08**	0.015482841	-0.40696089	0.38339268
17:15:12	0.515261422	0.083002007	0.88128064	**17:15:16**	0.515878644	0.073464788	0.880304886
17:15:20	0.516492345	0.063925487	0.879329132	**17:15:24**	0.51709097	0.054377182	0.878353379
17:15:28	0.517689595	0.059305191	0.877377625	**17:15:32**	0.51828822	0.064233182	0.876401871
17:15:36	0.518886845	0.071808042	0.875426117	**17:15:40**	0.519485471	0.082029773	0.874450364
17:15:44	0.520084096	0.092251503	0.87347461	**17:15:48**	0.520682721	0.113144863	0.872498856
17:15:52	0.521281346	0.134038241	0.871523103	**17:15:56**	0.521879972	0.143684768	0.870547349
17:16:00	0.522478597	0.14208448	0.869571595	**17:16:04**	0.520525844	0.138963337	0.868595842
17:16:08	0.51857309	0.146739062	0.867620088	**17:16:12**	0.516620337	0.154514787	0.866644334
17:16:16	0.514667584	0.166048218	0.86566858	**17:16:20**	0.51271483	0.18133938	0.864692827
17:16:24	0.510762077	0.196630543	0.863717073	**17:16:28**	0.508809324	0.214303499	0.862741319
17:16:32	0.50685657	0.231976455	0.861765566	**17:16:36**	0.504903817	0.238832039	0.860789812
17:16:40	0.502951064	0.242081838	0.859814058	**17:16:44**	0.500998311	0.245331632	0.858838304
17:16:48	0.499045557	0.254047403	0.857862551	**17:16:52**	0.497092804	0.262763175	0.856886797
17:16:56	0.495140051	0.270530442	0.855911043	**17:17:00**	0.493187297	0.277349207	0.85493529
17:17:04	0.493529342	0.285535864	0.853959536	**17:17:08**	0.493871386	0.299854472	0.852983782
17:17:12	0.494213431	0.31417308	0.852008029	**17:17:16**	0.494555476	0.334714427	0.851032275
17:17:20	0.49489752	0.361478517	0.850056521	**17:17:24**	0.495239565	0.388242602	0.849080767
17:17:28	0.495581609	0.401404383	0.848105014	**17:17:32**	0.495923654	0.414566155	0.84712926

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:17:36	0.496265698	0.424004481	0.846153506	**17:17:40**	0.496607743	0.429719353	0.845177753
17:17:44	0.496949787	0.436214272	0.844201999	**17:17:48**	0.497291832	0.445049371	0.843226245
17:17:52	0.497633877	0.45388447	0.842250491	**17:17:56**	0.497975921	0.467227185	0.841274738
17:18:00	0.499012942	0.482486685	0.841240618	**17:18:04**	0.499850658	0.497627382	0.841725715
17:18:08	0.500688374	0.509664746	0.842210813	**17:18:12**	0.50152609	0.52170211	0.84269591
17:18:16	0.502363806	0.527956139	0.843181008	**17:18:20**	0.503201522	0.528426834	0.843666105
17:18:24	0.504039238	0.528897547	0.844151202	**17:18:28**	0.504876954	0.522552708	0.8446363
17:18:32	0.50571467	0.516207868	0.845121397	**17:18:36**	0.506552387	0.510308443	0.845606495
17:18:40	0.507390103	0.504854468	0.846091592	**17:18:44**	0.508227819	0.499400492	0.84657669
17:18:48	0.509065535	0.495876936	0.847061787	**17:18:52**	0.509903251	0.49235338	0.847546884
17:18:56	0.510740967	0.488829824	0.848031982	**17:19:00**	0.511578683	0.485306268	0.848517079
17:19:04	0.510790423	0.481927997	0.849002177	**17:19:08**	0.510002163	0.481893238	0.849487274
17:19:12	0.50920058	0.481850538	0.849972372	**17:19:16**	0.508383278	0.485382123	0.850457469
17:19:20	0.507565975	0.492497381	0.850942566	**17:19:24**	0.506748672	0.49961264	0.851427664
17:19:28	0.505931369	0.509777564	0.851912761	**17:19:32**	0.505114066	0.519942471	0.852397859
17:19:36	0.504296763	0.519625493	0.852882956	**17:19:40**	0.50347946	0.508826595	0.853368054
17:19:44	0.502662157	0.498027696	0.853853151	**17:19:48**	0.501844854	0.493551238	0.854338248
17:19:52	0.501027551	0.489074779	0.854823346	**17:19:56**	0.500210248	0.490980698	0.855308443
17:20:00	0.499392945	0.4950141	0.855793541	**17:20:04**	0.501994828	0.501085609	0.856278638
17:20:08	0.504596711	0.507876214	0.856763736	**17:20:12**	0.507198594	0.514666837	0.857248833
17:20:16	0.509800477	0.515643464	0.85773393	**17:20:20**	0.51240236	0.510806095	0.858219028
17:20:24	0.515004243	0.505968726	0.858704125	**17:20:28**	0.517606126	0.501718622	0.859189223
17:20:32	0.520208009	0.497468518	0.85967432	**17:20:36**	0.522809892	0.488253909	0.860159417
17:20:40	0.525411775	0.474074775	0.860644515	**17:20:44**	0.528013657	0.459895651	0.861129612
17:20:48	0.53061554	0.453279955	0.86161471	**17:20:52**	0.533217423	0.446664259	0.862099807
17:20:56	0.535819306	0.438539647	0.862584905	**17:21:00**	0.538421189	0.428906119	0.863070002
17:21:04	0.538828065	0.417964172	0.863555099	**17:21:08**	0.539234941	0.417649817	0.864040197
17:21:12	0.539641817	0.41733547	0.864525294	**17:21:16**	0.540048693	0.41364846	0.865010392
17:21:20	0.540455569	0.406588793	0.865495489	**17:21:24**	0.540862445	0.399529127	0.865980587
17:21:28	0.541269321	0.397308308	0.866465684	**17:21:32**	0.541676197	0.395087498	0.866950781
17:21:36	0.542144612	0.396556944	0.867519259	**17:21:40**	0.542685525	0.401723191	0.868185965
17:21:44	0.543226438	0.406889433	0.868852671	**17:21:48**	0.543767351	0.402794376	0.869519377
17:21:52	0.544308263	0.39869932	0.870186084	**17:21:56**	0.544849176	0.39197904	0.87085279
17:22:00	0.545390089	0.382633541	0.871519496	**17:22:04**	0.546580291	0.373675074	0.872186202
17:22:08	0.547770493	0.358798662	0.872852908	**17:22:12**	0.548960695	0.34392225	0.873519614
17:22:16	0.550150897	0.330623345	0.87418632	**17:22:20**	0.551341099	0.318901949	0.874853026
17:22:24	0.552531301	0.307180551	0.875519732	**17:22:28**	0.553721503	0.307079307	0.876186438
17:22:32	0.554911705	0.306978062	0.876853144	**17:22:36**	0.556101907	0.304886654	0.87751985
17:22:40	0.557292109	0.300805081	0.878186556	**17:22:44**	0.558482311	0.296723508	0.878853263
17:22:48	0.559672513	0.296645536	0.879519969	**17:22:52**	0.560862715	0.296567563	0.880186675
17:22:56	0.562052917	0.299771477	0.880853381	**17:23:00**	0.563243119	0.306257284	0.881520087
17:23:04	0.564439036	0.312746497	0.882186793	**17:23:08**	0.565634952	0.319235709	0.882853499
17:23:12	0.566830868	0.325724922	0.883520205	**17:23:16**	0.568026785	0.33112112	0.884186911
17:23:20	0.569222701	0.335424301	0.884853617	**17:23:24**	0.570418617	0.339727483	0.885520323
17:23:28	0.571614534	0.344030665	0.886187029	**17:23:32**	0.57281045	0.358531173	0.886853735
17:23:36	0.574006366	0.375390573	0.887520442	**17:23:40**	0.575202283	0.399326654	0.888187148
17:23:44	0.576398199	0.423262735	0.888853854	**17:23:48**	0.577594115	0.437521658	0.88952056
17:23:52	0.578790032	0.451780582	0.890187266	**17:23:56**	0.580027692	0.467731251	0.890853972
17:24:00	0.581269309	0.485351148	0.891520678	**17:24:04**	0.581864581	0.50258577	0.892187384
17:24:08	0.582459853	0.518350771	0.89285409	**17:24:12**	0.583005487	0.534086166	0.893453541
17:24:16	0.582123996	0.541853677	0.892119358	**17:24:20**	0.581242505	0.542503955	0.890785175
17:24:24	0.580361014	0.543154233	0.889450991	**17:24:28**	0.579479523	0.550572063	0.888116808
17:24:32	0.578598031	0.557989876	0.886782625	**17:24:36**	0.57771654	0.563901668	0.885448442
17:24:40	0.576835049	0.568307404	0.884114259	**17:24:44**	0.575953558	0.572713158	0.882780075
17:24:48	0.575072066	0.579814883	0.881445892	**17:24:52**	0.574190575	0.586916626	0.880111709
17:24:56	0.573309084	0.596770139	0.878777526	**17:25:00**	0.572427593	0.609375458	0.877443343
17:25:04	0.571095202	0.621711984	0.876109159	**17:25:08**	0.569762811	0.632153053	0.874774976

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:25:12	0.568430419	0.642594121	0.873440793	**17:25:16**	0.567098028	0.652291203	0.87210661
17:25:20	0.565765637	0.661244371	0.870772427	**17:25:24**	0.564433246	0.670197504	0.869438243
17:25:28	0.563100855	0.682955054	0.86810406	**17:25:32**	0.562085277	0.695901451	0.867199132
17:25:36	0.561706423	0.706570857	0.867156911	**17:25:40**	0.561327569	0.714583728	0.86711469
17:25:44	0.560948715	0.722596599	0.867072468	**17:25:48**	0.560569861	0.726840547	0.867030247
17:25:52	0.560191007	0.731084495	0.866988025	**17:25:56**	0.559812153	0.738946899	0.866945804
17:26:00	0.559433299	0.750427761	0.866903583	**17:26:04**	0.561969766	0.763646399	0.866861361
17:26:08	0.564506233	0.772637537	0.86681914	**17:26:12**	0.5670427	0.781628674	0.866776919
17:26:16	0.569579167	0.78687757	0.866734697	**17:26:20**	0.572115634	0.78838426	0.866692476
17:26:24	0.574652101	0.78989095	0.866650254	**17:26:28**	0.577188568	0.784653129	0.866608033
17:26:32	0.579725035	0.779415308	0.866565812	**17:26:36**	0.582261502	0.77021912	0.86652359
17:26:40	0.584797969	0.757064602	0.866481369	**17:26:44**	0.587334436	0.743910083	0.866439148
17:26:48	0.589870903	0.738768654	0.866396926	**17:26:52**	0.59240737	0.733627259	0.866354705
17:26:56	0.594943837	0.722209738	0.866312484	**17:27:00**	0.597480304	0.704516125	0.866270262
17:27:04	0.596191221	0.68454216	0.866228041	**17:27:08**	0.594902139	0.661840106	0.866185819
17:27:12	0.593641023	0.639154723	0.866143598	**17:27:16**	0.59238948	0.618506209	0.866101377
17:27:20	0.591137937	0.599888839	0.866059155	**17:27:24**	0.589886393	0.58127147	0.866016934
17:27:28	0.58863485	0.576785033	0.865974713	**17:27:32**	0.587383307	0.572298596	0.865932491
17:27:36	0.586131764	0.570884831	0.86589027	**17:27:40**	0.584880221	0.572543738	0.865848048
17:27:44	0.583628677	0.574202662	0.865805827	**17:27:48**	0.582377134	0.563985119	0.865763606
17:27:52	0.581125591	0.553767576	0.865721384	**17:27:56**	0.579874048	0.541015649	0.865679163
17:28:00	0.578622505	0.525729375	0.865636942	**17:28:04**	0.579898254	0.51194958	0.86559472
17:28:08	0.581174003	0.49588878	0.865552499	**17:28:12**	0.582449752	0.47982798	0.865510277
17:28:16	0.583725502	0.464237145	0.865468056	**17:28:20**	0.585001251	0.448802977	0.865425835
17:28:24	0.586277	0.43454485	0.865383613	**17:28:28**	0.58755275	0.423814895	0.865341392
17:28:32	0.588828499	0.41308494	0.865299171	**17:28:36**	0.590104248	0.403847988	0.865256949
17:28:40	0.591379997	0.39610404	0.865214728	**17:28:44**	0.592655747	0.388360091	0.865172506
17:28:48	0.593931496	0.390555063	0.865130285	**17:28:52**	0.595207245	0.392750035	0.865088064
17:28:56	0.596482994	0.394611022	0.865045842	**17:29:00**	0.597758744	0.396138018	0.865003621
17:29:04	0.59879113	0.39751995	0.8649614	**17:29:08**	0.599823516	0.402545103	0.864919178
17:29:12	0.600855902	0.407570255	0.864876957	**17:29:16**	0.601888288	0.412859249	0.864834736
17:29:20	0.602920674	0.418412084	0.864792514	**17:29:24**	0.60395306	0.42396492	0.864750293
17:29:28	0.604985447	0.413887886	0.864708071	**17:29:32**	0.607078139	0.404442884	0.866102475
17:29:36	0.610222428	0.393136649	0.868921703	**17:29:40**	0.613366718	0.37934234	0.871740932
17:29:44	0.616511008	0.365548031	0.874560161	**17:29:48**	0.619655297	0.359512654	0.87737939
17:29:52	0.622799587	0.353477277	0.880198619	**17:29:56**	0.625943877	0.351360185	0.883017848
17:30:00	1.129088167	0.853161375	1.385837076	**17:30:04**	1.13261047	0.855187895	1.388656305
17:30:08	1.136132774	0.86015364	1.391475534	**17:30:12**	0.639655077	0.365119384	0.894294763
17:30:16	0.643177381	0.360446305	0.897113992	**17:30:20**	0.646636253	0.346096589	0.899933221
17:30:24	0.650070835	0.331732396	0.902752449	**17:30:28**	0.653505417	0.312508785	0.905571678
17:30:32	0.656939999	0.293285173	0.908390907	**17:30:36**	0.660374581	0.279577626	0.911210136
17:30:40	0.663809163	0.271386125	0.914029365	**17:30:44**	0.667243744	0.263194633	0.916848594
17:30:48	0.670678326	0.265604023	0.919667823	**17:30:52**	0.674112908	0.268013413	0.922487051
17:30:56	0.67754749	0.273318335	0.92530628	**17:31:00**	0.680982072	0.281518804	0.928125509
17:31:04	0.683268447	0.289034846	0.930944738	**17:31:08**	0.685554821	0.30669184	0.933763967
17:31:12	0.687841195	0.324348827	0.936583196	**17:31:16**	0.69012757	0.339597829	0.939402424
17:31:20	0.692413944	0.352438836	0.942221653	**17:31:24**	0.694700319	0.365279846	0.945040882
17:31:28	0.696986693	0.35596488	0.947860111	**17:31:32**	0.699273068	0.34664991	0.95067934
17:31:36	0.701559442	0.33865872	0.953498569	**17:31:40**	0.703845816	0.331991299	0.956317797
17:31:44	0.706132191	0.325323886	0.959137026	**17:31:48**	0.712917341	0.321338124	0.968051714
17:31:52	0.664226267	0.284283835	0.901800825	**17:31:56**	0.615535193	0.244856822	0.835549936
17:32:00	0.592053075	0.218083752	0.803455043	**17:32:04**	0.601872454	0.211161189	0.816279142
17:32:08	0.611691834	0.205805428	0.829103241	**17:32:12**	0.621511214	0.200449668	0.841927339
17:32:16	0.631330594	0.197596189	0.854751438	**17:32:20**	0.641149974	0.197244994	0.867575536
17:32:24	0.650969354	0.196893798	0.880399635	**17:32:28**	0.576134706	0.144130534	0.778524707
17:32:32	0.579554563	0.13801355	0.782677995	**17:32:36**	0.58297442	0.129919869	0.786831283
17:32:40	0.586394277	0.119849474	0.790984571	**17:32:44**	0.589814134	0.109779079	0.795137859

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:32:48	0.593233991	0.102314979	0.799291147	**17:32:52**	0.596653848	0.094850897	0.803444435
17:32:56	0.600073705	0.089108837	0.807597723	**17:33:00**	0.603493562	0.085088816	0.811751011
17:33:04	0.606790292	0.0809954	0.815904299	**17:33:08**	0.610087022	0.083270932	0.820057587
17:33:12	0.613383752	0.085546465	0.824210875	**17:33:16**	0.616680482	0.091504655	0.828364163
17:33:20	0.619977212	0.098690422	0.832517451	**17:33:24**	0.623273942	0.105876172	0.836670739
17:33:28	0.626570672	0.121179892	0.840824027	**17:33:32**	0.629867402	0.136483631	0.844977315
17:33:36	0.633164132	0.147499948	0.849130603	**17:33:40**	0.634630085	0.144562735	0.850803343
17:33:44	0.635605489	0.141333115	0.851811432	**17:33:48**	0.636580894	0.126895353	0.852819521
17:33:52	0.637556298	0.112457591	0.85382761	**17:33:56**	0.638531703	0.105897018	0.854835699
17:34:00	0.639507108	0.107213634	0.855843788	**17:34:04**	0.641550642	0.109166946	0.856851877
17:34:08	0.643594177	0.116887603	0.857859966	**17:34:12**	0.645735268	0.124666413	0.858868055
17:34:16	0.647876457	0.133893584	0.859876144	**17:34:20**	0.650017646	0.144569075	0.860884233
17:34:24	0.652158834	0.155244566	0.861892322	**17:34:28**	0.654300023	0.148419516	0.862900411
17:34:32	0.656441211	0.141594484	0.8639085	**17:34:36**	0.6585824	0.135353946	0.864916589
17:34:40	0.660723588	0.12969792	0.865924679	**17:34:44**	0.662864777	0.124041894	0.866932768
17:34:48	0.665005965	0.126911006	0.867940857	**17:34:52**	0.667147154	0.129780136	0.868948946
17:34:56	0.669288342	0.136731062	0.869957035	**17:35:00**	0.671429531	0.147763784	0.870965124
17:35:04	0.672929923	0.158414537	0.871973213	**17:35:08**	0.674430315	0.160495171	0.872981302
17:35:12	0.675930707	0.162575804	0.873989391	**17:35:16**	0.677431099	0.157182846	0.87499748
17:35:20	0.67893149	0.144316312	0.876005569	**17:35:24**	0.680431882	0.131449779	0.877013658
17:35:28	0.681932274	0.117811494	0.878021747	**17:35:32**	0.683432666	0.104173226	0.879029836
17:35:36	0.684933058	0.093766073	0.880037925	**17:35:40**	0.68643345	0.084435995	0.881046014
17:35:44	0.687933842	0.075105916	0.882054104	**17:35:48**	0.689434234	0.06995772	0.883062193
17:35:52	0.690934625	0.064809523	0.884070282	**17:35:56**	0.692435017	0.062742223	0.885078371
17:36:00	0.693935409	0.063755856	0.88608646	**17:36:04**	0.695205403	0.064632151	0.887094549
17:36:08	0.696475396	0.056746398	0.888102638	**17:36:12**	0.697745389	0.048860645	0.889110727
17:36:16	0.699015382	0.046245537	0.890118816	**17:36:20**	0.700285376	0.048901074	0.891126905
17:36:24	0.701769363	0.05168417	0.892424938	**17:36:28**	0.703331103	0.048248357	0.893828319
17:36:32	0.704892843	0.044812545	0.8952317	**17:36:36**	0.706454583	0.043456091	0.896635081
17:36:40	0.708016323	0.044178995	0.898038462	**17:36:44**	0.709578063	0.042030555	0.899441844
17:36:48	0.711139803	0.031268046	0.900845225	**17:36:52**	0.712701543	0.020505538	0.902248606
17:36:56	0.714263283	0.009743029	0.903651987	**17:37:00**	0.715825023	-0.00101948	0.905055368
17:37:04	0.717773007	-0.011551754	0.906458749	**17:37:08**	0.720031807	-0.023497402	0.90786213
17:37:12	0.724877991	-0.03390075	0.909265511	**17:37:16**	0.729724174	-0.038139001	0.910668893
17:37:20	0.734570357	-0.036212225	0.912072274	**17:37:24**	0.739416541	-0.034285449	0.913475655
17:37:28	0.744262724	-0.040683141	0.914879036	**17:37:32**	0.749108908	-0.047080833	0.916282417
17:37:36	0.753955091	-0.050474514	0.917685798	**17:37:40**	0.758801274	-0.050864184	0.919089179
17:37:44	0.763647458	-0.051253854	0.92049256	**17:37:48**	0.768493641	-0.033662199	0.921895942
17:37:52	0.773339824	-0.016070509	0.923299323	**17:37:56**	0.778186008	-0.000800771	0.924702704
17:38:00	0.783032191	0.012147084	0.926106085	**17:38:04**	0.787420251	0.024821824	0.927509466
17:38:08	0.791808312	0.0374966	0.928912847	**17:38:12**	0.796196372	0.050171375	0.930316228
17:38:16	0.800584433	0.062347033	0.931719609	**17:38:20**	0.804972493	0.07402361	0.933122991
17:38:24	0.809360553	0.085700222	0.934526372	**17:38:28**	0.813748614	0.097376799	0.935929753
17:38:32	0.818136674	0.109053376	0.937333134	**17:38:36**	0.822524734	0.11553797	0.938736515
17:38:40	0.826912795	0.120291891	0.940139896	**17:38:44**	0.831300855	0.125045811	0.941543277
17:38:48	0.835688916	0.13509507	0.942946658	**17:38:52**	0.840076976	0.145144365	0.94435004
17:38:56	0.844465036	0.148992037	0.945753421	**17:39:00**	0.887854209	0.169886117	1
17:39:04	0.881638434	0.161211421	0.986321111	**17:39:08**	0.87542266	0.147803108	0.972642222
17:39:12	0.869206886	0.134394794	0.958963333	**17:39:16**	0.834982227	0.112060531	0.945284444
17:39:20	0.809848202	0.102914766	0.931605555	**17:39:24**	0.784714178	0.095237964	0.917926666
17:39:28	0.776170891	0.101857606	0.904247777	**17:39:32**	0.76958579	0.10964449	0.890568888
17:39:36	0.763000688	0.118571798	0.876889999	**17:39:40**	0.761942917	0.131934213	0.870700174
17:39:44	0.767962737	0.14951547	0.873048854	**17:39:48**	0.774451752	0.162376994	0.875397534
17:39:52	0.780940767	0.175238554	0.877746214	**17:39:56**	0.741112164	0.162970372	0.880094895
17:40:00	0.74438574	0.178874257	0.882443575	**17:40:04**	0.74917512	0.195681672	0.884792255
17:40:08	0.753005346	0.219017457	0.887140935	**17:40:12**	0.753177855	0.240172934	0.889489615
17:40:16	0.753350363	0.262885664	0.891838295	**17:40:20**	0.753522872	0.287155648	0.894186976

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:40:24	0.75369538	0.31142565	0.896535656	**17:40:28**	0.753867888	0.329765723	0.898884336
17:40:32	0.754040397	0.348105805	0.901233016	**17:40:36**	0.754212905	0.365662081	0.903581696
17:40:40	0.754385414	0.382434566	0.905930376	**17:40:44**	0.754557922	0.399207046	0.908279057
17:40:48	0.75473043	0.426872515	0.910627737	**17:40:52**	0.754902939	0.454537985	0.912976417
17:40:56	0.755075447	0.478545033	0.915325097	**17:41:00**	0.755247956	0.498893664	0.917673777
17:41:04	0.75678443	0.520055328	0.920022457	**17:41:08**	0.758320904	0.533365243	0.922371138
17:41:12	0.759327842	0.546359514	0.924002341	**17:41:16**	0.759746775	0.562103474	0.924836848
17:41:20	0.760165708	0.58094764	0.925671355	**17:41:24**	0.760584641	0.599791798	0.926505862
17:41:28	0.761003574	0.617245682	0.927340369	**17:41:32**	0.761422507	0.634699556	0.928174876
17:41:36	0.76184144	0.65783293	0.929009383	**17:41:40**	0.762260374	0.686645787	0.92984389
17:41:44	0.762679307	0.708779985	0.930678397	**17:41:48**	0.76309824	0.710878211	0.931512904
17:41:52	0.763517173	0.712976436	0.932347411	**17:41:56**	0.763936106	0.723135023	0.933181918
17:42:00	0.764355039	0.741353952	0.934016425	**17:42:04**	0.765655435	0.760098307	0.934850932
17:42:08	0.766955831	0.774218014	0.935685439	**17:42:12**	0.768256227	0.788337684	0.936519946
17:42:16	0.769556624	0.803921166	0.937354453	**17:42:20**	0.77085702	0.820968424	0.93818896
17:42:24	0.772157416	0.838015682	0.939023467	**17:42:28**	0.773457812	0.84806784	0.939857974
17:42:32	0.774758208	0.858119998	0.940692481	**17:42:36**	0.776058604	0.868172156	0.941526988
17:42:40	0.777359	0.878224314	0.942361495	**17:42:44**	0.778659396	0.888276471	0.943196002
17:42:48	0.779959793	0.896596144	0.944030509	**17:42:52**	0.781260189	0.904915782	0.944865016
17:42:56	0.782560585	0.904723853	0.945699523	**17:43:00**	0.783860981	0.896020287	0.94653403
17:43:04	0.78428669	0.886795368	0.947368536	**17:43:08**	0.784712399	0.867572085	0.948203043
17:43:12	0.785138108	0.848348801	0.94903755	**17:43:16**	0.785563817	0.831835736	0.949872057
17:43:20	0.785721611	0.817873261	0.950343562	**17:43:24**	0.785219323	0.803517285	0.949920711
17:43:28	0.784717034	0.786822196	0.949497861	**17:43:32**	0.784214746	0.770127106	0.94907501
17:43:36	0.783712458	0.757830379	0.94865216	**17:43:40**	0.78321017	0.758728758	0.948229309
17:43:44	0.782707881	0.759627137	0.947806459	**17:43:48**	0.782205593	0.758348753	0.947383608
17:43:52	0.781703305	0.757070388	0.946960757	**17:43:56**	0.781201017	0.757142157	0.946537907
17:44:00	0.780698728	0.758564097	0.946115056	**17:44:04**	0.778958574	0.758504907	0.945692206
17:44:08	0.777218419	0.756215998	0.945269355	**17:44:12**	0.775478265	0.753927089	0.944846504
17:44:16	0.77373811	0.754335395	0.944423654	**17:44:20**	0.771997956	0.757440915	0.944000803
17:44:24	0.770276365	0.760557501	0.943577953	**17:44:28**	0.768759711	0.758004563	0.943155102
17:44:32	0.767243057	0.755451625	0.942732251	**17:44:36**	0.765726403	0.747479334	0.942309401
17:44:40	0.764209749	0.734087671	0.94188655	**17:44:44**	0.762693095	0.720695991	0.9414637
17:44:48	0.761176441	0.699909984	0.941040849	**17:44:52**	0.759659787	0.679123977	0.940617999
17:44:56	0.758143133	0.660704868	0.940195148	**17:45:00**	0.256626479	0.144652657	0.439772297
17:45:04	0.256531092	0.129447623	0.439349447	**17:45:08**	0.256435705	0.115669522	0.438926596
17:45:12	0.756340319	0.601891403	0.938503746	**17:45:16**	0.756244932	0.591460411	0.938080895
17:45:20	0.756149545	0.58437652	0.937658044	**17:45:24**	0.756054158	0.577292629	0.937235194
17:45:28	0.755958771	0.563843716	0.936812343	**17:45:32**	0.755863384	0.550394803	0.936389493
17:45:36	0.755767998	0.53563824	0.935966642	**17:45:40**	0.755672611	0.519574008	0.935543791
17:45:44	0.755577224	0.503509775	0.935120941	**17:45:48**	0.755481837	0.481034022	0.93469809
17:45:52	0.75538645	0.458558269	0.93427524	**17:45:56**	0.755361383	0.435591389	0.933947666
17:46:00	0.755732057	0.412327361	0.934156289	**17:46:04**	0.757266809	0.389757222	0.934364912
17:46:08	0.75880156	0.375583911	0.934573535	**17:46:12**	0.760336312	0.361410605	0.934782159
17:46:16	0.761871063	0.353801986	0.934990782	**17:46:20**	0.763405814	0.352758056	0.935199405
17:46:24	0.764940566	0.351714126	0.935408029	**17:46:28**	0.766475317	0.342287895	0.935616652
17:46:32	0.768010069	0.332861672	0.935825275	**17:46:36**	0.76954482	0.320870955	0.936033898
17:46:40	0.771079571	0.308025409	0.936242522	**17:46:44**	0.772614323	0.292939014	0.936451145
17:46:48	0.774149074	0.271130066	0.936659768	**17:46:52**	0.775683825	0.249321117	0.936868391
17:46:56	0.777218577	0.239870823	0.937077015	**17:47:00**	0.778753328	0.242779202	0.937285638
17:47:04	0.778473968	0.244606199	0.937494261	**17:47:08**	0.778194609	0.244424257	0.937702885
17:47:12	0.777915249	0.244242316	0.937911508	**17:47:16**	0.777635889	0.246007367	0.938120131
17:47:20	0.777356529	0.249719431	0.938328754	**17:47:24**	0.77707717	0.253431476	0.938537378
17:47:28	0.77679781	0.249966635	0.938746001	**17:47:32**	0.77651845	0.246501794	0.938954624
17:47:36	0.77623909	0.233577356	0.939163247	**17:47:40**	0.775959731	0.21119332	0.939371871
17:47:44	0.775680371	0.188809284	0.939580494	**17:47:48**	0.775401011	0.159193415	0.939789117
17:47:52	0.775131133	0.129583145	0.939997741	**17:47:56**	0.774769246	0.105879651	0.940077827

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:48:00	0.774191279	0.088008905	0.939865143	**17:48:04**	0.776274071	0.071724196	0.939652458
17:48:08	0.778356863	0.055439487	0.939439774	**17:48:12**	0.780439655	0.039154778	0.93922709
17:48:16	0.782522447	0.025046813	0.939014405	**17:48:20**	0.784605239	0.013115593	0.938801721
17:48:24	0.786688031	0.001184373	0.938589036	**17:48:28**	0.788770823	-0.000709825	0.938376352
17:48:32	0.790853615	-0.002604024	0.938163668	**17:48:36**	0.792936407	-0.004498187	0.937950983
17:48:40	0.795019199	-0.006392386	0.937738299	**17:48:44**	0.797101991	-0.008286584	0.937525615
17:48:48	0.799184783	-0.002287215	0.93731293	**17:48:52**	0.801267575	0.003712154	0.937100246
17:48:56	0.803350367	0.011923691	0.936887561	**17:49:00**	0.805433159	0.02234743	0.936674877
17:49:04	0.805127583	0.031347429	0.936462193	**17:49:08**	0.804822006	0.040347499	0.936249508
17:49:12	0.80451643	0.049347498	0.936036824	**17:49:16**	0.804210854	0.0599886	0.93582414
17:49:20	0.803905277	0.07227077	0.935611455	**17:49:24**	0.803599701	0.08455294	0.935398771
17:49:28	0.803294124	0.107815259	0.935186086	**17:49:32**	0.802988548	0.131077578	0.934973402
17:49:36	0.802682971	0.155560617	0.934760718	**17:49:40**	0.802377395	0.181264374	0.934548033
17:49:44	0.802071818	0.20696815	0.934335349	**17:49:48**	0.801766242	0.222053696	0.934122665
17:49:52	0.801460665	0.237139225	0.93390998	**17:49:56**	0.801155089	0.254746631	0.933697296
17:50:00	0.800849513	0.274875878	0.933484611	**17:50:04**	0.801625518	0.29564984	0.933271927
17:50:08	0.802401524	0.315097418	0.933059243	**17:50:12**	0.80317753	0.334544988	0.932846558
17:50:16	0.803953536	0.345491996	0.932633874	**17:50:20**	0.804729542	0.347938443	0.93242119
17:50:24	0.805505548	0.350384881	0.932208505	**17:50:28**	0.806281554	0.358022379	0.931995821
17:50:32	0.806298101	0.365207166	0.930754135	**17:50:36**	0.80621155	0.37049496	0.929372758
17:50:40	0.806124999	0.373947198	0.927991382	**17:50:44**	0.806038447	0.377399445	0.926610006
17:50:48	0.805951896	0.379571318	0.925228629	**17:50:52**	0.805865345	0.381743192	0.923847253
17:50:56	0.805778793	0.38647432	0.922465877	**17:51:00**	0.805692242	0.393764711	0.921084501
17:51:04	0.80465014	0.400485504	0.919703124	**17:51:08**	0.803608038	0.407822199	0.918321748
17:51:12	0.802565936	0.41515889	0.916940372	**17:51:16**	0.802033881	0.422206577	0.915558995
17:51:20	0.802081838	0.429006966	0.914177619	**17:51:24**	0.802129795	0.435807355	0.912796243
17:51:28	0.802177752	0.438584078	0.911414866	**17:51:32**	0.802225709	0.441360802	0.91003349
17:51:36	0.802273666	0.443796157	0.908652114	**17:51:40**	0.802321623	0.445890141	0.907270737
17:51:44	0.80236958	0.447984125	0.905889361	**17:51:48**	0.80265836	0.459213164	0.90483428
17:51:52	0.804209139	0.47119446	0.9054891	**17:51:56**	0.805759918	0.489540044	0.90614392
17:52:00	0.807310697	0.514249916	0.90679874	**17:52:04**	0.809895162	0.53957595	0.90745356
17:52:08	0.812479627	0.572286084	0.90810838	**17:52:12**	0.815064091	0.604996208	0.9087632
17:52:16	0.817648556	0.638312455	0.90941802	**17:52:20**	0.820233021	0.672234833	0.91007284
17:52:24	0.822817486	0.706157194	0.91072766	**17:52:28**	0.82540195	0.734103207	0.91138248
17:52:32	0.827986415	0.762049203	0.9120373	**17:52:36**	0.83057088	0.781879198	0.91269212
17:52:40	0.833155345	0.793593158	0.91334694	**17:52:44**	0.835739809	0.805307119	0.91400176
17:52:48	0.838324274	0.822468252	0.91465658	**17:52:52**	0.840908739	0.839629421	0.9153114
17:52:56	0.843493204	0.852488654	0.91596622	**17:53:00**	0.846077668	0.861046022	0.91662104
17:53:04	0.849503564	0.870104918	0.91727586	**17:53:08**	0.85292946	0.870509705	0.91793068
17:53:12	0.856355356	0.870914526	0.9185855	**17:53:16**	0.859781251	0.872223927	0.91924032
17:53:20	0.863207147	0.874437941	0.91989514	**17:53:24**	0.866633043	0.876651956	0.92054996
17:53:28	0.870058939	0.878279522	0.92120478	**17:53:32**	0.873484834	0.879907124	0.9218596
17:53:36	0.87691073	0.882096943	0.92251442	**17:53:40**	0.880336626	0.885973592	0.92316924
17:53:44	0.883762522	0.88985024	0.92382406	**17:53:48**	0.887188417	0.892909926	0.92447888
17:53:52	0.890614313	0.895969647	0.9251337	**17:53:56**	0.894040209	0.893258433	0.92578852
17:54:00	0.897466105	0.884776285	0.92644334	**17:54:04**	0.899243677	0.875311597	0.92709816
17:54:08	0.895088783	0.865184062	0.92775298	**17:54:12**	0.882427463	0.84998598	0.9284078
17:54:16	0.886835323	0.847917799	0.92906262	**17:54:20**	0.884966991	0.845063779	0.92971744
17:54:24	0.88309866	0.842209759	0.93037226	**17:54:28**	0.879912341	0.83982838	0.929241319
17:54:32	0.876284204	0.837183606	0.927511752	**17:54:36**	0.872656067	0.837008053	0.925782185
17:54:40	0.869027929	0.839301724	0.924052617	**17:54:44**	0.865399792	0.841595358	0.92232305
17:54:48	0.861771655	0.839360486	0.920593483	**17:54:52**	0.858143517	0.837125614	0.918863915
17:54:56	0.85451538	0.832750344	0.917134348	**17:55:00**	0.850887243	0.826234676	0.915404781
17:55:04	0.847398662	0.819802195	0.913675213	**17:55:08**	0.848372121	0.813599967	0.911945646
17:55:12	0.850886698	0.808316375	0.910216079	**17:55:16**	0.852753889	0.7924899	0.908486512
17:55:20	0.851700461	0.764765556	0.906756944	**17:55:24**	0.850647033	0.737041194	0.905027377
17:55:28	0.849593605	0.709899409	0.90329781	**17:55:32**	0.848540177	0.682757605	0.901568242

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
17:55:36	0.847486749	0.65798396	0.899838675	**17:55:40**	0.846433321	0.635578448	0.898109108
17:55:44	0.845379893	0.613172945	0.896379541	**17:55:48**	0.844326465	0.602820011	0.894649973
17:55:52	0.843273037	0.592467077	0.892920406	**17:55:56**	0.843027624	0.580356361	0.89228563
17:56:00	0.843381158	0.56636324	0.892462377	**17:56:04**	0.841281288	0.550907684	0.892639123
17:56:08	0.839181419	0.538963596	0.89281587	**17:56:12**	0.837081549	0.527019511	0.892992617
17:56:16	0.834981679	0.517794002	0.893169363	**17:56:20**	0.832881809	0.511287075	0.89334611
17:56:24	0.83078194	0.504780147	0.893522856	**17:56:28**	0.82868207	0.503250006	0.893699603
17:56:32	0.8265822	0.501719864	0.893876349	**17:56:36**	0.82448233	0.510682875	0.894053096
17:56:40	0.822382461	0.530139038	0.894229843	**17:56:44**	0.820282591	0.549595203	0.894406589
17:56:48	0.818182721	0.555791959	0.894583336	**17:56:52**	0.816082852	0.561988715	0.894760082
17:56:56	0.813982982	0.569075171	0.894936829	**17:57:00**	0.811883112	0.577051337	0.895113575
17:57:04	0.812582668	0.586696189	0.895290322	**17:57:08**	0.813282225	0.59634104	0.895467069
17:57:12	0.813981781	0.605985901	0.895643815	**17:57:16**	0.814681337	0.619518353	0.895820562
17:57:20	0.815380894	0.636938406	0.895997308	**17:57:24**	0.81608045	0.654358459	0.896174055
17:57:28	0.816780006	0.664366581	0.896350801	**17:57:32**	0.817479563	0.674374721	0.896527548
17:57:36	0.818179119	0.674838011	0.896704294	**17:57:40**	0.818878675	0.665756485	0.896881041
17:57:44	0.819578232	0.65667496	0.897057788	**17:57:48**	0.820277788	0.644514546	0.897234534
17:57:52	0.820977344	0.63235414	0.897411281	**17:57:56**	0.821676901	0.620990037	0.897588027
17:58:00	0.822376457	0.610422246	0.897764774	**17:58:04**	0.822798545	0.59968906	0.89794152
17:58:08	0.823220633	0.590165774	0.898118267	**17:58:12**	0.823642721	0.580642489	0.898295014
17:58:16	0.824064808	0.571664402	0.89847176	**17:58:20**	0.824486896	0.563231515	0.898648507
17:58:24	0.824908984	0.554798627	0.898825253	**17:58:28**	0.825331072	0.543144376	0.899002
17:58:32	0.82575316	0.531490126	0.899178746	**17:58:36**	0.826175248	0.526735007	0.899355493
17:58:40	0.826597335	0.528879016	0.899532239	**17:58:44**	0.827019423	0.531023026	0.899708986
17:58:48	0.827441511	0.518620157	0.899885733	**17:58:52**	0.827863599	0.506217288	0.900062479
17:58:56	0.828285687	0.494992207	0.900239226	**17:59:00**	0.828707775	0.484944914	0.900415972
17:59:04	0.82963997	0.475201687	0.900592719	**17:59:08**	0.830572166	0.480450773	0.900769465
17:59:12	0.831504361	0.485699858	0.900946212	**17:59:16**	0.832436557	0.488817875	0.901122959
17:59:20	0.833368752	0.489804825	0.901299705	**17:59:24**	0.834300948	0.490791774	0.901476452
17:59:28	0.835233143	0.496370369	0.901653198	**17:59:32**	0.836165339	0.501948965	0.901829945
17:59:36	0.837097534	0.514631237	0.902006691	**17:59:40**	0.837993069	0.534395334	0.902133766
17:59:44	0.838846832	0.55413453	0.902204244	**17:59:48**	0.839727639	0.573210609	0.902274721
17:59:52	0.840722283	0.592354544	0.902345198	**17:59:56**	0.841716927	0.610751745	0.902415676
18:00:00	1.342711571	1.088313118	1.402486153	**18:00:04**	1.341943881	1.079151001	1.40255663
18:00:08	1.341176191	1.08248764	1.402627108	**18:00:12**	0.840408501	0.585824279	0.902697585
18:00:16	0.839640811	0.589160927	0.902768063	**18:00:20**	0.838873121	0.592497567	0.90283854
18:00:24	0.838105431	0.595834206	0.902909017	**18:00:28**	0.837337741	0.588544622	0.902979495
18:00:32	0.836570051	0.581255047	0.903049972	**18:00:36**	0.835802361	0.565879743	0.903120449
18:00:40	0.83503467	0.5478092	0.903190927	**18:00:44**	0.83426698	0.529738656	0.903261404
18:00:48	0.83349929	0.515982953	0.903331881	**18:00:52**	0.8327316	0.502227249	0.903402359
18:00:56	0.83196391	0.492932315	0.903472836	**18:01:00**	0.83119622	0.488098148	0.903543314
18:01:04	0.830506376	0.483310385	0.903613791	**18:01:08**	0.829816532	0.491277224	0.903684268
18:01:12	0.829126688	0.499244063	0.903754746	**18:01:16**	0.828436844	0.50343637	0.903825223
18:01:20	0.827747	0.503854145	0.9038957	**18:01:24**	0.827057156	0.50427192	0.903966178
18:01:28	0.826367312	0.497045335	0.904036655	**18:01:32**	0.825677468	0.48981875	0.904107132
18:01:36	0.824987624	0.4816664	0.90417761	**18:01:40**	0.82429778	0.473205462	0.904248087
18:01:44	0.823607936	0.464744524	0.904318565	**18:01:48**	0.822918092	0.451271115	0.904389042
18:01:52	0.822228248	0.437797706	0.904459519	**18:01:56**	0.821538404	0.428499557	0.904529997
18:02:00	0.82084856	0.420593157	0.904600474	**18:02:04**	0.8221039	0.413846256	0.904670951
18:02:08	0.82335924	0.409553669	0.904741429	**18:02:12**	0.82461458	0.405261081	0.904811906
18:02:16	0.82586992	0.392088656	0.904882384	**18:02:20**	0.82712526	0.370036384	0.904952861
18:02:24	0.8283806	0.347984122	0.905023338	**18:02:28**	0.82963594	0.323968566	0.905093816
18:02:32	0.83089128	0.299953002	0.905164293	**18:02:36**	0.83214662	0.274423423	0.90523477
18:02:40	0.83340196	0.24737983	0.905305248	**18:02:44**	0.8346573	0.220585262	0.905375725
18:02:48	0.83591264	0.194537807	0.905446202	**18:02:52**	0.837167981	0.168490351	0.90551668
18:02:56	0.838423321	0.140377288	0.905587157	**18:03:00**	0.839678661	0.110198615	0.905657635
18:03:04	0.839373236	0.079089595	0.905728112	**18:03:08**	0.839067811	0.070431677	0.905798589

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:03:12	0.838762386	0.061773758	0.905869067	**18:03:16**	0.838449099	0.060059035	0.905939544
18:03:20	0.838134852	0.065291693	0.906010021	**18:03:24**	0.837820605	0.07052435	0.906080499
18:03:28	0.837506358	0.083554752	0.906150976	**18:03:32**	0.83719211	0.104382935	0.906221453
18:03:36	0.836877863	0.131601401	0.906291931	**18:03:40**	0.836517272	0.16518249	0.906299616
18:03:44	0.836144646	0.198756441	0.906290995	**18:03:48**	0.835772019	0.23899219	0.906282373
18:03:52	0.835399393	0.279227921	0.906273752	**18:03:56**	0.835026766	0.319097824	0.90626513
18:04:00	0.83465414	0.358601881	0.906256509	**18:04:04**	0.835720353	0.398963608	0.906247887
18:04:08	0.836786566	0.423150591	0.906239266	**18:04:12**	0.837852779	0.447337565	0.906230644
18:04:16	0.838918992	0.462661085	0.906222023	**18:04:20**	0.839985205	0.469121142	0.906213401
18:04:24	0.841051418	0.475581199	0.90620478	**18:04:28**	0.842117631	0.483271992	0.906196159
18:04:32	0.843183843	0.490962783	0.906187537	**18:04:36**	0.844250056	0.50237269	0.906178916
18:04:40	0.845316269	0.517501709	0.906170294	**18:04:44**	0.846382482	0.532630728	0.906161673
18:04:48	0.847448695	0.539386985	0.906153051	**18:04:52**	0.848514908	0.546143244	0.90614443
18:04:56	0.849581121	0.554543095	0.906135808	**18:05:00**	0.850647334	0.564586537	0.906127187
18:05:04	0.85117274	0.574307617	0.906118565	**18:05:08**	0.851698146	0.592215604	0.906109944
18:05:12	0.852223552	0.610123582	0.906101322	**18:05:16**	0.852748958	0.622838361	0.906092701
18:05:20	0.853274364	0.633822066	0.906084079	**18:05:24**	0.85379977	0.644805772	0.906075458
18:05:28	0.854325175	0.659562008	0.906066836	**18:05:32**	0.854850581	0.674318217	0.906058215
18:05:36	0.855375987	0.686402953	0.906049593	**18:05:40**	0.855901393	0.695816196	0.906040972
18:05:44	0.856426799	0.705229423	0.906032351	**18:05:48**	0.856952205	0.711302174	0.906023729
18:05:52	0.857477611	0.717374926	0.906015108	**18:05:56**	0.858003017	0.722556102	0.906006486
18:06:00	0.858528423	0.727440076	0.905997865	**18:06:04**	0.858947849	0.732260876	0.905989243
18:06:08	0.859367276	0.740094819	0.905980622	**18:06:12**	0.859786702	0.747928779	0.905972
18:06:16	0.860206128	0.759333072	0.905963379	**18:06:20**	0.860625555	0.774307732	0.905954757
18:06:24	0.861044981	0.789282374	0.905946136	**18:06:28**	0.861464408	0.806430564	0.905937514
18:06:32	0.861883834	0.823578753	0.905928893	**18:06:36**	0.861986735	0.833064549	0.905491407
18:06:40	0.861694393	0.83484096	0.904524492	**18:06:44**	0.861398786	0.83661546	0.903557578
18:06:48	0.861103179	0.826758556	0.902590663	**18:06:52**	0.860807572	0.816901617	0.901623749
18:06:56	0.860511965	0.802109128	0.900656835	**18:07:00**	0.860216358	0.782381072	0.89968992
18:07:04	0.860159086	0.762795084	0.898723006	**18:07:08**	0.860101815	0.750506925	0.897756091
18:07:12	0.860044543	0.738218783	0.896789177	**18:07:16**	0.859987272	0.727624542	0.895822263
18:07:20	0.85993	0.7187242	0.894855348	**18:07:24**	0.859872729	0.709823858	0.893888434
18:07:28	0.859815457	0.698208519	0.892921519	**18:07:32**	0.859758185	0.686593162	0.891954605
18:07:36	0.859700914	0.669827996	0.890987691	**18:07:40**	0.859643642	0.647912993	0.890020776
18:07:44	0.859586371	0.625998	0.889053862	**18:07:48**	0.859529099	0.602746656	0.888086947
18:07:52	0.859471828	0.579495317	0.887120033	**18:07:56**	0.859414556	0.554432245	0.886153118
18:08:00	0.859357284	0.527557441	0.885186204	**18:08:04**	0.859103421	0.500565453	0.88421929
18:08:08	0.858849559	0.472123633	0.883252375	**18:08:12**	0.858595696	0.443681816	0.882285461
18:08:16	0.858341833	0.422793995	0.881318546	**18:08:20**	0.85808797	0.404424178	0.880351632
18:08:24	0.857834107	0.386054362	0.879384718	**18:08:28**	0.857580244	0.376121455	0.878417803
18:08:32	0.857326381	0.36618854	0.877450889	**18:08:36**	0.857072518	0.355815327	0.876483974
18:08:40	0.856818655	0.345001824	0.87551706	**18:08:44**	0.856564792	0.334188321	0.874550146
18:08:48	0.856310929	0.304312582	0.873583231	**18:08:52**	0.855260273	0.27396187	0.87153673
18:08:56	0.853437646	0.260465222	0.868444273	**18:09:00**	0.851615018	0.252739952	0.865351815
18:09:04	0.849703491	0.244961709	0.862259358	**18:09:08**	0.847791963	0.216326444	0.859166901
18:09:12	0.845880436	0.187691179	0.856074443	**18:09:16**	0.843968909	0.166699479	0.852981986
18:09:20	0.842057381	0.153351362	0.849889529	**18:09:24**	0.840145854	0.140003245	0.846797071
18:09:28	0.838234327	0.126655128	0.843704614	**18:09:32**	0.83664045	0.113496358	0.841042546
18:09:36	0.837839721	0.109669181	0.842164957	**18:09:40**	0.839038992	0.113508611	0.843287368
18:09:44	0.840238264	0.11734804	0.844409779	**18:09:48**	0.841437535	0.132840048	0.845532189
18:09:52	0.842636806	0.148332092	0.8466546	**18:09:56**	0.843836077	0.157594339	0.847777011
18:10:00	0.845035348	0.164780035	0.848899422	**18:10:04**	0.846227984	0.171961774	0.850021833
18:10:08	0.847420619	0.186792142	0.851144243	**18:10:12**	0.848613254	0.20162251	0.852266654
18:10:16	0.84980589	0.217551447	0.853389065	**18:10:20**	0.850998525	0.234578972	0.854511476
18:10:24	0.852191161	0.251606513	0.855633887	**18:10:28**	0.853383796	0.266314589	0.856756297
18:10:32	0.854583984	0.281027185	0.857878708	**18:10:36**	0.855785408	0.298048419	0.859001119
18:10:40	0.856986833	0.317377572	0.86012353	**18:10:44**	0.858188258	0.336706725	0.86124594

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:10:48	0.859389682	0.363363071	0.862368351	**18:10:52**	0.860591107	0.390019427	0.863490762
18:10:56	0.861792531	0.416213127	0.864613173	**18:11:00**	0.862993956	0.442252608	0.865735584
18:11:04	0.864070112	0.468217423	0.866857994	**18:11:08**	0.865146268	0.496844869	0.867980405
18:11:12	0.866222425	0.525472316	0.869102816	**18:11:16**	0.867298581	0.538349917	0.870225227
18:11:20	0.868374737	0.545977571	0.871347638	**18:11:24**	0.869450894	0.553605225	0.872470048
18:11:28	0.87052705	0.567547168	0.873592459	**18:11:32**	0.871603206	0.581489112	0.87471487
18:11:36	0.872679363	0.599607422	0.875837281	**18:11:40**	0.873755519	0.621902094	0.876959692
18:11:44	0.874831675	0.644196765	0.878082102	**18:11:48**	0.875907832	0.671118884	0.879204513
18:11:52	0.876983988	0.698041003	0.880326924	**18:11:56**	0.878060144	0.721498312	0.881449335
18:12:00	0.8791363	0.741490812	0.882571745	**18:12:04**	0.880126493	0.761432069	0.883694156
18:12:08	0.881116686	0.777702696	0.884816567	**18:12:12**	0.882106879	0.793973322	0.885938978
18:12:16	0.883097071	0.805646763	0.887061389	**18:12:20**	0.884087264	0.812722983	0.888183799
18:12:24	0.885077457	0.819799221	0.88930621	**18:12:28**	0.88606765	0.831460813	0.890428621
18:12:32	0.887057842	0.843122369	0.891551032	**18:12:36**	0.888048035	0.854783961	0.892673443
18:12:40	0.889038228	0.866445517	0.893795853	**18:12:44**	0.890028421	0.876595013	0.894918264
18:12:48	0.891018613	0.882208257	0.896040675	**18:12:52**	0.892008806	0.887821465	0.897163086
18:12:56	0.892998999	0.89272142	0.898285497	**18:13:00**	0.893989192	0.896908123	0.899407907
18:13:04	0.895214418	0.901234925	0.900530318	**18:13:08**	0.896439644	0.905561728	0.901652729
18:13:12	0.89766487	0.90988853	0.90277514	**18:13:16**	0.899677914	0.921092205	0.904964978
18:13:20	0.901759923	0.938744255	0.907248257	**18:13:24**	0.903841932	0.95639634	0.909531536
18:13:28	0.905923941	0.972706338	0.911814815	**18:13:32**	0.90800595	0.9890163	0.914098094
18:13:36	0.910087959	0.997737039	0.916381373	**18:13:40**	0.912169968	0.998868519	0.918664652
18:13:44	0.914251977	1	0.920947931	**18:13:48**	0.916333986	0.988301351	0.92323121
18:13:52	0.918415995	0.976602701	0.925514489	**18:13:56**	0.920498005	0.961948965	0.927797768
18:14:00	0.922580014	0.944340106	0.930081047	**18:14:04**	0.924033093	0.926356351	0.932364326
18:14:08	0.925486172	0.910052143	0.934647605	**18:14:12**	0.926939251	0.893747899	0.936930884
18:14:16	0.92839233	0.886557053	0.939214163	**18:14:20**	0.929848623	0.888481523	0.941497442
18:14:24	0.93132264	0.890416522	0.943780721	**18:14:28**	0.932684715	0.880298522	0.945912327
18:14:32	0.933618445	0.869925194	0.947463563	**18:14:36**	0.934552175	0.864804638	0.949014799
18:14:40	0.935485904	0.864936822	0.950566035	**18:14:44**	0.936419634	0.865069005	0.952117271
18:14:48	0.937353364	0.866664538	0.953668507	**18:14:52**	0.938287094	0.868260106	0.955219743
18:14:56	0.939220824	0.868278595	0.956770979	**18:15:00**	0.440154554	0.366720076	0.458322214
18:15:04	0.441292139	0.365283036	0.45987345	**18:15:08**	0.442429724	0.355426274	0.461424686
18:15:12	0.943567309	0.845569529	0.962975922	**18:15:16**	0.944704894	0.835712766	0.964527158
18:15:20	0.945842479	0.825856022	0.966078394	**18:15:24**	0.946980064	0.815999259	0.96762963
18:15:28	0.947204536	0.803242853	0.967943674	**18:15:32**	0.946163316	0.789731988	0.966542814
18:15:36	0.945122096	0.776503244	0.965141955	**18:15:40**	0.944080877	0.763556639	0.963741095
18:15:44	0.943039657	0.750610034	0.962340235	**18:15:48**	0.941998437	0.722608288	0.960939376
18:15:52	0.940957218	0.69460656	0.959538516	**18:15:56**	0.939915998	0.668036383	0.958137656
18:16:00	0.938874779	0.641943392	0.956736797	**18:16:04**	0.937383865	0.615582341	0.955335937
18:16:08	0.935892952	0.591285913	0.953935078	**18:16:12**	0.934402038	0.566989484	0.952534218
18:16:16	0.932911125	0.546759722	0.951133358	**18:16:20**	0.931420212	0.530596627	0.949732499
18:16:24	0.929929298	0.514433532	0.948331639	**18:16:28**	0.928438385	0.51295999	0.946930779
18:16:32	0.926947471	0.511486452	0.94552992	**18:16:36**	0.925456558	0.505392022	0.94412906
18:16:40	0.923965645	0.4946767	0.9427282	**18:16:44**	0.922474731	0.483961378	0.941327341
18:16:48	0.920983818	0.467336912	0.939926481	**18:16:52**	0.919492905	0.450712459	0.938525622
18:16:56	0.918001991	0.436604501	0.937124762	**18:17:00**	0.916511078	0.425013055	0.935723902
18:17:04	0.916183586	0.414115106	0.934323043	**18:17:08**	0.915856094	0.394027211	0.932922183
18:17:12	0.915528603	0.373939315	0.931521323	**18:17:16**	0.915201111	0.36172351	0.930120464
18:17:20	0.914873619	0.357379813	0.928719604	**18:17:24**	0.914546127	0.353036116	0.927318744
18:17:28	0.914218636	0.34007144	0.925917885	**18:17:32**	0.913891144	0.327106763	0.924517025
18:17:36	0.913563652	0.309137842	0.923116166	**18:17:40**	0.913236161	0.28616471	0.921715306
18:17:44	0.912908669	0.26319156	0.920314446	**18:17:48**	0.91257742	0.24341936	0.918913587
18:17:52	0.912245493	0.223646756	0.917512727	**18:17:56**	0.911913567	0.205734826	0.916111867
18:18:00	0.91158164	0.189683536	0.914711008	**18:18:04**	0.909743757	0.172734569	0.913310148
18:18:08	0.907905874	0.16247657	0.911909289	**18:18:12**	0.90567326	0.151983314	0.909973603
18:18:16	0.902758406	0.135895524	0.907113539	**18:18:20**	0.899843551	0.114619907	0.904253475

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:18:24	0.896928697	0.093344291	0.901393412	**18:18:28**	0.894013843	0.104444809	0.898533348
18:18:32	0.891098989	0.115545327	0.895673284	**18:18:36**	0.888184134	0.112628216	0.89281322
18:18:40	0.88526928	0.095693475	0.889953157	**18:18:44**	0.882354426	0.078758699	0.887093093
18:18:48	0.879439572	0.071935734	0.884233029	**18:18:52**	0.876524718	0.065112769	0.881372965
18:18:56	0.873609863	0.059978587	0.878512902	**18:19:00**	0.870695009	0.055407334	0.875652838
18:19:04	0.869030265	0.051581216	0.873331762	**18:19:08**	0.868764364	0.06041734	0.872905998
18:19:12	0.868498462	0.0692535	0.872480234	**18:19:16**	0.86823256	0.082637245	0.872054471
18:19:20	0.867966658	0.100568649	0.871628707	**18:19:24**	0.867700756	0.118500052	0.871202943
18:19:28	0.867434854	0.144061217	0.870777179	**18:19:32**	0.867168952	0.169622346	0.870351415
18:19:36	0.866903051	0.189205334	0.869925652	**18:19:40**	0.866637149	0.202810143	0.869499888
18:19:44	0.866371247	0.216414953	0.869074124	**18:19:48**	0.866105345	0.232239516	0.86864836
18:19:52	0.865839443	0.248064079	0.868222597	**18:19:56**	0.865573541	0.267565011	0.867796833
18:20:00	0.86530764	0.290742313	0.867371069	**18:20:04**	0.862300033	0.312285309	0.866945305
18:20:08	0.859292427	0.337043628	0.866519541	**18:20:12**	0.856284821	0.361801929	0.866093778
18:20:16	0.853277214	0.380271357	0.865668014	**18:20:20**	0.850269608	0.392451903	0.86524225
18:20:24	0.847262002	0.404632439	0.864816486	**18:20:28**	0.844254395	0.404899265	0.864390722
18:20:32	0.841246789	0.40516609	0.863964959	**18:20:36**	0.838239183	0.404373624	0.863539195
18:20:40	0.835231577	0.402521849	0.863113431	**18:20:44**	0.83222397	0.400670074	0.862687667
18:20:48	0.829216364	0.406083795	0.862261904	**18:20:52**	0.826208758	0.411497508	0.86183614
18:20:56	0.823201151	0.416911225	0.861410376	**18:21:00**	0.820193545	0.422324943	0.860984612
18:21:04	0.821306313	0.430194751	0.860558848	**18:21:08**	0.82241908	0.442932607	0.860133085
18:21:12	0.823531867	0.455670477	0.859707321	**18:21:16**	0.824644672	0.466412151	0.859281557
18:21:20	0.825757477	0.47515762	0.858855793	**18:21:24**	0.826870281	0.483903091	0.858430029
18:21:28	0.827983086	0.482908877	0.858004266	**18:21:32**	0.82909589	0.481914665	0.857578502
18:21:36	0.830208695	0.480920452	0.857152738	**18:21:40**	0.8313215	0.47992624	0.856726974
18:21:44	0.832434304	0.478932026	0.856301211	**18:21:48**	0.833547109	0.472921166	0.855875447
18:21:52	0.834659913	0.466910304	0.855449683	**18:21:56**	0.835772718	0.461930108	0.855023919
18:22:00	0.836885523	0.457980576	0.854598155	**18:22:04**	0.835763815	0.452699085	0.852649423
18:22:08	0.834493576	0.45126981	0.850499442	**18:22:12**	0.833223336	0.449840534	0.84834946
18:22:16	0.831953096	0.448035469	0.846199479	**18:22:20**	0.830682857	0.445854622	0.844049497
18:22:24	0.829412617	0.443673775	0.841899516	**18:22:28**	0.828142377	0.444462281	0.839749535
18:22:32	0.826872137	0.445250786	0.837599553	**18:22:36**	0.825601898	0.446039292	0.835449572
18:22:40	0.824331658	0.446827797	0.83329959	**18:22:44**	0.823061418	0.447616302	0.831149609
18:22:48	0.821791178	0.455576003	0.828999627	**18:22:52**	0.820520939	0.463535704	0.826849646
18:22:56	0.819250699	0.463793429	0.824699665	**18:23:00**	0.818045393	0.456387884	0.822637663
18:23:04	0.817753997	0.449527105	0.821357158	**18:23:08**	0.817462601	0.451739596	0.820076653
18:23:12	0.817171205	0.453952088	0.818796148	**18:23:16**	0.816879809	0.454871018	0.817515643
18:23:20	0.816588413	0.454496387	0.816235138	**18:23:24**	0.816297017	0.454121756	0.814954633
18:23:28	0.816005621	0.454978004	0.813674128	**18:23:32**	0.815714225	0.455834249	0.812393623
18:23:36	0.815422829	0.454329925	0.811113118	**18:23:40**	0.815131433	0.450465032	0.809832613
18:23:44	0.814840037	0.446600139	0.808552108	**18:23:48**	0.814548641	0.431908035	0.807271603
18:23:52	0.814257245	0.417215931	0.805991098	**18:23:56**	0.813965849	0.407084243	0.804710593
18:24:00	0.813674453	0.401512982	0.803430088	**18:24:04**	0.8131634	0.395810777	0.802149583
18:24:08	0.812652348	0.39920419	0.800869078	**18:24:12**	0.812141295	0.402597602	0.799588573
18:24:16	0.811630242	0.400928908	0.798308068	**18:24:20**	0.81111919	0.394198119	0.797027563
18:24:24	0.810608137	0.38746732	0.795747058	**18:24:28**	0.810097085	0.377949258	0.794466553
18:24:32	0.809586032	0.368431196	0.793186049	**18:24:36**	0.809073557	0.359400068	0.791905544
18:24:40	0.808556091	0.350853758	0.790625039	**18:24:44**	0.808038626	0.34230744	0.789344534
18:24:48	0.80752116	0.346345325	0.788064029	**18:24:52**	0.807003695	0.350383211	0.786783524
18:24:56	0.80648623	0.355377983	0.785503019	**18:25:00**	0.805968764	0.36132966	0.784222514
18:25:04	0.805519627	0.367322067	0.782942009	**18:25:08**	0.80507049	0.378739431	0.781661504
18:25:12	0.804621352	0.390156787	0.780380999	**18:25:16**	0.804172215	0.404274946	0.779100494
18:25:20	0.802856486	0.420577342	0.776645831	**18:25:24**	0.800999246	0.436556951	0.773457466
18:25:28	0.799142006	0.432478626	0.770269101	**18:25:32**	0.797284766	0.428400305	0.767080736
18:25:36	0.795427526	0.43063222	0.763892371	**18:25:40**	0.793570286	0.439174373	0.760704007
18:25:44	0.791713046	0.447716527	0.757515642	**18:25:48**	0.791993748	0.463373296	0.757224008
18:25:52	0.793104392	0.479524779	0.758056873	**18:25:56**	0.794215035	0.494611124	0.758889738

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:26:00	0.795325678	0.508632333	0.759722604	**18:26:04**	0.796001616	0.522394418	0.760555469
18:26:08	0.796677553	0.513956503	0.761388334	**18:26:12**	0.797353491	0.505518589	0.762221199
18:26:16	0.798029429	0.494670242	0.763054064	**18:26:20**	0.798705367	0.481411464	0.76388693
18:26:24	0.799381304	0.468152686	0.764719795	**18:26:28**	0.800057242	0.475217628	0.76555266
18:26:32	0.80073318	0.482282571	0.766385525	**18:26:36**	0.801409118	0.491374668	0.76721839
18:26:40	0.802085055	0.502493918	0.768051256	**18:26:44**	0.802760993	0.513613169	0.768884121
18:26:48	0.803436931	0.519894871	0.769716986	**18:26:52**	0.804112868	0.526176576	0.770549851
18:26:56	0.804788806	0.527003695	0.771382717	**18:27:00**	0.805464744	0.526012624	0.772215582
18:27:04	0.80674614	0.525382452	0.773048447	**18:27:08**	0.808027535	0.526630214	0.773881312
18:27:12	0.809308931	0.527877976	0.774714177	**18:27:16**	0.810590327	0.527268345	0.775547043
18:27:20	0.811871723	0.526039578	0.776379908	**18:27:24**	0.813153119	0.524810812	0.777212773
18:27:28	0.814434515	0.537808325	0.778045638	**18:27:32**	0.81571591	0.550805839	0.778878503
18:27:36	0.81705921	0.554048775	0.779711369	**18:27:40**	0.818522371	0.547571689	0.780544234
18:27:44	0.819985532	0.541094604	0.781377099	**18:27:48**	0.821448693	0.530567748	0.782209964
18:27:52	0.822911854	0.520040897	0.783042829	**18:27:56**	0.824375015	0.500783657	0.783875695
18:28:00	0.825838176	0.472796034	0.78470856	**18:28:04**	0.826770468	0.447335861	0.785541425
18:28:08	0.82770276	0.430407375	0.78637429	**18:28:12**	0.828635052	0.413478893	0.787207156
18:28:16	0.829567344	0.405102703	0.788040021	**18:28:20**	0.830499636	0.405278805	0.788872886
18:28:24	0.831431928	0.405454916	0.789705751	**18:28:28**	0.83236422	0.401104608	0.790538616
18:28:32	0.833296512	0.396754299	0.791371482	**18:28:36**	0.834228805	0.399748185	0.792204347
18:28:40	0.835161097	0.410086274	0.793037212	**18:28:44**	0.836093389	0.420424363	0.793870077
18:28:48	0.837025681	0.430762448	0.794702942	**18:28:52**	0.837957973	0.441100537	0.795535808
18:28:56	0.838890265	0.453818426	0.796368673	**18:29:00**	0.839822557	0.467329579	0.797201538
18:29:04	0.841083796	0.481036813	0.798034403	**18:29:08**	0.842345035	0.491042868	0.798867269
18:29:12	0.843606275	0.501048923	0.799700134	**18:29:16**	0.844867514	0.513165944	0.800532999
18:29:20	0.846128753	0.527393934	0.801365864	**18:29:24**	0.847389993	0.541621922	0.802198729
18:29:28	0.848651232	0.546606614	0.803031595	**18:29:32**	0.849912471	0.551591313	0.80386446
18:29:36	0.851173711	0.555513482	0.804697325	**18:29:40**	0.852736244	0.558552733	0.80553019
18:29:44	0.855658144	0.562402281	0.806363055	**18:29:48**	0.858580045	0.56254859	0.807195921
18:29:52	0.861501946	0.5626949	0.808028786	**18:29:56**	0.864423846	0.562841209	0.808861651
18:30:00	1.367345747	1.062987519	1.309694516	**18:30:04**	1.370704108	1.063393996	1.310558398
18:30:08	1.374062741	1.066332815	1.311422646	**18:30:12**	0.877421374	0.569271635	0.812286895
18:30:16	0.880780006	0.575947881	0.813151144	**18:30:20**	0.884138639	0.586361563	0.814015393
18:30:24	0.887497272	0.596775241	0.814879642	**18:30:28**	0.889389415	0.598348661	0.815743891
18:30:32	0.890237055	0.599299469	0.816608139	**18:30:36**	0.891084695	0.596556272	0.817472388
18:30:40	0.891932335	0.590119078	0.818336637	**18:30:44**	0.892779975	0.582546609	0.819200886
18:30:48	0.893627615	0.571568321	0.820065135	**18:30:52**	0.894475255	0.560590039	0.820929384
18:30:56	0.895322895	0.551307686	0.821793632	**18:31:00**	0.896170535	0.543721266	0.822657881
18:31:04	0.896802011	0.536005995	0.82352213	**18:31:08**	0.897433486	0.521690656	0.824386379
18:31:12	0.898064961	0.507375314	0.825250628	**18:31:16**	0.898696437	0.49140157	0.826114877
18:31:20	0.899327912	0.473769415	0.826979125	**18:31:24**	0.899959387	0.456137265	0.827843374
18:31:28	0.900590863	0.442392436	0.828707623	**18:31:32**	0.901222338	0.428647607	0.829571872
18:31:36	0.901853813	0.416185753	0.830436121	**18:31:40**	0.902485289	0.405006875	0.83130037
18:31:44	0.903116764	0.393828006	0.832164618	**18:31:48**	0.903748239	0.39165736	0.833028867
18:31:52	0.904379715	0.389486723	0.833893116	**18:31:56**	0.90501119	0.387316086	0.834757365
18:32:00	0.905642665	0.385145431	0.835621614	**18:32:04**	0.904526704	0.381933175	0.836485863
18:32:08	0.903410743	0.378720918	0.837350112	**18:32:12**	0.902294782	0.375508661	0.83821436
18:32:16	0.901178821	0.375905481	0.839078609	**18:32:20**	0.90006286	0.379911396	0.839942858
18:32:24	0.899978693	0.384532347	0.840411696	**18:32:28**	0.899950364	0.396380292	0.840702609
18:32:32	0.899922034	0.408228228	0.840993521	**18:32:36**	0.899893705	0.415836378	0.841284433
18:32:40	0.899865376	0.419204724	0.841575345	**18:32:44**	0.899837046	0.422573079	0.841866257
18:32:48	0.899808717	0.432798174	0.842157169	**18:32:52**	0.899780387	0.443023269	0.842448081
18:32:56	0.899752058	0.448484306	0.842738993	**18:33:00**	0.899723729	0.449181267	0.843029905
18:33:04	0.901063385	0.453087279	0.843320817	**18:33:08**	0.902403042	0.46417414	0.843611729
18:33:12	0.903742699	0.475261005	0.843902641	**18:33:16**	0.905082355	0.484777496	0.844193553
18:33:20	0.906422012	0.49272362	0.844484465	**18:33:24**	0.907761669	0.500669743	0.844775377
18:33:28	0.909101325	0.496660768	0.84506629	**18:33:32**	0.910440982	0.492651793	0.845357202

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:33:36	0.911780638	0.49195883	0.845648114	**18:33:40**	0.913120295	0.494581871	0.845939026
18:33:44	0.914459952	0.497204913	0.846229938	**18:33:48**	0.915799608	0.494548	0.84652085
18:33:52	0.917139265	0.491891088	0.846811762	**18:33:56**	0.918478922	0.495672045	0.847102674
18:34:00	0.919626093	0.505776136	0.847393586	**18:34:04**	0.919618315	0.51519178	0.847684498
18:34:08	0.919610537	0.513569238	0.84797541	**18:34:12**	0.919602759	0.511946697	0.848266322
18:34:16	0.919594981	0.516391817	0.848557234	**18:34:20**	0.919587203	0.526904597	0.848848146
18:34:24	0.919579425	0.537417378	0.849139058	**18:34:28**	0.919571646	0.555930201	0.84942997
18:34:32	0.919563868	0.574443023	0.849720883	**18:34:36**	0.91955609	0.590022858	0.850011795
18:34:40	0.919548312	0.602669701	0.850302707	**18:34:44**	0.919540534	0.615316544	0.850593619
18:34:48	0.919532756	0.61684982	0.850884531	**18:34:52**	0.919524978	0.618383096	0.851175443
18:34:56	0.919517199	0.618346683	0.851466355	**18:35:00**	0.919509421	0.616740576	0.851757267
18:35:04	0.919435583	0.615251044	0.852048179	**18:35:08**	0.919361744	0.614229367	0.852339091
18:35:12	0.919287905	0.613207686	0.852630003	**18:35:16**	0.919214067	0.61218601	0.852920915
18:35:20	0.919140228	0.619601985	0.853211827	**18:35:24**	0.919066389	0.627017955	0.853502739
18:35:28	0.918992551	0.628604563	0.853793651	**18:35:32**	0.918918712	0.63019118	0.854084564
18:35:36	0.918844874	0.62856355	0.854375476	**18:35:40**	0.918771035	0.625864494	0.854666388
18:35:44	0.918697196	0.62219124	0.8549573	**18:35:48**	0.918295657	0.6154	0.854804205
18:35:52	0.917868251	0.60859335	0.854616064	**18:35:56**	0.917440845	0.598807058	0.854427922
18:36:00	0.91701344	0.58802755	0.854239781	**18:36:04**	0.918198941	0.581318339	0.854051639
18:36:08	0.919384443	0.583935721	0.853863498	**18:36:12**	0.920569945	0.586553102	0.853675357
18:36:16	0.921755447	0.584928684	0.853487215	**18:36:20**	0.922940949	0.581890333	0.853299074
18:36:24	0.924126451	0.579715305	0.853110932	**18:36:28**	0.925311952	0.580130241	0.852922791
18:36:32	0.926497454	0.580545179	0.852734649	**18:36:36**	0.928106563	0.584300004	0.852546508
18:36:40	0.929944954	0.58922063	0.852358366	**18:36:44**	0.931783346	0.596323681	0.852170225
18:36:48	0.933621738	0.60997402	0.851982084	**18:36:52**	0.93546013	0.623624358	0.851793942
18:36:56	0.937298522	0.635023989	0.851605801	**18:37:00**	0.939136914	0.645673381	0.851417659
18:37:04	0.939331681	0.652835226	0.851229518	**18:37:08**	0.939526448	0.652473639	0.851041376
18:37:12	0.939721215	0.652112053	0.850853235	**18:37:16**	0.939915982	0.660947066	0.850665093
18:37:20	0.940110748	0.67284761	0.850476952	**18:37:24**	0.940305515	0.678995259	0.850288811
18:37:28	0.940500282	0.667884252	0.850100669	**18:37:32**	0.940695049	0.656773244	0.849912528
18:37:36	0.940889816	0.644552022	0.849724386	**18:37:40**	0.941084583	0.631960726	0.849536245
18:37:44	0.94127935	0.61308804	0.849348103	**18:37:48**	0.941474117	0.57537119	0.849159962
18:37:52	0.941668883	0.537654338	0.84897182	**18:37:56**	0.94186365	0.510985175	0.848783679
18:38:00	0.942058417	0.484316018	0.848595538	**18:38:04**	0.942143713	0.458042833	0.848407396
18:38:08	0.942229008	0.433153348	0.848219255	**18:38:12**	0.942314304	0.408263864	0.848031113
18:38:16	0.942399599	0.404554364	0.847842972	**18:38:20**	0.942484894	0.407904841	0.84765483
18:38:24	0.94257019	0.411255318	0.847466689	**18:38:28**	0.942135085	0.414295601	0.846573449
18:38:32	0.941253045	0.417069464	0.84507465	**18:38:36**	0.940371004	0.415071897	0.84357585
18:38:40	0.939488964	0.411483847	0.842077051	**18:38:44**	0.938606924	0.406574601	0.840578252
18:38:48	0.937724884	0.3977018	0.839079453	**18:38:52**	0.936842844	0.388829	0.837580653
18:38:56	0.935960803	0.387175367	0.836081854	**18:39:00**	0.935078763	0.387928157	0.834583055
18:39:04	0.934392926	0.386276646	0.833084256	**18:39:08**	0.933707089	0.377061404	0.831585457
18:39:12	0.933021251	0.367846162	0.830086657	**18:39:16**	0.932332962	0.363280862	0.828587858
18:39:20	0.931590416	0.360233705	0.827089059	**18:39:24**	0.93084787	0.361736711	0.82559026
18:39:28	0.930105324	0.367789843	0.824091461	**18:39:32**	0.929362777	0.373842993	0.822592661
18:39:36	0.928620231	0.383213043	0.821093862	**18:39:40**	0.927877685	0.393688734	0.819595063
18:39:44	0.927135139	0.40365082	0.818096264	**18:39:48**	0.926392593	0.413099328	0.816597465
18:39:52	0.925650047	0.422547836	0.815098665	**18:39:56**	0.9249075	0.43964667	0.813599866
18:40:00	0.924393417	0.4594318	0.812410615	**18:40:04**	0.925027741	0.468543047	0.811268957
18:40:08	0.925662064	0.466295881	0.810127299	**18:40:12**	0.926296387	0.464048705	0.808985641
18:40:16	0.926930711	0.45655397	0.807843983	**18:40:20**	0.927565034	0.447310034	0.806702326
18:40:24	0.928199357	0.446946557	0.805560668	**18:40:28**	0.92883368	0.45546353	0.80441901
18:40:32	0.929468004	0.463980503	0.803277352	**18:40:36**	0.930102327	0.481065445	0.802135694
18:40:40	0.93073665	0.501006375	0.800994036	**18:40:44**	0.931370974	0.52144496	0.799852378
18:40:48	0.932005297	0.543376504	0.79871072	**18:40:52**	0.93263962	0.565308047	0.797569062
18:40:56	0.933273943	0.581484021	0.796427404	**18:41:00**	0.933908267	0.595741474	0.795285746
18:41:04	0.933606387	0.608724782	0.794144088	**18:41:08**	0.933304507	0.619559826	0.793002431

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:41:12	0.933002627	0.63039487	0.791860773	**18:41:16**	0.932700747	0.638951201	0.790719115
18:41:20	0.932398867	0.646747971	0.789577457	**18:41:24**	0.932096987	0.653093781	0.788435799
18:41:28	0.931795107	0.655086761	0.787294141	**18:41:32**	0.931493227	0.65707974	0.786152483
18:41:36	0.931191347	0.671385834	0.785010825	**18:41:40**	0.930957459	0.689836831	0.78396129
18:41:44	0.930930176	0.702638521	0.783191688	**18:41:48**	0.930902894	0.698122814	0.782422087
18:41:52	0.930875611	0.693607108	0.781652485	**18:41:56**	0.930848329	0.686546927	0.780882884
18:42:00	0.930821046	0.67863858	0.780113282	**18:42:04**	0.929746292	0.668473488	0.77934368
18:42:08	0.928671537	0.653411298	0.778574079	**18:42:12**	0.927596782	0.638349099	0.777804477
18:42:16	0.926522027	0.627740627	0.777034876	**18:42:20**	0.925447272	0.618616741	0.776265274
18:42:24	0.924372517	0.61004064	0.775495673	**18:42:28**	0.923297762	0.603107897	0.774726071
18:42:32	0.922223007	0.596175155	0.773956469	**18:42:36**	0.921148252	0.587261461	0.773186868
18:42:40	0.920073497	0.577687447	0.772417266	**18:42:44**	0.918998742	0.567069135	0.771647665
18:42:48	0.918042595	0.553388623	0.770878063	**18:42:52**	0.917146048	0.539743639	0.770108462
18:42:56	0.9162495	0.530778812	0.76933886	**18:43:00**	0.915352953	0.523374038	0.768569258
18:43:04	0.915362488	0.516339497	0.767799657	**18:43:08**	0.915372023	0.508795355	0.767030055
18:43:12	0.915381558	0.501251209	0.766260454	**18:43:16**	0.915391092	0.49295324	0.765490852
18:43:20	0.915400627	0.484403994	0.764721251	**18:43:24**	0.915410162	0.476295592	0.763951649
18:43:28	0.915419697	0.469509732	0.763182048	**18:43:32**	0.915429232	0.462723863	0.762412446
18:43:36	0.915438766	0.454281507	0.761642844	**18:43:40**	0.915448301	0.445286997	0.760873243
18:43:44	0.916045323	0.437399802	0.760899636	**18:43:48**	0.916900159	0.431937672	0.761275346
18:43:52	0.917754995	0.42647555	0.761651056	**18:43:56**	0.918609831	0.436084212	0.762026766
18:44:00	0.919464667	0.445692883	0.762402475	**18:44:04**	0.920156683	0.456928989	0.762778185
18:44:08	0.920848698	0.473338622	0.763153895	**18:44:12**	0.921540714	0.489748249	0.763529605
18:44:16	0.92223273	0.501890538	0.763905315	**18:44:20**	0.922924746	0.512610376	0.764281025
18:44:24	0.923616761	0.521302983	0.764656735	**18:44:28**	0.924308777	0.5239139	0.765032445
18:44:32	0.925000793	0.526524818	0.765408154	**18:44:36**	0.925692809	0.532598333	0.765783864
18:44:40	0.926384824	0.539826049	0.766159574	**18:44:44**	0.92707684	0.546525441	0.766535284
18:44:48	0.927705375	0.55160202	0.766910994	**18:44:52**	0.92808094	0.556527807	0.767286704
18:44:56	0.928456505	0.567491643	0.767662414	**18:45:00**	0.428832071	0.080468162	0.268038124
18:45:04	0.429496939	0.091752737	0.268413833	**18:45:08**	0.430161808	0.097444135	0.268789543
18:45:12	0.930826677	0.603135534	0.769165253	**18:45:16**	0.931491546	0.609787696	0.769540963
18:45:20	0.932156414	0.616760107	0.769916673	**18:45:24**	0.932821283	0.622706598	0.770292383
18:45:28	0.933486152	0.625575336	0.770668093	**18:45:32**	0.934151021	0.628444074	0.771043803
18:45:36	0.934815889	0.63238501	0.771419513	**18:45:40**	0.935480758	0.637398134	0.771795222
18:45:44	0.936145627	0.642411258	0.772170932	**18:45:48**	0.936810496	0.641882515	0.772546642
18:45:52	0.937475364	0.641353781	0.772922352	**18:45:56**	0.938140233	0.64502511	0.773298062
18:46:00	0.938805102	0.652896513	0.773673772	**18:46:04**	0.940104014	0.661145859	0.774049482
18:46:08	0.941402926	0.670863795	0.774425192	**18:46:12**	0.942701838	0.680581732	0.774800901
18:46:16	0.94400075	0.685133248	0.775176611	**18:46:20**	0.945299662	0.684518355	0.775552321
18:46:24	0.946598574	0.683903461	0.775928031	**18:46:28**	0.947897487	0.668047722	0.776303741
18:46:32	0.949196399	0.652191984	0.776679451	**18:46:36**	0.950495311	0.635424095	0.777055161
18:46:40	0.951794223	0.617744059	0.777430871	**18:46:44**	0.953093135	0.600064021	0.777806581
18:46:48	0.954392047	0.579764672	0.77818229	**18:46:52**	0.955690959	0.559465323	0.778558
18:46:56	0.956989871	0.545332361	0.77893371	**18:47:00**	0.958288783	0.537365785	0.77930942
18:47:04	0.958779286	0.528917328	0.77968513	**18:47:08**	0.959269788	0.53032897	0.78006084
18:47:12	0.95976029	0.531740611	0.78043655	**18:47:16**	0.960250793	0.531436062	0.78081226
18:47:20	0.960741295	0.529415315	0.781187969	**18:47:24**	0.961171595	0.527358685	0.78148211
18:47:28	0.960987486	0.52117928	0.780943779	**18:47:32**	0.960803378	0.514999874	0.780405449
18:47:36	0.960619269	0.514531994	0.779867119	**18:47:40**	0.960435161	0.519775638	0.779328788
18:47:44	0.960251053	0.525019283	0.778790458	**18:47:48**	0.960066944	0.530262927	0.778252127
18:47:52	0.959882836	0.535506574	0.777713797	**18:47:56**	0.959698728	0.545380293	0.777175467
18:48:00	0.959514619	0.559884089	0.776637136	**18:48:04**	0.959417748	0.574439885	0.776098806
18:48:08	0.959320877	0.576109411	0.775560476	**18:48:12**	0.959224006	0.577778936	0.775022145
18:48:16	0.959127135	0.581130107	0.774483815	**18:48:20**	0.959030265	0.586162925	0.773945484
18:48:24	0.958933394	0.591195743	0.773407154	**18:48:28**	0.958836523	0.596228559	0.772868824
18:48:32	0.958739652	0.601261376	0.772330493	**18:48:36**	0.958642781	0.60822933	0.771792163
18:48:40	0.95854591	0.617132425	0.771253833	**18:48:44**	0.958449039	0.626035517	0.770715502

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:48:48	0.958352168	0.620107446	0.770177172	**18:48:52**	0.958255297	0.61417937	0.769638841
18:48:56	0.958158426	0.612864974	0.769100511	**18:49:00**	0.958061555	0.616164253	0.768562181
18:49:04	0.957898226	0.619423918	0.76802385	**18:49:08**	0.957734897	0.632874304	0.76748552
18:49:12	0.957571568	0.646324685	0.76694719	**18:49:16**	0.957408239	0.650715713	0.766408859
18:49:20	0.958378808	0.652762844	0.767406864	**18:49:24**	0.959429152	0.654857528	0.768512957
18:49:28	0.960479495	0.655779679	0.76961905	**18:49:32**	0.961529838	0.65670183	0.770725142
18:49:36	0.962580182	0.657036316	0.771831235	**18:49:40**	0.963630525	0.656783119	0.772937328
18:49:44	0.964680868	0.65652993	0.77404342	**18:49:48**	0.965731212	0.659026895	0.775149513
18:49:52	0.966781555	0.66152387	0.776255606	**18:49:56**	0.967831899	0.670990212	0.777361698
18:50:00	0.968882242	0.68742594	0.778467791	**18:50:04**	0.970992706	0.704493581	0.779573884
18:50:08	0.97310317	0.717242853	0.780679976	**18:50:12**	0.975213635	0.729992126	0.781786069
18:50:16	0.977410441	0.743719109	0.782892162	**18:50:20**	0.979720016	0.758439553	0.783998254
18:50:24	0.98202959	0.773159998	0.785104347	**18:50:28**	0.984339164	0.778656866	0.78621044
18:50:32	0.986648738	0.784153735	0.787316532	**18:50:36**	0.988958312	0.792880902	0.788422625
18:50:40	0.991267886	0.804838384	0.789528718	**18:50:44**	0.99357746	0.816795867	0.79063481
18:50:48	0.995887035	0.83610703	0.791740903	**18:50:52**	0.998196609	0.855418211	0.792846996
18:50:56	0.999846298	0.876902547	0.793059	**18:51:00**	1	0.900061686	0.791244069
18:51:04	0.998889401	0.922467176	0.789429138	**18:51:08**	0.997778802	0.934264226	0.787614207
18:51:12	0.996668203	0.946061276	0.785799276	**18:51:16**	0.995557604	0.951674682	0.783984345
18:51:20	0.994447005	0.951104444	0.782169414	**18:51:24**	0.993336406	0.950534205	0.780354483
18:51:28	0.992225806	0.95342215	0.778539552	**18:51:32**	0.991115207	0.95631006	0.776724621
18:51:36	0.990004608	0.956690801	0.77490969	**18:51:40**	0.988894009	0.954564375	0.773094759
18:51:44	0.98778341	0.952437949	0.771279828	**18:51:48**	0.986672811	0.946932996	0.769464897
18:51:52	0.985562212	0.941428007	0.767649966	**18:51:56**	0.984451613	0.92859849	0.765835035
18:52:00	0.983341014	0.908444408	0.764020105	**18:52:04**	0.983112962	0.888816399	0.762205174
18:52:08	0.98288491	0.85380851	0.760390243	**18:52:12**	0.982656858	0.81880062	0.758575312
18:52:16	0.982428806	0.791204343	0.756760381	**18:52:20**	0.982723465	0.7663902	0.755653678
18:52:24	0.983353872	0.741776174	0.755001887	**18:52:28**	0.98398428	0.713930384	0.754350096
18:52:32	0.984614688	0.686084595	0.753698305	**18:52:36**	0.985245095	0.665604885	0.753046514
18:52:40	0.985875503	0.652491257	0.752394723	**18:52:44**	0.986505911	0.639377628	0.751742931
18:52:48	0.987136318	0.623769982	0.75109114	**18:52:52**	0.987557815	0.608037808	0.750439349
18:52:56	0.987969564	0.59401734	0.749787558	**18:53:00**	0.988381313	0.580569377	0.749135767
18:53:04	0.987542809	0.566376158	0.748483976	**18:53:08**	0.986704305	0.548667252	0.747832185
18:53:12	0.985865801	0.530958344	0.747180393	**18:53:16**	0.985027297	0.522354641	0.746528602
18:53:20	0.984188793	0.522856142	0.745876811	**18:53:24**	0.98335029	0.523357644	0.74522502
18:53:28	0.982511786	0.525523405	0.744573229	**18:53:32**	0.981673282	0.53268194	0.743921438
18:53:36	0.980834778	0.536718813	0.743269647	**18:53:40**	0.979996274	0.537634028	0.742617856
18:53:44	0.97915777	0.538549243	0.741966064	**18:53:48**	0.978319266	0.546875296	0.741314273
18:53:52	0.977480763	0.55520135	0.740662482	**18:53:56**	0.976642259	0.562794976	0.740010691
18:54:00	0.975803755	0.569656175	0.7393589	**18:54:04**	0.975465615	0.576815633	0.738707109
18:54:08	0.975127475	0.575930439	0.738055318	**18:54:12**	0.974789335	0.575045245	0.737403526
18:54:16	0.974451195	0.570159261	0.736751735	**18:54:20**	0.974113055	0.561272486	0.736099944
18:54:24	0.973774915	0.552385712	0.735448153	**18:54:28**	0.973436775	0.534882888	0.734796362
18:54:32	0.973098635	0.517380063	0.734144571	**18:54:36**	0.972760495	0.497187936	0.73349278
18:54:40	0.972422355	0.476099368	0.732840988	**18:54:44**	0.972084216	0.455010808	0.732189197
18:54:48	0.971746076	0.440154887	0.731537406	**18:54:52**	0.971512177	0.425361094	0.731026853
18:54:56	0.971729661	0.414622058	0.731127886	**18:55:00**	0.971947146	0.407668715	0.731228919
18:55:04	0.97162316	0.400392609	0.731329952	**18:55:08**	0.971299173	0.389430452	0.731430985
18:55:12	0.970975187	0.378468295	0.731532018	**18:55:16**	0.9706512	0.36170607	0.731633051
18:55:20	0.970327214	0.339143793	0.731734084	**18:55:24**	0.970003228	0.316581499	0.731835117
18:55:28	0.969679241	0.292861656	0.73193615	**18:55:32**	0.969355255	0.269141832	0.732037183
18:55:36	0.969031269	0.252132499	0.732138216	**18:55:40**	0.968707282	0.237359956	0.73223925
18:55:44	0.968383296	0.225294895	0.732340283	**18:55:48**	0.968059309	0.221352105	0.732441316
18:55:52	0.967735323	0.217409279	0.732542349	**18:55:56**	0.967411337	0.210210539	0.732643382
18:56:00	0.96708735	0.201926518	0.732744415	**18:56:04**	0.967463179	0.195745408	0.732845448
18:56:08	0.967839007	0.194621733	0.732946481	**18:56:12**	0.968214835	0.193498057	0.733047514
18:56:16	0.968590664	0.19010995	0.733148547	**18:56:20**	0.968966492	0.18596702	0.73324958

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
18:56:24	0.96934232	0.179264624	0.733350613	**18:56:28**	0.969718149	0.164883719	0.733451646
18:56:32	0.970093977	0.150502814	0.733552679	**18:56:36**	0.970469806	0.146734116	0.733653712
18:56:40	0.970845634	0.146502832	0.733754745	**18:56:44**	0.971221462	0.147819671	0.733855778
18:56:48	0.971597291	0.153781056	0.733956811	**18:56:52**	0.971973119	0.159742405	0.734057845
18:56:56	0.972348947	0.171931136	0.734158878	**18:57:00**	0.972724776	0.186195671	0.734259911
18:57:04	0.972108522	0.203672762	0.734360944	**18:57:08**	0.971492269	0.232561543	0.734461977
18:57:12	0.970876015	0.261450324	0.73456301	**18:57:16**	0.970259762	0.29152966	0.734664043
18:57:20	0.969643508	0.322005876	0.734765076	**18:57:24**	0.969027255	0.345726656	0.734866109
18:57:28	0.968411002	0.362692018	0.734967142	**18:57:32**	0.967794748	0.379657379	0.735068175
18:57:36	0.967178495	0.408364196	0.735169208	**18:57:40**	0.966562241	0.440984817	0.735270241
18:57:44	0.965945988	0.470527001	0.735371274	**18:57:48**	0.965329734	0.490833858	0.735472307
18:57:52	0.964713481	0.511140711	0.73557334	**18:57:56**	0.964097227	0.525863456	0.735674373
18:58:00	0.963541822	0.540622474	0.735775406	**18:58:04**	0.963228355	0.556198034	0.73587644
18:58:08	0.962914889	0.57379058	0.735977473	**18:58:12**	0.962601422	0.591383125	0.736078506
18:58:16	0.962287955	0.608593984	0.736179539	**18:58:20**	0.961974488	0.625677615	0.736280572
18:58:24	0.961661021	0.640626253	0.736381605	**18:58:28**	0.961347554	0.649169917	0.736482638
18:58:32	0.961034087	0.65771358	0.736583671	**18:58:36**	0.96072062	0.671761903	0.736684704
18:58:40	0.960407153	0.687645116	0.736785737	**18:58:44**	0.960093686	0.706864974	0.73688677
18:58:48	0.959777223	0.736093013	0.736983744	**18:58:52**	0.95941323	0.76529272	0.737016318
18:58:56	0.959049237	0.78298081	0.737048892	**18:59:00**	0.958685244	0.796831725	0.737081467
18:59:04	0.958364101	0.808048611	0.737114041	**18:59:08**	0.958042958	0.811286872	0.737146615
18:59:12	0.957721816	0.814525133	0.737179189	**18:59:16**	0.957400673	0.815805191	0.737211763
18:59:20	0.957079531	0.816432485	0.737244337	**18:59:24**	0.956758388	0.820126819	0.737276911
18:59:28	0.956437246	0.83302222	0.737309485	**18:59:32**	0.956116103	0.845917622	0.737342059
18:59:36	0.955794961	0.855496692	0.737374633	**18:59:40**	0.955473818	0.863970299	0.737407208
18:59:44	0.955152676	0.872183103	0.737439782	**18:59:48**	0.954831533	0.879613443	0.737472356
18:59:52	0.95451039	0.887043783	0.73750493	**18:59:56**	0.954189248	0.909543848	0.737537504
19:00:00	1.453868105	1.437067133	1.237570078	**19:00:04**	1.453757133	1.460062054	1.237602652
19:00:08	1.453646161	1.46909591	1.237635226	**19:00:12**	0.953535189	0.978129765	0.7376678
19:00:16	0.953424216	0.984757285	0.737700374	**19:00:20**	0.953313244	0.990582694	0.737732949
19:00:24	0.953202272	0.993553385	0.737765523	**19:00:28**	0.9530913	0.987959856	0.737798097
19:00:32	0.952980327	0.982366326	0.737830671	**19:00:36**	0.952869355	0.968598973	0.737863245
19:00:40	0.952758383	0.952106976	0.737895819	**19:00:44**	0.952647411	0.936454007	0.737928393
19:00:48	0.952536438	0.923318082	0.737960967	**19:00:52**	0.952425466	0.910182157	0.737993541
19:00:56	0.952314494	0.897445121	0.738026115	**19:01:00**	0.952203522	0.884841107	0.73805869
19:01:04	0.951975435	0.875609834	0.738091264	**19:01:08**	0.951747348	0.876706283	0.738123838
19:01:12	0.951519261	0.877802768	0.738156412	**19:01:16**	0.951291174	0.879412298	0.738188986
19:01:20	0.951063087	0.88119283	0.73822156	**19:01:24**	0.950835	0.881398522	0.738254134
19:01:28	0.950606913	0.87687962	0.738286708	**19:01:32**	0.950378827	0.872360718	0.738319282
19:01:36	0.95015074	0.86020891	0.738351856	**19:01:40**	0.949922653	0.845512788	0.73838443
19:01:44	0.949694566	0.830023827	0.738417005	**19:01:48**	0.949466479	0.81215635	0.738449579
19:01:52	0.949238392	0.794288873	0.738482153	**19:01:56**	0.949010305	0.781583907	0.738514727
19:02:00	0.94832292	0.77032601	0.737924991	**19:02:04**	0.947767576	0.757671018	0.737266621
19:02:08	0.947212232	0.740588635	0.736608252	**19:02:12**	0.946656888	0.723506253	0.735949882
19:02:16	0.946101544	0.699971872	0.735291513	**19:02:20**	0.9455462	0.674286817	0.734633143
19:02:24	0.944990856	0.650808431	0.733974773	**19:02:28**	0.944435512	0.633950026	0.733316404
19:02:32	0.943880168	0.617091621	0.732658034	**19:02:36**	0.943324824	0.600233221	0.731999665
19:02:40	0.94276948	0.583374816	0.731341295	**19:02:44**	0.942214136	0.567837634	0.730682926
19:02:48	0.941658791	0.556264117	0.730024556	**19:02:52**	0.941103447	0.5446906	0.729366186
19:02:56	0.940548103	0.540141845	0.728707817	**19:03:00**	0.939992759	0.537934678	0.728049447
19:03:04	0.939880481	0.534287777	0.727391078	**19:03:08**	0.939719704	0.525500444	0.726732708
19:03:12	0.939558928	0.516713112	0.726074338	**19:03:16**	0.939398151	0.525371659	0.725415969
19:03:20	0.939237375	0.539845501	0.724757599	**19:03:24**	0.939076598	0.554319344	0.72409923
19:03:28	0.938915822	0.56384071	0.72344086	**19:03:32**	0.938755046	0.568409599	0.722782491
19:03:36	0.938594269	0.567235361	0.722124121	**19:03:40**	0.938433493	0.564146747	0.721465751
19:03:44	0.938272716	0.561205932	0.720807382	**19:03:48**	0.93811194	0.55870852	0.720149012
19:03:52	0.937951163	0.556211107	0.719490643	**19:03:56**	0.937790387	0.565976154	0.718832273

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:04:00	0.937629611	0.579828688	0.718173904	**19:04:04**	0.93762332	0.595948599	0.717515534
19:04:08	0.93761703	0.618594394	0.716857164	**19:04:12**	0.937610739	0.641240192	0.716198795
19:04:16	0.937604449	0.653800155	0.715540425	**19:04:20**	0.937598158	0.662998183	0.714882056
19:04:24	0.937591868	0.6700576	0.714223686	**19:04:28**	0.937585577	0.670701187	0.713565316
19:04:32	0.937579287	0.671344774	0.712906947	**19:04:36**	0.937572996	0.656819455	0.712248577
19:04:40	0.937566706	0.637237831	0.711590208	**19:04:44**	0.937244785	0.616648681	0.710504186
19:04:48	0.936382155	0.593279058	0.708685549	**19:04:52**	0.935519524	0.569909433	0.706866911
19:04:56	0.934656894	0.546944096	0.705048273	**19:05:00**	0.933794263	0.524113522	0.703229636
19:05:04	0.932366076	0.504756422	0.701410998	**19:05:08**	0.930937888	0.496831113	0.69959236
19:05:12	0.929509701	0.488905804	0.697773723	**19:05:16**	0.928081513	0.487206094	0.695955085
19:05:20	0.926653326	0.487581582	0.694136447	**19:05:24**	0.925225138	0.488789826	0.69231781
19:05:28	0.92379695	0.492496324	0.690499172	**19:05:32**	0.922368763	0.496202826	0.688680535
19:05:36	0.920940575	0.505104892	0.686861897	**19:05:40**	0.919512388	0.519202526	0.685043259
19:05:44	0.9180842	0.533300159	0.683224622	**19:05:48**	0.916656012	0.540714574	0.681405984
19:05:52	0.915227825	0.54812899	0.679587346	**19:05:56**	0.913799637	0.546064242	0.677768709
19:06:00	0.91237145	0.534520331	0.675950071	**19:06:04**	0.912430321	0.523862832	0.674779581
19:06:08	0.912736062	0.484231841	0.673943577	**19:06:12**	0.913041803	0.44460085	0.673107573
19:06:16	0.913347544	0.406237655	0.67227157	**19:06:20**	0.913653284	0.369142273	0.671435566
19:06:24	0.913959025	0.332046873	0.670599562	**19:06:28**	0.914264766	0.317257545	0.669763559
19:06:32	0.914570507	0.302468216	0.668927555	**19:06:36**	0.914876247	0.285038679	0.668091551
19:06:40	0.915181988	0.264968971	0.667255548	**19:06:44**	0.915487729	0.244899262	0.666419544
19:06:48	0.91579347	0.238837891	0.665583541	**19:06:52**	0.91609921	0.232776521	0.664747537
19:06:56	0.916404951	0.224290553	0.663911533	**19:07:00**	0.916710692	0.213379987	0.66307553
19:07:04	0.91629278	0.202038028	0.662239526	**19:07:08**	0.915874869	0.203705302	0.661403522
19:07:12	0.915456957	0.205372612	0.660567519	**19:07:16**	0.915039046	0.205446535	0.659731515
19:07:20	0.914621134	0.203927106	0.658895512	**19:07:24**	0.914203222	0.202407677	0.658059508
19:07:28	0.913785311	0.202266718	0.657223504	**19:07:32**	0.913367399	0.202125794	0.656387501
19:07:36	0.912949488	0.205656017	0.655551497	**19:07:40**	0.912531576	0.212857458	0.654715493
19:07:44	0.912113665	0.2200589	0.65387949	**19:07:48**	0.911695753	0.225363177	0.653043486
19:07:52	0.911277841	0.230667419	0.652207482	**19:07:56**	0.91085993	0.236882812	0.651371479
19:08:00	0.910442018	0.244009322	0.650535475	**19:08:04**	0.910338514	0.251323263	0.649699472
19:08:08	0.91023501	0.265204956	0.648863468	**19:08:12**	0.910129868	0.279085673	0.648027464
19:08:16	0.910001008	0.293652928	0.647191461	**19:08:20**	0.909872148	0.308453735	0.646355457
19:08:24	0.909743288	0.32325456	0.645519453	**19:08:28**	0.909614428	0.345769156	0.64468345
19:08:32	0.909485568	0.368283752	0.643847446	**19:08:36**	0.909356708	0.391173467	0.643011443
19:08:40	0.909227848	0.414438311	0.642175439	**19:08:44**	0.909098988	0.437703146	0.641339435
19:08:48	0.909203348	0.473525753	0.640819425	**19:08:52**	0.910837387	0.510260179	0.642372
19:08:56	0.912471425	0.547836362	0.643924574	**19:09:00**	0.914105464	0.585693131	0.645477148
19:09:04	0.915353722	0.623319941	0.647029723	**19:09:08**	0.91660198	0.651349889	0.648582297
19:09:12	0.917850239	0.679379838	0.650134872	**19:09:16**	0.919098497	0.707104562	0.651687446
19:09:20	0.920346755	0.734524071	0.653240021	**19:09:24**	0.921595013	0.76194358	0.654792595
19:09:28	0.922843272	0.786005542	0.656345169	**19:09:32**	0.92409153	0.810067505	0.657897744
19:09:36	0.925339788	0.824381016	0.659450318	**19:09:40**	0.926588046	0.82894604	0.661002893
19:09:44	0.927836305	0.833511064	0.662555467	**19:09:48**	0.929084563	0.823472614	0.664108042
19:09:52	0.930332821	0.813434164	0.665660616	**19:09:56**	0.931581079	0.810897962	0.66721319
19:10:00	0.932829337	0.815864006	0.668765765	**19:10:04**	0.934163883	0.820881467	0.670318339
19:10:08	0.935498429	0.823765139	0.671870914	**19:10:12**	0.936832975	0.826648828	0.673423488
19:10:16	0.93816752	0.825750128	0.674976062	**19:10:20**	0.939502066	0.821069074	0.676528637
19:10:24	0.940836612	0.816388021	0.678081211	**19:10:28**	0.942171157	0.815055382	0.679633786
19:10:32	0.943505703	0.813722726	0.68118636	**19:10:36**	0.944840249	0.816874965	0.682738935
19:10:40	0.944381171	0.823442911	0.681861301	**19:10:44**	0.9431251	0.829535782	0.67990381
19:10:48	0.941869029	0.824685437	0.677946319	**19:10:52**	0.940612959	0.819835092	0.675988828
19:10:56	0.939356888	0.815806044	0.674031337	**19:11:00**	0.938100817	0.812598294	0.672073846
19:11:04	0.936498716	0.809184281	0.670116355	**19:11:08**	0.934896616	0.79622405	0.668158864
19:11:12	0.933294515	0.783263819	0.666201374	**19:11:16**	0.931692414	0.772683631	0.664243883
19:11:20	0.930090313	0.764483487	0.662286392	**19:11:24**	0.928488212	0.757242744	0.660328901
19:11:28	0.926886111	0.752880167	0.65837141	**19:11:32**	0.925284011	0.748517608	0.656413919

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:11:36	0.92368191	0.739148564	0.654456428	**19:11:40**	0.922079809	0.724773037	0.652498937
19:11:44	0.920477708	0.710397527	0.650541446	**19:11:48**	0.918875607	0.69830853	0.648583955
19:11:52	0.917273506	0.686219534	0.646626464	**19:11:56**	0.915671405	0.671388413	0.644668973
19:12:00	0.914069305	0.653815159	0.642711482	**19:12:04**	0.910750187	0.635218418	0.640753991
19:12:08	0.907431069	0.6361607	0.6387965	**19:12:12**	0.904111951	0.637102982	0.636839009
19:12:16	0.900792833	0.637461667	0.634881519	**19:12:20**	0.897473715	0.637236755	0.632924028
19:12:24	0.894154597	0.637011852	0.630966537	**19:12:28**	0.889780358	0.630849346	0.627579445
19:12:32	0.88467945	0.624253684	0.62320778	**19:12:36**	0.879578542	0.620417804	0.618836116
19:12:40	0.874477635	0.619341697	0.614464451	**19:12:44**	0.869376727	0.61826559	0.610092786
19:12:48	0.86427582	0.609619082	0.605721121	**19:12:52**	0.859174912	0.600972566	0.601349457
19:12:56	0.854891063	0.586867869	0.598084837	**19:13:00**	0.853984367	0.568831026	0.599395972
19:13:04	0.854870578	0.551862903	0.600707108	**19:13:08**	0.855756788	0.549924646	0.602018244
19:13:12	0.856642999	0.547986394	0.60332938	**19:13:16**	0.85752921	0.543641879	0.604640515
19:13:20	0.858415421	0.536891104	0.605951651	**19:13:24**	0.859301632	0.53014033	0.607262787
19:13:28	0.860187843	0.523389555	0.608573923	**19:13:32**	0.861074054	0.508814558	0.609885058
19:13:36	0.861960265	0.495650751	0.611196194	**19:13:40**	0.862846476	0.486720514	0.61250733
19:13:44	0.863732687	0.477790277	0.613818466	**19:13:48**	0.864618897	0.466106229	0.615129601
19:13:52	0.865505108	0.454422181	0.616440737	**19:13:56**	0.866391319	0.443016381	0.617751873
19:14:00	0.86727753	0.431888825	0.619063009	**19:14:04**	0.8675242	0.420380058	0.620374145
19:14:08	0.86777087	0.412370831	0.62168528	**19:14:12**	0.86801754	0.404361604	0.622996416
19:14:16	0.86826421	0.391750599	0.624307552	**19:14:20**	0.86851088	0.374537817	0.625618688
19:14:24	0.86875755	0.357325036	0.626929823	**19:14:28**	0.86900422	0.345224553	0.628240959
19:14:32	0.86925089	0.33312407	0.629552095	**19:14:36**	0.869497561	0.325098704	0.630863231
19:14:40	0.869744231	0.321148436	0.632174366	**19:14:44**	0.869990901	0.317198186	0.633485502
19:14:48	0.870237571	0.315708808	0.634796638	**19:14:52**	0.870484241	0.314219414	0.636107774
19:14:56	0.870730911	0.313779024	0.637418909	**19:15:00**	0.370977581	-0.185612395	0.138730045
19:15:04	0.371868761	-0.184619632	0.140041181	**19:15:08**	0.372759941	-0.193993549	0.141352317
19:15:12	0.87365112	0.296632551	0.642663453	**19:15:16**	0.8745423	0.287258633	0.643974588
19:15:20	0.87543348	0.277884733	0.645285724	**19:15:24**	0.87632466	0.268510816	0.64659686
19:15:28	0.87721584	0.273613212	0.647907996	**19:15:32**	0.87810702	0.27871559	0.649219131
19:15:36	0.8789982	0.286464838	0.650530267	**19:15:40**	0.87988938	0.296860956	0.651841403
19:15:44	0.88078056	0.307257074	0.653152539	**19:15:48**	0.88167174	0.328324821	0.654463674
19:15:52	0.882562919	0.349392586	0.65577481	**19:15:56**	0.883454099	0.359213501	0.657085946
19:16:00	0.884345279	0.3577876	0.658397082	**19:16:04**	0.88402178	0.35563763	0.659708218
19:16:08	0.883698281	0.364384528	0.661019353	**19:16:12**	0.883374782	0.373131426	0.662330489
19:16:16	0.883051283	0.38563603	0.663641625	**19:16:20**	0.882727783	0.401898366	0.664952761
19:16:24	0.882404284	0.418160701	0.666263896	**19:16:28**	0.882080785	0.43680483	0.667575032
19:16:32	0.881726382	0.455430539	0.668844296	**19:16:36**	0.875603007	0.45980008	0.662297092
19:16:40	0.869479632	0.460563836	0.655749888	**19:16:44**	0.863356257	0.461327587	0.649202684
19:16:48	0.857232882	0.467557315	0.64265548	**19:16:52**	0.851109507	0.473787043	0.636108276
19:16:56	0.844986132	0.479068267	0.629561072	**19:17:00**	0.838862757	0.483400989	0.623013868
19:17:04	0.83669986	0.49009449	0.619981952	**19:17:08**	0.836164002	0.503889794	0.619154534
19:17:12	0.835628143	0.517685097	0.618327117	**19:17:16**	0.835092284	0.53770314	0.617499699
19:17:20	0.834556425	0.563943925	0.616672281	**19:17:24**	0.834020566	0.590184705	0.615844863
19:17:28	0.833484707	0.602823181	0.615017445	**19:17:32**	0.832948848	0.615461649	0.614190027
19:17:36	0.832412989	0.624376671	0.613362609	**19:17:40**	0.83187713	0.629568237	0.612535191
19:17:44	0.831341271	0.635539852	0.611707773	**19:17:48**	0.830805412	0.643851646	0.610880356
19:17:52	0.830269553	0.65216344	0.610052938	**19:17:56**	0.829733695	0.66498285	0.60922552
19:18:00	0.829197836	0.679304781	0.608398102	**19:18:04**	0.829178422	0.693934557	0.607570684
19:18:08	0.829159009	0.705460999	0.606743266	**19:18:12**	0.829139595	0.716987441	0.605915848
19:18:16	0.829120181	0.722730549	0.60508843	**19:18:20**	0.829100768	0.722690323	0.604261012
19:18:24	0.829081354	0.722650114	0.603433594	**19:18:28**	0.829061941	0.715794353	0.602606177
19:18:32	0.829042527	0.708938591	0.601778759	**19:18:36**	0.829023114	0.702528245	0.600951341
19:18:40	0.8290037	0.696563348	0.600123923	**19:18:44**	0.828984287	0.690598451	0.599296505
19:18:48	0.828964873	0.686563973	0.598469087	**19:18:52**	0.82894546	0.682529495	0.597641669
19:18:56	0.828926046	0.678495017	0.596814251	**19:19:00**	0.828906633	0.67446054	0.595986833
19:19:04	0.828111483	0.671078162	0.595159415	**19:19:08**	0.827316333	0.671039296	0.594331998

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:19:12	0.826521183	0.67100043	0.59350458	**19:19:16**	0.827594719	0.675659115	0.595209073
19:19:20	0.829888424	0.684628797	0.598566792	**19:19:24**	0.832182129	0.693598479	0.60192451
19:19:28	0.834475834	0.705617827	0.605282229	**19:19:32**	0.836769539	0.717637158	0.608639947
19:19:36	0.839063244	0.719174604	0.611997666	**19:19:40**	0.841356949	0.710230129	0.615355385
19:19:44	0.843650654	0.701285654	0.618713103	**19:19:48**	0.845944359	0.698663619	0.622070822
19:19:52	0.845915899	0.694657377	0.622282203	**19:19:56**	0.844999602	0.696504287	0.621290641
19:20:00	0.844083305	0.70047868	0.620299079	**19:20:04**	0.842910332	0.704300056	0.619307517
19:20:08	0.84173736	0.708840528	0.618315955	**19:20:12**	0.840564387	0.713381019	0.617324393
19:20:16	0.839391414	0.712107513	0.616332831	**19:20:20**	0.838218442	0.705020011	0.615341269
19:20:24	0.837045469	0.697932509	0.614349707	**19:20:28**	0.835872496	0.691432272	0.613358145
19:20:32	0.834699524	0.684932035	0.612366583	**19:20:36**	0.833526551	0.673467293	0.611375021
19:20:40	0.832353578	0.657038026	0.610383459	**19:20:44**	0.831180606	0.640608769	0.609391897
19:20:48	0.830007633	0.63174294	0.608400335	**19:20:52**	0.828834661	0.622877111	0.607408773
19:20:56	0.827661688	0.612502367	0.606417211	**19:21:00**	0.826488715	0.600618706	0.605425649
19:21:04	0.825661408	0.588941082	0.604434087	**19:21:08**	0.824834101	0.587891049	0.603442525
19:21:12	0.824006794	0.586841025	0.602450963	**19:21:16**	0.823179487	0.582418337	0.601459401
19:21:20	0.82235218	0.574622994	0.600467839	**19:21:24**	0.821524873	0.56682765	0.599476277
19:21:28	0.820697566	0.563871154	0.598484714	**19:21:32**	0.819870259	0.560914666	0.597493152
19:21:36	0.819042953	0.561611752	0.59650159	**19:21:40**	0.818215646	0.565962424	0.595510028
19:21:44	0.817388339	0.570313092	0.594518466	**19:21:48**	0.816561032	0.565402461	0.593526904
19:21:52	0.815733725	0.56049183	0.592535342	**19:21:56**	0.814906418	0.552955975	0.59154378
19:22:00	0.814079111	0.542794902	0.590552218	**19:22:04**	0.812816294	0.532374228	0.589560656
19:22:08	0.811553478	0.51603561	0.588569094	**19:22:12**	0.810290661	0.499696992	0.587577532
19:22:16	0.809027845	0.48493588	0.58658597	**19:22:20**	0.807765028	0.471752278	0.585594408
19:22:24	0.806502211	0.458568674	0.584602846	**19:22:28**	0.805239395	0.457005223	0.583611284
19:22:32	0.803976578	0.455441772	0.582619722	**19:22:36**	0.802713762	0.451888157	0.58162816
19:22:40	0.801450945	0.446344378	0.580636598	**19:22:44**	0.800188129	0.440800599	0.579645036
19:22:48	0.798594759	0.439063383	0.578205603	**19:22:52**	0.796464902	0.437006374	0.576039274
19:22:56	0.794335045	0.438231252	0.573872945	**19:23:00**	0.792205187	0.442738023	0.571706616
19:23:04	0.790774648	0.447661647	0.569540288	**19:23:08**	0.789344108	0.45258527	0.567373959
19:23:12	0.787913569	0.457508892	0.56520763	**19:23:16**	0.786483029	0.461339501	0.563041301
19:23:20	0.78505249	0.464077093	0.560874973	**19:23:24**	0.78362195	0.466814685	0.558708644
19:23:28	0.782191411	0.469552277	0.556542315	**19:23:32**	0.780760871	0.482487195	0.554375986
19:23:36	0.779330332	0.497781006	0.552209658	**19:23:40**	0.777899792	0.520151497	0.550043329
19:23:44	0.776469253	0.542521989	0.547877	**19:23:48**	0.775764812	0.555648139	0.546694473
19:23:52	0.775543649	0.569062363	0.546166747	**19:23:56**	0.775322486	0.584143449	0.545639021
19:24:00	0.775101323	0.600891407	0.545111295	**19:24:04**	0.774455753	0.617386382	0.544583568
19:24:08	0.773810184	0.632411737	0.544055842	**19:24:12**	0.773164615	0.647437074	0.543528116
19:24:16	0.772519046	0.655345214	0.543000389	**19:24:20**	0.771873477	0.656136122	0.542472663
19:24:24	0.771227907	0.656927029	0.541944937	**19:24:28**	0.770582338	0.664485489	0.541417211
19:24:32	0.769936769	0.672043931	0.540889484	**19:24:36**	0.7692912	0.678096353	0.540361758
19:24:40	0.768645631	0.682642718	0.539834032	**19:24:44**	0.768000061	0.687189102	0.539306305
19:24:48	0.767354492	0.694431456	0.538778579	**19:24:52**	0.766708923	0.701673829	0.538250853
19:24:56	0.766063354	0.711667971	0.537723127	**19:25:00**	0.765417785	0.724413919	0.5371954
19:25:04	0.765318588	0.737485534	0.536667674	**19:25:08**	0.765219391	0.74866169	0.536139948
19:25:12	0.765120194	0.759837846	0.535612222	**19:25:16**	0.765020997	0.770270017	0.535084495
19:25:20	0.7649218	0.779958273	0.534556769	**19:25:24**	0.764822603	0.789646493	0.534029043
19:25:28	0.764723406	0.803139131	0.533501316	**19:25:32**	0.764624209	0.816631769	0.53297359
19:25:36	0.764525012	0.827467873	0.532445864	**19:25:40**	0.764425815	0.835647444	0.531918138
19:25:44	0.764326618	0.843827015	0.531390411	**19:25:48**	0.764227421	0.848237662	0.530862685
19:25:52	0.764128224	0.852648309	0.530334959	**19:25:56**	0.764029027	0.860677412	0.529807233
19:26:00	0.76392983	0.872324973	0.529279506	**19:26:04**	0.763539695	0.883799109	0.52875178
19:26:08	0.763149559	0.891045743	0.528224054	**19:26:12**	0.762759423	0.898292378	0.527696327
19:26:16	0.762369287	0.901796771	0.527168601	**19:26:20**	0.761979151	0.901558959	0.526640875
19:26:24	0.761589015	0.901321146	0.526113149	**19:26:28**	0.761198879	0.894338823	0.525585422
19:26:32	0.760931911	0.887429917	0.525224578	**19:26:36**	0.762257442	0.87751191	0.527021436
19:26:40	0.763582974	0.863635572	0.528818294	**19:26:44**	0.764908506	0.849759233	0.530615151

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:26:48	0.766234038	0.843895984	0.532412009	**19:26:52**	0.76755957	0.83803277	0.534208867
19:26:56	0.768885101	0.825893429	0.536005725	**19:27:00**	0.770210633	0.807477996	0.537802583
19:27:04	0.7717083	0.78916517	0.539599441	**19:27:08**	0.773205967	0.768124254	0.541396299
19:27:12	0.774703633	0.747083338	0.543193157	**19:27:16**	0.7762013	0.728073585	0.544990015
19:27:20	0.777698967	0.711094977	0.546786873	**19:27:24**	0.779196634	0.694116369	0.548583731
19:27:28	0.780947469	0.691419604	0.550380589	**19:27:32**	0.782975768	0.68888823	0.552177447
19:27:36	0.785004068	0.689429529	0.553974305	**19:27:40**	0.787032367	0.693043499	0.555771163
19:27:44	0.789060667	0.696657486	0.557568021	**19:27:48**	0.791088966	0.688395007	0.559364879
19:27:52	0.793117266	0.680132527	0.561161737	**19:27:56**	0.795145565	0.669335664	0.562958594
19:28:00	0.797173865	0.656004453	0.564755452	**19:28:04**	0.798626661	0.642330193	0.56655231
19:28:08	0.800079458	0.626374928	0.568349168	**19:28:12**	0.801032191	0.610121583	0.569468484
19:28:16	0.801633387	0.594128657	0.570111495	**19:28:20**	0.802234583	0.578292398	0.570754506
19:28:24	0.802835778	0.56363218	0.571397517	**19:28:28**	0.803436974	0.552500134	0.572040528
19:28:32	0.80403817	0.541368088	0.57268354	**19:28:36**	0.804639365	0.531729046	0.573326551
19:28:40	0.805240561	0.523583006	0.573969562	**19:28:44**	0.805841757	0.515436967	0.574612573
19:28:48	0.806442952	0.517229848	0.575255584	**19:28:52**	0.807044148	0.519022729	0.575898596
19:28:56	0.807645344	0.520481625	0.576541607	**19:29:00**	0.808246539	0.52160653	0.577184618
19:29:04	0.808741444	0.522668078	0.577827629	**19:29:08**	0.809236348	0.527372846	0.57847064
19:29:12	0.809731253	0.532077614	0.579113652	**19:29:16**	0.810226157	0.537046223	0.579756663
19:29:20	0.810721061	0.542278674	0.580399674	**19:29:24**	0.811215966	0.547511125	0.581042685
19:29:28	0.81171087	0.537113706	0.581685696	**19:29:32**	0.812205775	0.526716288	0.582328708
19:29:36	0.812700679	0.513830796	0.582971719	**19:29:40**	0.813195583	0.498457229	0.58361473
19:29:44	0.813690488	0.483083662	0.584257741	**19:29:48**	0.814185392	0.475469028	0.584900752
19:29:52	0.814680297	0.467854394	0.585543764	**19:29:56**	0.815175201	0.464158044	0.586186775
19:30:00	1.315670106	0.964379976	1.086829786	**19:30:04**	1.316667163	0.964901236	1.087472797
19:30:08	1.31766422	0.968361721	1.088115808	**19:30:12**	0.818661277	0.471822205	0.58875882
19:30:16	0.819658334	0.465643866	0.589401831	**19:30:20**	0.820655391	0.4498267	0.590044842
19:30:24	0.821652449	0.434009537	0.590687853	**19:30:28**	0.822649506	0.413332954	0.591330864
19:30:32	0.823646563	0.392656372	0.591973876	**19:30:36**	0.82464362	0.377495854	0.592616887
19:30:40	0.825640677	0.367851382	0.593259898	**19:30:44**	0.826637734	0.35820692	0.593902909
19:30:48	0.827634792	0.359163339	0.59454592	**19:30:52**	0.828631849	0.360119758	0.595188932
19:30:56	0.829628906	0.363971709	0.595831943	**19:31:00**	0.830625963	0.370719208	0.596474954
19:31:04	0.831030522	0.377113528	0.597117965	**19:31:08**	0.831435081	0.393648802	0.597760976
19:31:12	0.83183964	0.410184067	0.598403988	**19:31:16**	0.8322442	0.424311349	0.599046999
19:31:20	0.832648759	0.436030635	0.59969001	**19:31:24**	0.833053318	0.447749924	0.600333021
19:31:28	0.833457877	0.437313237	0.600976032	**19:31:32**	0.833862436	0.426876546	0.601619044
19:31:36	0.834266995	0.417763635	0.602262055	**19:31:40**	0.834671554	0.409974493	0.602905066
19:31:44	0.835076113	0.402185359	0.603548077	**19:31:48**	0.835480672	0.394396226	0.604191088
19:31:52	0.835885232	0.386607083	0.6048341	**19:31:56**	0.836289791	0.376445216	0.605477111
19:32:00	0.83669435	0.363910624	0.606120122	**19:32:04**	0.83708973	0.351370561	0.606763133
19:32:08	0.83748511	0.3403973	0.607406144	**19:32:12**	0.83788049	0.329424039	0.608049156
19:32:16	0.83827587	0.32095306	0.608692167	**19:32:20**	0.83867125	0.314984365	0.609335178
19:32:24	0.83906663	0.309015669	0.609978189	**19:32:28**	0.83946201	0.301095858	0.6106212
19:32:32	0.83985739	0.29317603	0.611264212	**19:32:36**	0.84025277	0.283279505	0.611907223
19:32:40	0.84064815	0.271406266	0.612550234	**19:32:44**	0.84104353	0.259533028	0.613193245
19:32:48	0.84143891	0.250266084	0.613836256	**19:32:52**	0.84183429	0.240999158	0.614479268
19:32:56	0.84222967	0.233454254	0.615122279	**19:33:00**	0.84262505	0.227631388	0.61576529
19:33:04	0.843098272	0.221854923	0.616408301	**19:33:08**	0.843571493	0.222447406	0.617051312
19:33:12	0.844044715	0.223039889	0.617694324	**19:33:16**	0.844517936	0.22731503	0.618337335
19:33:20	0.844991158	0.232817747	0.618980346	**19:33:24**	0.845464379	0.238320447	0.619623357
19:33:28	0.845937601	0.251941118	0.620266368	**19:33:32**	0.846410823	0.265561807	0.62090938
19:33:36	0.846884044	0.274895074	0.621552391	**19:33:40**	0.847357266	0.27136611	0.622195402
19:33:44	0.847830487	0.267837146	0.622838413	**19:33:48**	0.848303709	0.253100041	0.623481424
19:33:52	0.84877693	0.238362936	0.624124436	**19:33:56**	0.849250152	0.231503019	0.624767447
19:34:00	0.849723373	0.232520291	0.625410458	**19:34:04**	0.850163754	0.233517988	0.626053469
19:34:08	0.850604135	0.240283031	0.62669648	**19:34:12**	0.851044516	0.247048073	0.627339492
19:34:16	0.851484897	0.255261419	0.627982503	**19:34:20**	0.851925279	0.264923085	0.628625514

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:34:24	0.85236566	0.274584751	0.629268525	**19:34:28**	0.852806041	0.266745876	0.629911536
19:34:32	0.853246422	0.258907019	0.630554548	**19:34:36**	0.853686803	0.251652656	0.631197559
19:34:40	0.854127184	0.244982805	0.63184057	**19:34:44**	0.854567565	0.238312954	0.632483581
19:34:48	0.855007946	0.240168241	0.633126592	**19:34:52**	0.855448327	0.242023547	0.633769604
19:34:56	0.855888708	0.247960648	0.634412615	**19:35:00**	0.856329089	0.257979544	0.635055626
19:35:04	0.856829414	0.268034173	0.635698637	**19:35:08**	0.857329739	0.269518682	0.636341648
19:35:12	0.857830064	0.271003192	0.63698466	**19:35:16**	0.858330389	0.265014109	0.637627671
19:35:20	0.858830714	0.251551451	0.638270682	**19:35:24**	0.85933104	0.238088793	0.638913693
19:35:28	0.859831365	0.223854384	0.639556704	**19:35:32**	0.86033169	0.209619992	0.640199716
19:35:36	0.860832015	0.198616715	0.640842727	**19:35:40**	0.86133234	0.188690512	0.641485738
19:35:44	0.861832665	0.178764309	0.642128749	**19:35:48**	0.86233299	0.173019988	0.64277176
19:35:52	0.862833316	0.167275668	0.643414772	**19:35:56**	0.863333641	0.164612243	0.644057783
19:36:00	0.863833966	0.165029752	0.644700794	**19:36:04**	0.864073193	0.165291624	0.645343805
19:36:08	0.86431242	0.156791447	0.645986816	**19:36:12**	0.864551647	0.14829127	0.646629828
19:36:16	0.864790875	0.145061738	0.647272839	**19:36:20**	0.865030102	0.147102852	0.64791585
19:36:24	0.865269329	0.149143965	0.648558861	**19:36:28**	0.865508556	0.144919823	0.649201872
19:36:32	0.865747783	0.140695681	0.649844884	**19:36:36**	0.865987011	0.138550898	0.650487895
19:36:40	0.866226238	0.138485473	0.651130906	**19:36:44**	0.866465465	0.135548703	0.651773917
19:36:48	0.866704692	0.123997865	0.652416928	**19:36:52**	0.866943919	0.112447027	0.65305994
19:36:56	0.867183147	0.100896189	0.653702951	**19:37:00**	0.867422374	0.089345351	0.654345962
19:37:04	0.867786278	0.077868831	0.654988973	**19:37:08**	0.868150181	0.064793665	0.655631984
19:37:12	0.868514085	0.051718499	0.656274996	**19:37:16**	0.868877989	0.044808431	0.656918007
19:37:20	0.869241892	0.04406339	0.657561018	**19:37:24**	0.869605796	0.043318348	0.658204029
19:37:28	0.8699697	0.034248839	0.65884704	**19:37:32**	0.870333604	0.025179329	0.659490052
19:37:36	0.870697507	0.01911383	0.660133063	**19:37:40**	0.871061411	0.016052343	0.660776074
19:37:44	0.871425315	0.012990856	0.661419085	**19:37:48**	0.871789219	0.027910693	0.662062096
19:37:52	0.872153122	0.042830567	0.662705108	**19:37:56**	0.872517026	0.055428487	0.663348119
19:38:00	0.87288093	0.065704525	0.66399113	**19:38:04**	0.873860062	0.076347256	0.664634141
19:38:08	0.874839195	0.086990022	0.665277152	**19:38:12**	0.875818328	0.097632788	0.665920164
19:38:16	0.87679746	0.107776438	0.666563175	**19:38:20**	0.877776593	0.117421006	0.667206186
19:38:24	0.878755726	0.127065609	0.667849197	**19:38:28**	0.879734858	0.136710177	0.668492208
19:38:32	0.880713991	0.146354744	0.66913522	**19:38:36**	0.881693124	0.150807329	0.669778231
19:38:40	0.882672256	0.153529241	0.670421242	**19:38:44**	0.883651389	0.156251153	0.671064253
19:38:48	0.884630522	0.164268403	0.671707264	**19:38:52**	0.885609654	0.172285689	0.672350276
19:38:56	0.886588787	0.174101352	0.672993287	**19:39:00**	0.88756792	0.169715465	0.673636298
19:39:04	0.887816633	0.16489415	0.674279309	**19:39:08**	0.888065347	0.155339217	0.67492232
19:39:12	0.88831406	0.145784284	0.675565332	**19:39:16**	0.888562774	0.143999064	0.676208343
19:39:20	0.888811487	0.149983556	0.676851354	**19:39:24**	0.8890602	0.157437011	0.677494365
19:39:28	0.889308914	0.169297427	0.678137376	**19:39:32**	0.889557627	0.181157843	0.678780388
19:39:36	0.889806341	0.194158682	0.679423399	**19:39:40**	0.890055054	0.208299872	0.68006641
19:39:44	0.890303768	0.222441063	0.680709421	**19:39:48**	0.890552481	0.23158284	0.681352432
19:39:52	0.890801195	0.240724652	0.681995444	**19:39:56**	0.891049908	0.252345937	0.682638455
19:40:00	0.891298622	0.266446749	0.683281466	**19:40:04**	0.892127777	0.280893534	0.683924477
19:40:08	0.892956931	0.302440428	0.684567488	**19:40:12**	0.893786086	0.323987321	0.6852105
19:40:16	0.894615241	0.347091468	0.685853511	**19:40:20**	0.895444396	0.371752869	0.686496522
19:40:24	0.896273551	0.396414287	0.687139533	**19:40:28**	0.897102706	0.415145777	0.687782544
19:40:32	0.897931861	0.433877276	0.688425556	**19:40:36**	0.898761016	0.451824969	0.689068567
19:40:40	0.899590171	0.468988871	0.689711578	**19:40:44**	0.900419326	0.486152768	0.690354589
19:40:48	0.901248481	0.514209654	0.6909976	**19:40:52**	0.902077636	0.54226654	0.691640612
19:40:56	0.902906791	0.566665005	0.692283623	**19:41:00**	0.903735946	0.587405053	0.692926634
19:41:04	0.904339265	0.608010478	0.693569645	**19:41:08**	0.904942583	0.620764153	0.694212656
19:41:12	0.905545902	0.633517833	0.694855668	**19:41:16**	0.906149221	0.649371702	0.695498679
19:41:20	0.90675254	0.668325778	0.69614169	**19:41:24**	0.907355858	0.687279846	0.696784701
19:41:28	0.907959177	0.704843639	0.697427712	**19:41:32**	0.908562496	0.722407423	0.698070724
19:41:36	0.909165815	0.745650706	0.698713735	**19:41:40**	0.909769134	0.774573472	0.699356746
19:41:44	0.910372452	0.79681758	0.699999757	**19:41:48**	0.910975771	0.799025715	0.700642768
19:41:52	0.91157909	0.80123385	0.70128578	**19:41:56**	0.912182409	0.811502346	0.701928791

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:42:00	0.912785727	0.829831184	0.702571802	**19:42:04**	0.913411339	0.848173311	0.703214813
19:42:08	0.91403695	0.861890789	0.703857824	**19:42:12**	0.914662562	0.875608231	0.704500836
19:42:16	0.915288173	0.890789484	0.705143847	**19:42:20**	0.915913785	0.907434513	0.705786858
19:42:24	0.916539396	0.924079543	0.706429869	**19:42:28**	0.917165008	0.933729472	0.70707288
19:42:32	0.917790619	0.943379401	0.707715892	**19:42:36**	0.918416231	0.95302933	0.708358903
19:42:40	0.919041842	0.962679259	0.709001914	**19:42:44**	0.919667454	0.972329189	0.709644925
19:42:48	0.920293065	0.980246633	0.710287936	**19:42:52**	0.920918677	0.988164042	0.710930948
19:42:56	0.921544288	0.987569884	0.711573959	**19:43:00**	0.9221699	0.978464089	0.71221697
19:43:04	0.922904219	0.969423129	0.712859981	**19:43:08**	0.923638539	0.950383803	0.713502992
19:43:12	0.924372858	0.931344478	0.714146004	**19:43:16**	0.925107178	0.915015371	0.714789015
19:43:20	0.925841497	0.901396553	0.715432026	**19:43:24**	0.926575817	0.8877777	0.716075037
19:43:28	0.927310136	0.871819733	0.716718048	**19:43:32**	0.928044456	0.855861766	0.71736106
19:43:36	0.928778775	0.844302162	0.718004071	**19:43:40**	0.929513095	0.845937664	0.718647082
19:43:44	0.930247414	0.847573165	0.719290093	**19:43:48**	0.930981733	0.847031904	0.719933104
19:43:52	0.931716053	0.846490661	0.720576116	**19:43:56**	0.932450372	0.847299553	0.721219127
19:44:00	0.933184692	0.849458616	0.721862138	**19:44:04**	0.933621699	0.850697198	0.722505149
19:44:08	0.934058705	0.849706061	0.72314816	**19:44:12**	0.934495712	0.848714924	0.723791172
19:44:16	0.934932718	0.850421002	0.724434183	**19:44:20**	0.935369725	0.854824294	0.725077194
19:44:24	0.935806732	0.859227587	0.725720205	**19:44:28**	0.93604253	0.857719259	0.726090596
19:44:32	0.935517254	0.855757265	0.725429796	**19:44:36**	0.934991978	0.848375919	0.724768996
19:44:40	0.934466702	0.835575201	0.724108196	**19:44:44**	0.933941426	0.822774466	0.723447395
19:44:48	0.93341615	0.802579404	0.722786595	**19:44:52**	0.932890874	0.782384342	0.722125795
19:44:56	0.932365598	0.764556179	0.721464995	**19:45:00**	0.431840322	0.249094912	0.220804195
19:45:04	0.431451544	0.233714993	0.220143395	**19:45:08**	0.431062766	0.219762006	0.219482594
19:45:12	0.930673988	0.705809001	0.718821794	**19:45:16**	0.93028521	0.695203123	0.718160994
19:45:20	0.929896433	0.687944346	0.717500194	**19:45:24**	0.929507655	0.68068557	0.716839394
19:45:28	0.929118877	0.667061771	0.716178594	**19:45:32**	0.928730099	0.653437972	0.715517794
19:45:36	0.928341321	0.638506523	0.714856993	**19:45:40**	0.927952544	0.622267405	0.714196193
19:45:44	0.927563766	0.606028287	0.713535393	**19:45:48**	0.927174988	0.583377648	0.712874593
19:45:52	0.92678621	0.560727009	0.712213793	**19:45:56**	0.926397432	0.537543327	0.711552993
19:46:00	0.926008654	0.513826601	0.710892192	**19:46:04**	0.926149354	0.490425489	0.710231392
19:46:08	0.926290054	0.475421206	0.709570592	**19:46:12**	0.926430754	0.460416927	0.708909792
19:46:16	0.926571454	0.451977336	0.708248992	**19:46:20**	0.926712154	0.450102434	0.707588192
19:46:24	0.926852854	0.448227531	0.706927391	**19:46:28**	0.926993554	0.437970327	0.706266591
19:46:32	0.927134254	0.427713132	0.705605791	**19:46:36**	0.927274953	0.414891442	0.704944991
19:46:40	0.927415653	0.401214924	0.704284191	**19:46:44**	0.927556353	0.385297557	0.703623391
19:46:48	0.927697053	0.362657636	0.702962591	**19:46:52**	0.927837753	0.340017714	0.70230179
19:46:56	0.927978453	0.329736448	0.70164099	**19:47:00**	0.928119153	0.331813854	0.70098019
19:47:04	0.927711402	0.33356432	0.70031939	**19:47:08**	0.927303652	0.333305847	0.69965859
19:47:12	0.926895902	0.333047373	0.69899779	**19:47:16**	0.926488151	0.334735893	0.698336989
19:47:20	0.926080401	0.338371425	0.697676189	**19:47:24**	0.925672651	0.342006939	0.697015389
19:47:28	0.9252649	0.338465566	0.696354589	**19:47:32**	0.92485715	0.334924193	0.695693789
19:47:36	0.9244494	0.321923223	0.695032989	**19:47:40**	0.924041649	0.299462656	0.694372188
19:47:44	0.923633899	0.277002088	0.693711388	**19:47:48**	0.923226149	0.247309688	0.693050588
19:47:52	0.922818398	0.217617235	0.692389788	**19:47:56**	0.922410648	0.193886402	0.691728988
19:48:00	0.922002898	0.176117119	0.691068188	**19:48:04**	0.922312046	0.158775169	0.690407388
19:48:08	0.922621195	0.141433219	0.689746587	**19:48:12**	0.922930344	0.124091269	0.689085787
19:48:16	0.923239492	0.108926063	0.688424987	**19:48:20**	0.923548641	0.095937602	0.687764187
19:48:24	0.92385779	0.08294914	0.687103387	**19:48:28**	0.924166939	0.0799977	0.686442587
19:48:32	0.924476087	0.07704626	0.685781786	**19:48:36**	0.924785236	0.074094856	0.685120986
19:48:40	0.925094385	0.071143416	0.684460186	**19:48:44**	0.925403533	0.068191976	0.683799386
19:48:48	0.925712682	0.073134104	0.683138586	**19:48:52**	0.926021831	0.078076232	0.682477786
19:48:56	0.926330979	0.085230527	0.681816985	**19:49:00**	0.926640128	0.094597025	0.681156185
19:49:04	0.926309623	0.103582165	0.680495385	**19:49:08**	0.925979118	0.112567375	0.679834585
19:49:12	0.925648613	0.121552515	0.679173785	**19:49:16**	0.925318108	0.132178757	0.678512985
19:49:20	0.924987603	0.144446067	0.677852185	**19:49:24**	0.924657098	0.156713378	0.677191384
19:49:28	0.924326592	0.179960837	0.676530584	**19:49:32**	0.923996087	0.203208297	0.675869784

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:49:36	0.923665582	0.227676476	0.675208984	**19:49:40**	0.923335077	0.253365374	0.674548184
19:49:44	0.923004572	0.27905429	0.673887384	**19:49:48**	0.922674067	0.294124977	0.673226583
19:49:52	0.922343562	0.309195646	0.672565783	**19:49:56**	0.922013057	0.326788192	0.671904983
19:50:00	0.921682552	0.34690258	0.671244183	**19:50:04**	0.922696243	0.367818222	0.670583383
19:50:08	0.923709935	0.387407481	0.669922583	**19:50:12**	0.924723627	0.406996732	0.669261782
19:50:16	0.925737318	0.418085421	0.668600982	**19:50:20**	0.92675101	0.420673548	0.667940182
19:50:24	0.927764702	0.423261667	0.667279382	**19:50:28**	0.928778393	0.431040846	0.666618582
19:50:32	0.929792085	0.438820015	0.665957782	**19:50:36**	0.930805777	0.444763647	0.665296982
19:50:40	0.931819468	0.448871722	0.664636181	**19:50:44**	0.93283316	0.452979807	0.663975381
19:50:48	0.933846852	0.455807519	0.663314581	**19:50:52**	0.934860543	0.45863523	0.662653781
19:50:56	0.935874235	0.464022196	0.661992981	**19:51:00**	0.936887927	0.471968424	0.661332181
19:51:04	0.936607111	0.479143009	0.66067138	**19:51:08**	0.936326296	0.486933495	0.66001058
19:51:12	0.936045481	0.494723977	0.65934978	**19:51:16**	0.935764666	0.501921425	0.65868898
19:51:20	0.935483851	0.508525838	0.65802818	**19:51:24**	0.935203035	0.51513025	0.65736738
19:51:28	0.93492222	0.517710998	0.656706579	**19:51:32**	0.934641405	0.520291746	0.656045779
19:51:36	0.93436059	0.522531125	0.655384979	**19:51:40**	0.934079775	0.524429133	0.654724179
19:51:44	0.93379896	0.526327141	0.654063379	**19:51:48**	0.933518144	0.537216653	0.653402579
19:51:52	0.933237329	0.548106164	0.652741779	**19:51:56**	0.932956514	0.565359963	0.652080978
19:52:00	0.932675699	0.58897805	0.651420178	**19:52:04**	0.933187735	0.613068742	0.650759378
19:52:08	0.93369977	0.644543532	0.650098578	**19:52:12**	0.934211806	0.676018314	0.649437778
19:52:16	0.934723842	0.708099218	0.648776978	**19:52:20**	0.935235878	0.740786254	0.648116177
19:52:24	0.935747914	0.773473272	0.647455377	**19:52:28**	0.936259949	0.800183942	0.646794577
19:52:32	0.936771985	0.826894595	0.646133777	**19:52:36**	0.937284021	0.845489247	0.645472977
19:52:40	0.937796057	0.855967865	0.644812177	**19:52:44**	0.938308093	0.866446482	0.644151376
19:52:48	0.938820128	0.882372273	0.643490576	**19:52:52**	0.939332164	0.898298099	0.642829776
19:52:56	0.9398442	0.909921989	0.642168976	**19:53:00**	0.940356236	0.917244014	0.641508176
19:53:04	0.939980106	0.924036583	0.640847376	**19:53:08**	0.939603977	0.922175041	0.640186575
19:53:12	0.939227847	0.920313534	0.639525775	**19:53:16**	0.938851718	0.919356606	0.638864975
19:53:20	0.938475588	0.919304293	0.638204175	**19:53:24**	0.938099459	0.919251979	0.637543375
19:53:28	0.937723329	0.918613217	0.636882575	**19:53:32**	0.9373472	0.91797449	0.636221775
19:53:36	0.936971071	0.917897981	0.635560974	**19:53:40**	0.936594941	0.919508301	0.634900174
19:53:44	0.936218812	0.921118622	0.634239374	**19:53:48**	0.935842682	0.921911979	0.633578574
19:53:52	0.935466553	0.922705372	0.632917774	**19:53:56**	0.935090423	0.91772783	0.632256974
19:54:00	0.934714294	0.906979353	0.631596173	**19:54:04**	0.934300948	0.896208693	0.630935373
19:54:08	0.933887602	0.888311437	0.630274573	**19:54:12**	0.933474256	0.880414182	0.629613773
19:54:16	0.93306091	0.875472155	0.628952973	**19:54:20**	0.932647564	0.873485429	0.628292173
19:54:24	0.932234218	0.871498703	0.627631372	**19:54:28**	0.931820873	0.870770251	0.626970572
19:54:32	0.931407527	0.870041764	0.626309772	**19:54:36**	0.930994181	0.871782499	0.625648972
19:54:40	0.930580835	0.875992456	0.624988172	**19:54:44**	0.930167489	0.880202379	0.624327372
19:54:48	0.929754143	0.879883794	0.623666572	**19:54:52**	0.929340797	0.879565209	0.623005771
19:54:56	0.928927451	0.877106226	0.622344971	**19:55:00**	0.928514106	0.872506845	0.621684171
19:55:04	0.92800291	0.867849138	0.621023371	**19:55:08**	0.927491714	0.86076193	0.620362571
19:55:12	0.926980518	0.853674722	0.619701771	**19:55:16**	0.926469323	0.836430527	0.61904097
19:55:20	0.925958127	0.8090294	0.61838017	**19:55:24**	0.925446931	0.781628254	0.61771937
19:55:28	0.924935736	0.754809685	0.61705857	**19:55:32**	0.92442454	0.727991097	0.61639777
19:55:36	0.923913344	0.703540669	0.61573697	**19:55:40**	0.923402149	0.681458373	0.615076169
19:55:44	0.922890953	0.659376086	0.614415369	**19:55:48**	0.922379757	0.649346368	0.613754569
19:55:52	0.921868561	0.639316651	0.613093769	**19:55:56**	0.921357366	0.627047505	0.612432969
19:56:00	0.92084617	0.612538933	0.611772169	**19:56:04**	0.920581715	0.598177439	0.611111369
19:56:08	0.920317261	0.587327414	0.610450568	**19:56:12**	0.920052806	0.576477391	0.609789768
19:56:16	0.919788352	0.568345945	0.609128968	**19:56:20**	0.919523897	0.56293308	0.608468168
19:56:24	0.919259443	0.557520215	0.607807368	**19:56:28**	0.918994988	0.557084136	0.607146568
19:56:32	0.918730534	0.556648057	0.606485767	**19:56:36**	0.918466079	0.566705131	0.605824967
19:56:40	0.918201625	0.587255356	0.605164167	**19:56:44**	0.91793717	0.607805584	0.604503367
19:56:48	0.917672715	0.615096402	0.603842567	**19:56:52**	0.917408261	0.62238722	0.603181767
19:56:56	0.917143806	0.630567739	0.602520966	**19:57:00**	0.916879352	0.639637968	0.601860166
19:57:04	0.916402487	0.648581573	0.601199366	**19:57:08**	0.915925623	0.657525179	0.600538566

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
19:57:12	0.915448758	0.666468793	0.599877766	**19:57:16**	0.914971894	0.679299999	0.599216966
19:57:20	0.914495029	0.696018806	0.598556166	**19:57:24**	0.914018165	0.712737613	0.597895365
19:57:28	0.9135413	0.722044489	0.597234565	**19:57:32**	0.913064436	0.731351382	0.596573765
19:57:36	0.912587571	0.731113426	0.595912965	**19:57:40**	0.912110707	0.721330654	0.595252165
19:57:44	0.911633842	0.711547883	0.594591365	**19:57:48**	0.911156978	0.698686222	0.593930564
19:57:52	0.910680113	0.68582457	0.593269764	**19:57:56**	0.910203249	0.673759221	0.592608964
19:58:00	0.909726384	0.662490183	0.591948164	**19:58:04**	0.909527348	0.651386755	0.591287364
19:58:08	0.909328313	0.641493228	0.590626564	**19:58:12**	0.909129277	0.6315997	0.589965763
19:58:16	0.908930241	0.622251371	0.589304963	**19:58:20**	0.908731205	0.613448241	0.588644163
19:58:24	0.908532169	0.604645111	0.587983363	**19:58:28**	0.908333133	0.592620618	0.587322563
19:58:32	0.908134097	0.580596126	0.586661763	**19:58:36**	0.907935061	0.575470764	0.586000963
19:58:40	0.907736025	0.577244531	0.585340162	**19:58:44**	0.907536989	0.579018298	0.584679362
19:58:48	0.907337953	0.566245188	0.584018562	**19:58:52**	0.907138917	0.553472076	0.583357762
19:58:56	0.906939881	0.541876753	0.582696962	**19:59:00**	0.906740845	0.531459217	0.582036162
19:59:04	0.906242298	0.520863147	0.581375361	**19:59:08**	0.90574375	0.525259389	0.580714561
19:59:12	0.905245203	0.529655631	0.580053761	**19:59:16**	0.904746656	0.531920804	0.579392961
19:59:20	0.904248108	0.53205491	0.578732161	**19:59:24**	0.903749561	0.532189016	0.578071361
19:59:28	0.903251013	0.536914767	0.57741056	**19:59:32**	0.902752466	0.541640519	0.57674976
19:59:36	0.902253919	0.553469947	0.57608896	**19:59:40**	0.901755371	0.572403054	0.57542816
19:59:44	0.901256824	0.591336159	0.57476736	**19:59:48**	0.900758277	0.609590026	0.57410656
19:59:52	0.900259729	0.627843893	0.57344576	**19:59:56**	0.899761182	0.645351026	0.572784959
20:00:00	1.399262635	1.12202233	1.072124159	**20:00:04**	1.398040592	1.112589381	1.071463359
20:00:08	1.39681855	1.115655188	1.070802559	**20:00:12**	0.895596508	0.618720995	0.570141759
20:00:16	0.894374466	0.621786811	0.569480959	**20:00:20**	0.893152424	0.624852618	0.568820158
20:00:24	0.891930382	0.627918425	0.568159358	**20:00:28**	0.89070834	0.620358009	0.567498558
20:00:32	0.889486298	0.612797601	0.566837758	**20:00:36**	0.888264256	0.597151465	0.566176958
20:00:40	0.887042214	0.578810091	0.565516158	**20:00:44**	0.885820172	0.560468714	0.564855357
20:00:48	0.88459813	0.54644218	0.564194557	**20:00:52**	0.883376088	0.532415643	0.563533757
20:00:56	0.882154046	0.522849876	0.562872957	**20:01:00**	0.880932004	0.517744878	0.562212157
20:01:04	0.880412677	0.513058758	0.561551357	**20:01:08**	0.87989335	0.521127239	0.560890557
20:01:12	0.879374023	0.52919572	0.560229756	**20:01:16**	0.878854697	0.533489671	0.559568956
20:01:20	0.87833537	0.534009088	0.558908156	**20:01:24**	0.877816043	0.534528506	0.558247356
20:01:28	0.877296716	0.527403563	0.557586556	**20:01:32**	0.876777389	0.520278621	0.556925756
20:01:36	0.876258063	0.512227914	0.556264955	**20:01:40**	0.875738736	0.503868618	0.555604155
20:01:44	0.875219409	0.495509323	0.554943355	**20:01:48**	0.874700082	0.482137557	0.554282555
20:01:52	0.874180756	0.46876579	0.553621755	**20:01:56**	0.873661429	0.459569284	0.552960955
20:02:00	0.873142102	0.451764527	0.552300154	**20:02:04**	0.871524431	0.443305069	0.551639354
20:02:08	0.86990676	0.437299924	0.550978554	**20:02:12**	0.868289089	0.431294779	0.550317754
20:02:16	0.866671418	0.416409796	0.549656954	**20:02:20**	0.865053747	0.392644968	0.548996154
20:02:24	0.863436076	0.368880148	0.548335354	**20:02:28**	0.861818405	0.343152035	0.547674553
20:02:32	0.860200735	0.317423913	0.547013753	**20:02:36**	0.858583064	0.290181777	0.546352953
20:02:40	0.856965393	0.261425627	0.545692153	**20:02:44**	0.855347722	0.232918502	0.545031353
20:02:48	0.853730051	0.205158489	0.544370553	**20:02:52**	0.85211238	0.177398476	0.543709752
20:02:56	0.850494709	0.147572855	0.543048952	**20:03:00**	0.848877038	0.115681625	0.542388152
20:03:04	0.848243424	0.084376977	0.541727352	**20:03:08**	0.847609811	0.07552343	0.541066552
20:03:12	0.846976197	0.066669884	0.540405752	**20:03:16**	0.846342584	0.064764219	0.539744951
20:03:20	0.84570897	0.069806507	0.539084151	**20:03:24**	0.845075357	0.074848795	0.538423351
20:03:28	0.844441743	0.087688828	0.537762551	**20:03:32**	0.843808129	0.108326641	0.537101751
20:03:36	0.84340814	0.135493998	0.536757491	**20:03:40**	0.843071249	0.169089214	0.536498725
20:03:44	0.842734358	0.202684466	0.536239959	**20:03:48**	0.842397467	0.242941517	0.535981193
20:03:52	0.842060576	0.28319855	0.535722427	**20:03:56**	0.841723686	0.323089754	0.535463661
20:04:00	0.841386795	0.362615112	0.535204896	**20:04:04**	0.840087259	0.401566653	0.53494613
20:04:08	0.838787723	0.424343449	0.534687364	**20:04:12**	0.837488187	0.447120237	0.534428598
20:04:16	0.836188651	0.461033571	0.534169832	**20:04:20**	0.834889116	0.466083442	0.533911066
20:04:24	0.83358958	0.471133313	0.5336523	**20:04:28**	0.832290044	0.47741392	0.533393534
20:04:32	0.830990508	0.483694525	0.533134768	**20:04:36**	0.829690972	0.493694245	0.532876002
20:04:40	0.828391436	0.507413079	0.532617236	**20:04:44**	0.827091901	0.521131911	0.53235847

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:04:48	0.825792365	0.526477982	0.532099704	**20:04:52**	0.824492829	0.531824055	0.531840938
20:04:56	0.823193293	0.53881372	0.531582172	**20:05:00**	0.821893757	0.547446976	0.531323406
20:05:04	0.821756981	0.556773339	0.53106464	**20:05:08**	0.821620205	0.57428661	0.530805874
20:05:12	0.821483429	0.591799872	0.530547109	**20:05:16**	0.821346653	0.604119934	0.530288343
20:05:20	0.821209877	0.614708923	0.530029577	**20:05:24**	0.821073101	0.625297913	0.529770811
20:05:28	0.820936326	0.639659432	0.529512045	**20:05:32**	0.82079955	0.654020925	0.529253279
20:05:36	0.820662774	0.665710944	0.528994513	**20:05:40**	0.820525998	0.674729472	0.528735747
20:05:44	0.820389222	0.683747981	0.528476981	**20:05:48**	0.820252446	0.689426017	0.528218215
20:05:52	0.82011567	0.695104052	0.527959449	**20:05:56**	0.819978894	0.699890512	0.527700683
20:06:00	0.819842118	0.704379769	0.527441917	**20:06:04**	0.818636571	0.708231948	0.527183151
20:06:08	0.817431023	0.715097269	0.526924385	**20:06:12**	0.816225476	0.721962607	0.526665619
20:06:16	0.815019928	0.732398278	0.526406853	**20:06:20**	0.813814381	0.746404317	0.526148087
20:06:24	0.812608834	0.760410338	0.525889321	**20:06:28**	0.811403286	0.776589905	0.525630556
20:06:32	0.810197739	0.792769473	0.52537179	**20:06:36**	0.808992192	0.801475324	0.525113024
20:06:40	0.807786644	0.802707386	0.524854258	**20:06:44**	0.806581097	0.803939485	0.524595492
20:06:48	0.80537555	0.79354018	0.524336726	**20:06:52**	0.804170002	0.783140839	0.52407796
20:06:56	0.802964455	0.767805949	0.523819194	**20:07:00**	0.801758907	0.747535492	0.523560428
20:07:04	0.801186215	0.72764227	0.523301662	**20:07:08**	0.800613523	0.715046876	0.523042896
20:07:12	0.800040831	0.702451501	0.52278413	**20:07:16**	0.799468139	0.691550025	0.522525364
20:07:20	0.798895447	0.682342449	0.522266598	**20:07:24**	0.798322755	0.673134873	0.522007832
20:07:28	0.797750063	0.6612123	0.521749066	**20:07:32**	0.797177371	0.649289709	0.5214903
20:07:36	0.796604679	0.632217308	0.521231534	**20:07:40**	0.796031987	0.609995072	0.520972768
20:07:44	0.795459295	0.587772844	0.520714003	**20:07:48**	0.794886603	0.564214266	0.520455237
20:07:52	0.794313911	0.540655693	0.520196471	**20:07:56**	0.793741219	0.515285387	0.519937705
20:08:00	0.793168527	0.488103348	0.519678939	**20:08:04**	0.792026975	0.460582223	0.519420173
20:08:08	0.790885424	0.431611266	0.519161407	**20:08:12**	0.789743873	0.402640312	0.518902641
20:08:16	0.788602322	0.381223354	0.518643875	**20:08:20**	0.78746077	0.3623244	0.518385109
20:08:24	0.786319219	0.343425446	0.518126343	**20:08:28**	0.785177668	0.332963402	0.517867577
20:08:32	0.784036117	0.32250135	0.517608811	**20:08:36**	0.782894565	0.311598999	0.517350045
20:08:40	0.781753014	0.300256359	0.517091279	**20:08:44**	0.780611463	0.288913719	0.516832513
20:08:48	0.779469912	0.258508843	0.516573747	**20:08:52**	0.77832836	0.228103949	0.516314981
20:08:56	0.777186809	0.21501328	0.516056216	**20:09:00**	0.776045258	0.20769399	0.51579745
20:09:04	0.775687136	0.200841707	0.515538684	**20:09:08**	0.775329014	0.173132403	0.515279918
20:09:12	0.774970892	0.145423099	0.515021152	**20:09:16**	0.77461277	0.12535736	0.514762386
20:09:20	0.774254648	0.112935204	0.51450362	**20:09:24**	0.773896526	0.100513048	0.514244854
20:09:28	0.773538404	0.088090892	0.513986088	**20:09:32**	0.773180282	0.075668736	0.513727322
20:09:36	0.77282216	0.070913221	0.513468556	**20:09:40**	0.772464038	0.073824313	0.51320979
20:09:44	0.772105916	0.076735404	0.512951024	**20:09:48**	0.771747794	0.091299074	0.512692258
20:09:52	0.771389672	0.10586278	0.512433492	**20:09:56**	0.77103155	0.114196689	0.512174726
20:10:00	0.770673428	0.120454047	0.51191596	**20:10:04**	0.770371456	0.126744874	0.511657194
20:10:08	0.770069484	0.14068433	0.511398428	**20:10:12**	0.769767511	0.154623785	0.511139663
20:10:16	0.769465539	0.16966181	0.510880897	**20:10:20**	0.769163567	0.185798421	0.510622131
20:10:24	0.768861594	0.201935051	0.510363365	**20:10:28**	0.768559622	0.215752214	0.510104599
20:10:32	0.76825765	0.229569395	0.509845833	**20:10:36**	0.767955677	0.245694478	0.509587067
20:10:40	0.767653705	0.264127479	0.509328301	**20:10:44**	0.767351733	0.28256048	0.509069535
20:10:48	0.76704976	0.308320675	0.508810769	**20:10:52**	0.766747788	0.334080879	0.508552003
20:10:56	0.766445816	0.359378428	0.508293237	**20:11:00**	0.766143843	0.384521757	0.508034471
20:11:04	0.765721125	0.409593116	0.507775705	**20:11:08**	0.765298406	0.437327105	0.507516939
20:11:12	0.764875687	0.465061096	0.507258173	**20:11:16**	0.764452968	0.477045242	0.506999407
20:11:20	0.764030249	0.483779439	0.506740641	**20:11:24**	0.76360753	0.490513636	0.506481875
20:11:28	0.763184811	0.503562124	0.50622311	**20:11:32**	0.762762093	0.516610612	0.505964344
20:11:36	0.762339374	0.533835465	0.505705578	**20:11:40**	0.761916655	0.555236681	0.505446812
20:11:44	0.761493936	0.576637896	0.505188046	**20:11:48**	0.761071217	0.602666559	0.50492928
20:11:52	0.760648498	0.628695221	0.504670514	**20:11:56**	0.76022578	0.651259074	0.504411748
20:12:00	0.759803061	0.670358117	0.504152982	**20:12:04**	0.759910511	0.689773186	0.503894216
20:12:08	0.760017961	0.705517623	0.50363545	**20:12:12**	0.760125411	0.72126206	0.503376684
20:12:16	0.760232861	0.732409311	0.503117918	**20:12:20**	0.760340311	0.738959342	0.502859152

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:12:24	0.760447761	0.745509391	0.502600386	**20:12:28**	0.760555211	0.756644794	0.50234162
20:12:32	0.760662661	0.767780161	0.502082854	**20:12:36**	0.760770111	0.778915563	0.501824088
20:12:40	0.760877561	0.79005093	0.501565322	**20:12:44**	0.760985011	0.799674237	0.501306557
20:12:48	0.761092461	0.804761291	0.501047791	**20:12:52**	0.761199911	0.80984831	0.500789025
20:12:56	0.761307361	0.814222076	0.500530259	**20:13:00**	0.761414811	0.81788259	0.500271493
20:13:04	0.761350311	0.821440606	0.500012727	**20:13:08**	0.761285811	0.824998623	0.499753961
20:13:12	0.761221311	0.82855664	0.499495195	**20:13:16**	0.761156812	0.838521923	0.499236429
20:13:20	0.761092312	0.854894472	0.498977663	**20:13:24**	0.761027812	0.871267057	0.498718897
20:13:28	0.760963313	0.886297554	0.498460131	**20:13:32**	0.760898813	0.901328015	0.498201365
20:13:36	0.760834313	0.908769254	0.497942599	**20:13:40**	0.760769814	0.908621234	0.497683833
20:13:44	0.760705314	0.908473214	0.497425067	**20:13:48**	0.760640814	0.895495064	0.497166301
20:13:52	0.760576314	0.882516914	0.496907535	**20:13:56**	0.760511815	0.866583677	0.49664877
20:14:00	0.760447315	0.847695317	0.496390004	**20:14:04**	0.760429063	0.828834525	0.496131238
20:14:08	0.760410811	0.811653279	0.495872472	**20:14:12**	0.760392559	0.794471997	0.495613706
20:14:16	0.760374307	0.786404114	0.49535494	**20:14:20**	0.760356055	0.78744963	0.495096174
20:14:24	0.760337803	0.788495111	0.494837408	**20:14:28**	0.760319551	0.777554321	0.494578642
20:14:32	0.760301299	0.76661353	0.494319876	**20:14:36**	0.760283047	0.760925513	0.49406111
20:14:40	0.760264796	0.760490235	0.493802344	**20:14:44**	0.760246544	0.760054956	0.493543578
20:14:48	0.760228292	0.761083028	0.493284812	**20:14:52**	0.76021004	0.762111134	0.493026046
20:14:56	0.760191788	0.761562162	0.49276728	**20:15:00**	0.260173536	0.259436181	-0.007491486
20:15:04	0.259476619	0.256905623	-0.007750252	**20:15:08**	0.258779702	0.245955343	-0.008009018
20:15:12	0.758082785	0.73500508	0.491732217	**20:15:16**	0.757385868	0.724054799	0.491473451
20:15:20	0.756688952	0.713104536	0.491214685	**20:15:24**	0.755992035	0.702154255	0.490955919
20:15:28	0.755295118	0.688848624	0.490697153	**20:15:32**	0.754598201	0.675542992	0.490438387
20:15:36	0.753901284	0.662519482	0.490179621	**20:15:40**	0.753204367	0.649778111	0.489920855
20:15:44	0.752507451	0.63703674	0.489662089	**20:15:48**	0.751810534	0.609240227	0.489403323
20:15:52	0.751113617	0.581443733	0.489144557	**20:15:56**	0.7504167	0.555078789	0.488885791
20:16:00	0.749719783	0.529191031	0.488627025	**20:16:04**	0.748600064	0.503051244	0.488368259
20:16:08	0.747480344	0.478976078	0.488109493	**20:16:12**	0.746360625	0.454900912	0.487850727
20:16:16	0.745240906	0.434892414	0.487591961	**20:16:20**	0.744121187	0.418950581	0.487333195
20:16:24	0.743001467	0.40300875	0.487074429	**20:16:28**	0.741881748	0.401756471	0.486815664
20:16:32	0.740762029	0.400504196	0.486556898	**20:16:36**	0.739642309	0.394631029	0.486298132
20:16:40	0.73852259	0.38413697	0.486039366	**20:16:44**	0.737402871	0.373642911	0.4857806
20:16:48	0.736283151	0.357239708	0.485521834	**20:16:52**	0.735163432	0.340836518	0.485263068
20:16:56	0.734043713	0.326949823	0.485004302	**20:17:00**	0.732923993	0.31557964	0.484745536
20:17:04	0.732513923	0.304632467	0.48448677	**20:17:08**	0.732103852	0.284495348	0.484228004
20:17:12	0.731693782	0.264358228	0.483969238	**20:17:16**	0.731283711	0.252093199	0.483710472
20:17:20	0.730873641	0.247700278	0.483451706	**20:17:24**	0.73046357	0.243307357	0.48319294
20:17:28	0.7300535	0.230293457	0.482934174	**20:17:32**	0.729643429	0.217279557	0.482675408
20:17:36	0.729233359	0.199261411	0.482416642	**20:17:40**	0.728823288	0.176239055	0.482157877
20:17:44	0.728413218	0.153216682	0.481899111	**20:17:48**	0.728003147	0.133397497	0.481640345
20:17:52	0.727593077	0.113578312	0.481381579	**20:17:56**	0.727183006	0.095619803	0.481122813
20:18:00	0.726772936	0.079521932	0.480864047	**20:18:04**	0.7266938	0.063621327	0.480605281
20:18:08	0.726614665	0.054411691	0.480346515	**20:18:12**	0.726535529	0.04520209	0.480087749
20:18:16	0.726456393	0.030804627	0.479828983	**20:18:20**	0.726377258	0.011219339	0.479570217
20:18:24	0.726298122	-0.00836595	0.479311451	**20:18:28**	0.726218986	0.004424896	0.479052685
20:18:32	0.726139851	0.017215742	0.478793919	**20:18:36**	0.726060715	0.015988959	0.478535153
20:18:40	0.725981579	0.000744546	0.478276387	**20:18:44**	0.725902444	-0.014499902	0.478017621
20:18:48	0.725823308	-0.019632539	0.477758855	**20:18:52**	0.725744172	-0.024765177	0.477500089
20:18:56	0.725665037	-0.02820903	0.477241324	**20:19:00**	0.725585901	-0.031089956	0.476982558
20:19:04	0.725492943	-0.033979157	0.476723792	**20:19:08**	0.725399984	-0.025039944	0.476465026
20:19:12	0.725307026	-0.016100696	0.47620626	**20:19:16**	0.725214067	-0.002613861	0.475947494
20:19:20	0.725121109	0.015420631	0.475688728	**20:19:24**	0.72502815	0.033455123	0.475429962
20:19:28	0.724935192	0.059119377	0.475171196	**20:19:32**	0.724842233	0.084783595	0.47491243
20:19:36	0.724749275	0.104469672	0.474653664	**20:19:40**	0.724656316	0.11817757	0.474394898
20:19:44	0.724563358	0.131885469	0.474136132	**20:19:48**	0.724470399	0.14781312	0.473877366
20:19:52	0.724377441	0.163740772	0.4736186	**20:19:56**	0.724284482	0.183344793	0.473359834

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:20:00	0.724191524	0.206625184	0.473101068	**20:20:04**	0.7228999	0.229191051	0.472842302
20:20:08	0.721608276	0.25497224	0.472583536	**20:20:12**	0.720316652	0.280753412	0.472324771
20:20:16	0.719025028	0.30024571	0.472066005	**20:20:20**	0.717733405	0.313449126	0.471807239
20:20:24	0.716441781	0.326652534	0.471548473	**20:20:28**	0.715150157	0.32794223	0.471289707
20:20:32	0.713858533	0.329231926	0.471030941	**20:20:36**	0.712566909	0.32946233	0.470772175
20:20:40	0.711275285	0.328633425	0.470513409	**20:20:44**	0.709983662	0.327804521	0.470254643
20:20:48	0.708692038	0.334241113	0.469995877	**20:20:52**	0.707400414	0.340677696	0.469737111
20:20:56	0.70610879	0.347114284	0.469478345	**20:21:00**	0.704817166	0.353550872	0.469219579
20:21:04	0.704932905	0.360826367	0.468960813	**20:21:08**	0.705048644	0.37296991	0.468702047
20:21:12	0.705164384	0.385113455	0.468443281	**20:21:16**	0.705280123	0.395260794	0.468184515
20:21:20	0.705395862	0.403411928	0.467925749	**20:21:24**	0.705511601	0.411563063	0.467666984
20:21:28	0.70562734	0.409974514	0.467408218	**20:21:32**	0.70574308	0.408385967	0.467149452
20:21:36	0.705858819	0.406797418	0.466890686	**20:21:40**	0.705974558	0.405208871	0.46663192
20:21:44	0.706090297	0.403620322	0.466373154	**20:21:48**	0.706206036	0.397015127	0.466114388
20:21:52	0.706321775	0.39040993	0.465855622	**20:21:56**	0.706437515	0.384835398	0.465596856
20:22:00	0.706553254	0.380291531	0.46533809	**20:22:04**	0.705885925	0.375280888	0.465079324
20:22:08	0.705218596	0.374210999	0.464820558	**20:22:12**	0.704551268	0.373141109	0.464561792
20:22:16	0.703883939	0.371695429	0.464303026	**20:22:20**	0.70321661	0.369873968	0.46404426
20:22:24	0.702549281	0.368052507	0.463785494	**20:22:28**	0.701881952	0.369200399	0.463526728
20:22:32	0.701214624	0.37034829	0.463267962	**20:22:36**	0.700547295	0.371496181	0.463009196
20:22:40	0.699879966	0.372644073	0.462750431	**20:22:44**	0.699212637	0.373791964	0.462491665
20:22:48	0.698545309	0.382111051	0.462232899	**20:22:52**	0.69787798	0.390430137	0.461974133
20:22:56	0.697210651	0.391047248	0.461715367	**20:23:00**	0.696543322	0.383962383	0.461456601
20:23:04	0.696382153	0.37717923	0.461197835	**20:23:08**	0.696220984	0.379469348	0.460939069
20:23:12	0.696059815	0.381759466	0.460680303	**20:23:16**	0.695898646	0.382756022	0.460421537
20:23:20	0.695737476	0.382459017	0.460162771	**20:23:24**	0.695576307	0.382162013	0.459904005
20:23:28	0.695415138	0.383095886	0.459645239	**20:23:32**	0.695253969	0.384029758	0.459386473
20:23:36	0.6950928	0.38260306	0.459127707	**20:23:40**	0.694931631	0.378815793	0.458868941
20:23:44	0.694770461	0.375028526	0.458610175	**20:23:48**	0.694609292	0.360414048	0.458351409
20:23:52	0.694448123	0.345799571	0.458092643	**20:23:56**	0.694286954	0.33574551	0.457833878
20:24:00	0.694125785	0.330251874	0.457575112	**20:24:04**	0.693609703	0.324546672	0.457316346
20:24:08	0.693093621	0.327937086	0.45705758	**20:24:12**	0.69257754	0.3313275	0.456798814
20:24:16	0.692061458	0.329655809	0.456540048	**20:24:20**	0.691545376	0.322922022	0.456281282
20:24:24	0.691029295	0.316188226	0.456022516	**20:24:28**	0.690513213	0.306667166	0.45576375
20:24:32	0.689997131	0.297146105	0.455504984	**20:24:36**	0.68948105	0.288112828	0.455246218
20:24:40	0.688964968	0.279567343	0.454987452	**20:24:44**	0.688448886	0.27102185	0.454728686
20:24:48	0.687932804	0.27506056	0.45446992	**20:24:52**	0.687416723	0.279099271	0.454211154
20:24:56	0.686900641	0.284094868	0.453952388	**20:25:00**	0.686384559	0.29004737	0.453693622
20:25:04	0.686319156	0.296268514	0.453434856	**20:25:08**	0.686253753	0.307914616	0.453176091
20:25:12	0.68618835	0.31956071	0.452917325	**20:25:16**	0.686122947	0.333907607	0.452658559
20:25:20	0.686057544	0.350955302	0.452399793	**20:25:24**	0.68599214	0.368002998	0.452141027
20:25:28	0.685926737	0.364992759	0.451882261	**20:25:32**	0.685861334	0.361982525	0.451623495
20:25:36	0.685795931	0.365282526	0.451364729	**20:25:40**	0.685730528	0.374892764	0.451105963
20:25:44	0.685665125	0.384503005	0.450847197	**20:25:48**	0.685599721	0.399953466	0.450588431
20:25:52	0.685534318	0.415403926	0.450329665	**20:25:56**	0.685468915	0.429789248	0.450070899
20:26:00	0.685403512	0.443109433	0.449812133	**20:26:04**	0.685835256	0.456725959	0.449553367
20:26:08	0.686267001	0.448142485	0.449294601	**20:26:12**	0.686698745	0.43955901	0.449035835
20:26:16	0.68713049	0.428565103	0.448777069	**20:26:20**	0.687562234	0.415160766	0.448518303
20:26:24	0.687993979	0.401756428	0.448259538	**20:26:28**	0.688425723	0.408675811	0.448000772
20:26:32	0.688857468	0.415595193	0.447742006	**20:26:36**	0.689289212	0.42454173	0.44748324
20:26:40	0.689720957	0.435515421	0.447224474	**20:26:44**	0.690152701	0.446489112	0.446965708
20:26:48	0.690584446	0.452625255	0.446706942	**20:26:52**	0.69101619	0.458761399	0.446448176
20:26:56	0.691447935	0.459442959	0.44618941	**20:27:00**	0.691879679	0.458306328	0.445930644
20:27:04	0.691652558	0.456776952	0.445671878	**20:27:08**	0.691425437	0.457125511	0.445413112
20:27:12	0.691198315	0.457474069	0.445154346	**20:27:16**	0.690971194	0.455965234	0.44489558
20:27:20	0.690744073	0.453837264	0.444636814	**20:27:24**	0.690516951	0.451709294	0.444378048
20:27:28	0.69028983	0.463807603	0.444119282	**20:27:32**	0.690062709	0.475905913	0.443860516

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:27:36	0.689835588	0.478212746	0.44360175	**20:27:40**	0.689608466	0.470728109	0.443342985
20:27:44	0.689381345	0.463243473	0.443084219	**20:27:48**	0.689154224	0.451709066	0.442825453
20:27:52	0.688927103	0.440174664	0.442566687	**20:27:56**	0.688699981	0.419909873	0.442307921
20:28:00	0.68847286	0.390914699	0.442049155	**20:28:04**	0.688221906	0.364749211	0.441790389
20:28:08	0.687970951	0.34711541	0.441531623	**20:28:12**	0.687719997	0.329481613	0.441272857
20:28:16	0.687469043	0.320400109	0.441014091	**20:28:20**	0.687218088	0.319870896	0.440755325
20:28:24	0.686967134	0.319341692	0.440496559	**20:28:28**	0.68671618	0.314286068	0.440237793
20:28:32	0.686465225	0.309230445	0.439979027	**20:28:36**	0.686214271	0.311519016	0.439720261
20:28:40	0.685963317	0.32115179	0.439461495	**20:28:44**	0.685712362	0.330784565	0.439202729
20:28:48	0.685461408	0.340417334	0.438943963	**20:28:52**	0.685210454	0.350050109	0.438685197
20:28:56	0.684959499	0.362062683	0.438426432	**20:29:00**	0.684708545	0.374868521	0.438167666
20:29:04	0.68449091	0.387694221	0.4379089	**20:29:08**	0.684273275	0.396818742	0.437650134
20:29:12	0.68405564	0.405943263	0.437391368	**20:29:16**	0.683838005	0.41717875	0.437132602
20:29:20	0.68362037	0.430525206	0.436873836	**20:29:24**	0.683402735	0.44387166	0.43661507
20:29:28	0.6831851	0.447974818	0.436356304	**20:29:32**	0.682967465	0.452077982	0.436097538
20:29:36	0.68274983	0.455118618	0.435838772	**20:29:40**	0.682532195	0.457096738	0.435580006
20:29:44	0.68231456	0.459074857	0.43532124	**20:29:48**	0.682096925	0.457349738	0.435062474
20:29:52	0.68187929	0.455624619	0.434803708	**20:29:56**	0.681661655	0.4538995	0.434544942
20:30:00	1.18144402	0.952174381	0.934286176	**20:30:04**	1.18097672	0.950300441	0.93402741
20:30:08	1.18050942	0.950958681	0.933768645	**20:30:12**	0.680042121	0.451616922	0.433509879
20:30:16	0.679574821	0.456012589	0.433251113	**20:30:20**	0.679107521	0.464145692	0.432992347
20:30:24	0.678640222	0.472278791	0.432733581	**20:30:28**	0.678172922	0.472445784	0.432474815
20:30:32	0.677705622	0.472612777	0.432216049	**20:30:36**	0.677238322	0.469085764	0.431957283
20:30:40	0.676771023	0.461864755	0.431698517	**20:30:44**	0.676303723	0.45350847	0.431439751
20:30:48	0.675836423	0.441746368	0.431180985	**20:30:52**	0.675369123	0.42998427	0.430922219
20:30:56	0.674901824	0.419918102	0.430663453	**20:31:00**	0.674434524	0.411547867	0.430404687
20:31:04	0.674008191	0.403202053	0.430145921	**20:31:08**	0.673581859	0.388256171	0.429887155
20:31:12	0.673155526	0.373310286	0.429628389	**20:31:16**	0.672729193	0.356705999	0.429369623
20:31:20	0.672302861	0.338443301	0.429110857	**20:31:24**	0.671876528	0.320180608	0.428852092
20:31:28	0.671450195	0.305805236	0.428593326	**20:31:32**	0.671023863	0.291429864	0.42833456
20:31:36	0.67059753	0.278337467	0.428075794	**20:31:40**	0.670171197	0.266528047	0.427817028
20:31:44	0.669744865	0.254718635	0.427558262	**20:31:48**	0.669318532	0.251917446	0.427299496
20:31:52	0.668892199	0.249116266	0.42704073	**20:31:56**	0.668465867	0.246315086	0.426781964
20:32:00	0.668039534	0.243513888	0.426523198	**20:32:04**	0.667127356	0.240423103	0.426264432
20:32:08	0.666215178	0.237332318	0.426005666	**20:32:12**	0.665303	0.234241533	0.4257469
20:32:16	0.664390822	0.234759825	0.425488134	**20:32:20**	0.663478644	0.238887212	0.425229368
20:32:24	0.662566466	0.243014599	0.424970602	**20:32:28**	0.661654287	0.254335695	0.424711836
20:32:32	0.660742109	0.265656782	0.42445307	**20:32:36**	0.659829931	0.272738084	0.424194304
20:32:40	0.658917753	0.275579581	0.423935539	**20:32:44**	0.658005575	0.278421088	0.423676773
20:32:48	0.657093397	0.288119334	0.423418007	**20:32:52**	0.656181219	0.297817581	0.423159241
20:32:56	0.655269041	0.302751769	0.422900475	**20:33:00**	0.654356863	0.302921882	0.422641709
20:33:04	0.653898006	0.305755828	0.422382943	**20:33:08**	0.653439149	0.315770622	0.422124177
20:33:12	0.652980292	0.325785421	0.421865411	**20:33:16**	0.652521435	0.334229847	0.421606645
20:33:20	0.652062578	0.341103904	0.421347879	**20:33:24**	0.651603721	0.347977961	0.421089113
20:33:28	0.651144864	0.34289692	0.420830347	**20:33:32**	0.650686007	0.337815879	0.420571581
20:33:36	0.65022715	0.33605085	0.420312815	**20:33:40**	0.649768293	0.337601825	0.420054049
20:33:44	0.649309436	0.339152801	0.419795283	**20:33:48**	0.648850579	0.335423822	0.419536517
20:33:52	0.648391722	0.331694843	0.419277752	**20:33:56**	0.647932865	0.334403735	0.419018986
20:34:00	0.647474008	0.343550497	0.41876022	**20:34:04**	0.646647984	0.352478396	0.418501454
20:34:08	0.645821959	0.350368111	0.418242688	**20:34:12**	0.644995934	0.348257826	0.417983922
20:34:16	0.644169909	0.352215201	0.417725156	**20:34:20**	0.643343884	0.362240237	0.41746639
20:34:24	0.642517859	0.372265274	0.417207624	**20:34:28**	0.641691835	0.390290353	0.416948858
20:34:32	0.64086581	0.408315431	0.416690092	**20:34:36**	0.640039785	0.423407522	0.416431326
20:34:40	0.63921376	0.435566621	0.41617256	**20:34:44**	0.638387735	0.447725719	0.415913794
20:34:48	0.637561711	0.448771251	0.415655028	**20:34:52**	0.636735686	0.449816783	0.415396262
20:34:56	0.635909661	0.449292626	0.415137496	**20:35:00**	0.635083636	0.447198775	0.41487873
20:35:04	0.634935115	0.445664726	0.414619964	**20:35:08**	0.634786595	0.444598532	0.414361199

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:35:12	0.634638074	0.443532334	0.414102433	**20:35:16**	0.634489553	0.442466141	0.413843667
20:35:20	0.634341032	0.449837599	0.413584901	**20:35:24**	0.634192511	0.457209053	0.413326135
20:35:28	0.63404399	0.458751144	0.413067369	**20:35:32**	0.63389547	0.460293244	0.412808603
20:35:36	0.633746949	0.458621096	0.412549837	**20:35:40**	0.633598428	0.455877524	0.412291071
20:35:44	0.633449907	0.452159753	0.412032305	**20:35:48**	0.633301386	0.445519333	0.411773539
20:35:52	0.633152865	0.438878922	0.411514773	**20:35:56**	0.633004344	0.429258869	0.411256007
20:36:00	0.632855824	0.4186456	0.410997241	**20:36:04**	0.632041697	0.410744442	0.410738475
20:36:08	0.631227571	0.412169876	0.410479709	**20:36:12**	0.630413445	0.413595311	0.410220943
20:36:16	0.629599318	0.410778945	0.409962177	**20:36:20**	0.628785192	0.406548647	0.409703411
20:36:24	0.627971066	0.403181671	0.409444646	**20:36:28**	0.627156939	0.402404659	0.40918588
20:36:32	0.626342813	0.401627651	0.408927114	**20:36:36**	0.625528687	0.403938023	0.408668348
20:36:40	0.62471456	0.407277524	0.408409582	**20:36:44**	0.623900434	0.41279945	0.408150816
20:36:48	0.623086308	0.424868663	0.40789205	**20:36:52**	0.622272181	0.436937877	0.407633284
20:36:56	0.621458055	0.446756383	0.407374518	**20:37:00**	0.620643929	0.45582465	0.407115752
20:37:04	0.620022902	0.462500213	0.406856986	**20:37:08**	0.619401875	0.461652344	0.40659822
20:37:12	0.618780848	0.460804476	0.406339454	**20:37:16**	0.618159822	0.469153207	0.406080688
20:37:20	0.617538795	0.480567469	0.405821922	**20:37:24**	0.616917768	0.486228836	0.405563156
20:37:28	0.616296741	0.474631547	0.40530439	**20:37:32**	0.615675714	0.463034257	0.405045624
20:37:36	0.615054688	0.450326753	0.404786859	**20:37:40**	0.614433661	0.437249175	0.404528093
20:37:44	0.613812634	0.417890207	0.404269327	**20:37:48**	0.613191607	0.379687075	0.404010561
20:37:52	0.61257058	0.341483942	0.403751795	**20:37:56**	0.611949554	0.314328496	0.403493029
20:38:00	0.611328527	0.287173058	0.403234263	**20:38:04**	0.610451859	0.260326461	0.402975497
20:38:08	0.609575191	0.234863565	0.402716731	**20:38:12**	0.608698523	0.209400669	0.402457965
20:38:16	0.607821855	0.205117758	0.402199199	**20:38:20**	0.606945188	0.207894823	0.401940433
20:38:24	0.60606852	0.210671889	0.401681667	**20:38:28**	0.605191852	0.213448963	0.401422901
20:38:32	0.604315184	0.216226028	0.401164135	**20:38:36**	0.603438516	0.214231664	0.400905369
20:38:40	0.602561848	0.210646816	0.400646603	**20:38:44**	0.60168518	0.205740772	0.400387837
20:38:48	0.600808513	0.196871174	0.400129071	**20:38:52**	0.599931845	0.188001577	0.399870306
20:38:56	0.599055177	0.186351145	0.39961154	**20:39:00**	0.598178509	0.187107138	0.399352774
20:39:04	0.597738173	0.185601966	0.399094008	**20:39:08**	0.597297837	0.176533064	0.398835242
20:39:12	0.5968575	0.167464162	0.398576476	**20:39:16**	0.596417164	0.163046662	0.39831771
20:39:20	0.595976828	0.160179648	0.398058944	**20:39:24**	0.595536492	0.161862797	0.397800178
20:39:28	0.595096156	0.168096071	0.397541412	**20:39:32**	0.59465582	0.174329364	0.397282646
20:39:36	0.594215483	0.183879557	0.39702388	**20:39:40**	0.593775147	0.19453539	0.396765114
20:39:44	0.593334811	0.204677619	0.396506348	**20:39:48**	0.592894475	0.21430627	0.396247582
20:39:52	0.592454139	0.223934921	0.395988816	**20:39:56**	0.592013802	0.241213897	0.39573005
20:40:00	0.591573466	0.261042987	0.395471284	**20:40:04**	0.590908649	0.269379836	0.395212518
20:40:08	0.590243832	0.266358272	0.394953753	**20:40:12**	0.589579015	0.263336699	0.394694987
20:40:16	0.588914198	0.255067567	0.394436221	**20:40:20**	0.58824938	0.245049233	0.394177455
20:40:24	0.587584563	0.243911358	0.393918689	**20:40:28**	0.586919746	0.251653934	0.393659923
20:40:32	0.586254929	0.25939651	0.393401157	**20:40:36**	0.585590112	0.275707055	0.393142391
20:40:40	0.584925295	0.294873586	0.392883625	**20:40:44**	0.584260478	0.314537774	0.392624859
20:40:48	0.58359566	0.33569492	0.392366093	**20:40:52**	0.582930843	0.356852066	0.392107327
20:40:56	0.582266026	0.372253643	0.391848561	**20:41:00**	0.581601209	0.385736698	0.391589795
20:41:04	0.580754319	0.398395134	0.391331029	**20:41:08**	0.579907429	0.408905306	0.391072263
20:41:12	0.579060539	0.419415478	0.390813497	**20:41:16**	0.578213649	0.427646937	0.390554731
20:41:20	0.577366759	0.435118834	0.390295966	**20:41:24**	0.576519869	0.441139773	0.3900372
20:41:28	0.575672979	0.44280788	0.389778434	**20:41:32**	0.574826089	0.444475987	0.389519668
20:41:36	0.573979198	0.458457209	0.389260902	**20:41:40**	0.573132308	0.476542806	0.389002136
20:41:44	0.572285418	0.48885594	0.38874337	**20:41:48**	0.571438528	0.483851678	0.388484604
20:41:52	0.570591638	0.478847416	0.388225838	**20:41:56**	0.569744748	0.471298681	0.387967072
20:42:00	0.568897858	0.462901778	0.387708306	**20:42:04**	0.568608295	0.453204726	0.38744954
20:42:08	0.568318731	0.438610577	0.387190774	**20:42:12**	0.568029168	0.424016419	0.386932008
20:42:16	0.567739604	0.413875986	0.386673242	**20:42:20**	0.567450041	0.405220142	0.386414476
20:42:24	0.567160478	0.39711208	0.38615571	**20:42:28**	0.566870914	0.390647378	0.385896944
20:42:32	0.566581351	0.384182676	0.385638178	**20:42:36**	0.566291787	0.375737024	0.385379413
20:42:40	0.566002224	0.36663105	0.385120647	**20:42:44**	0.565712661	0.356480779	0.384861881

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:42:48	0.565423097	0.343197607	0.384603115	**20:42:52**	0.565133534	0.329914436	0.384344349
20:42:56	0.56484397	0.321311423	0.384085583	**20:43:00**	0.564554407	0.314268463	0.383826817
20:43:04	0.564394141	0.307132706	0.383568051	**20:43:08**	0.564233875	0.299487349	0.383309285
20:43:12	0.56407361	0.291841987	0.383050519	**20:43:16**	0.563913344	0.283442803	0.382791753
20:43:20	0.563753078	0.274792341	0.382532987	**20:43:24**	0.563592813	0.266582724	0.382274221
20:43:28	0.563432547	0.259695648	0.382015455	**20:43:32**	0.563272281	0.252808564	0.381756689
20:43:36	0.563112015	0.244264992	0.381497923	**20:43:40**	0.56295175	0.235169267	0.381239157
20:43:44	0.562791484	0.226830664	0.380980391	**20:43:48**	0.562631218	0.220763448	0.380721625
20:43:52	0.562470952	0.21469624	0.38046286	**20:43:56**	0.562310687	0.223699816	0.380204094
20:44:00	0.562150421	0.2327034	0.379945328	**20:44:04**	0.560866382	0.242761611	0.379686562
20:44:08	0.559582342	0.257993347	0.379427796	**20:44:12**	0.558298303	0.273225079	0.37916903
20:44:16	0.557014263	0.284189471	0.378910264	**20:44:20**	0.555730224	0.293731413	0.378651498
20:44:24	0.554446185	0.301246125	0.378392732	**20:44:28**	0.553162145	0.302679147	0.378133966
20:44:32	0.551878106	0.304112168	0.3778752	**20:44:36**	0.550594067	0.309007788	0.377616434
20:44:40	0.549310027	0.315057608	0.377357668	**20:44:44**	0.548025988	0.320579104	0.377098902
20:44:48	0.546741949	0.324515627	0.376840136	**20:44:52**	0.545457909	0.32845215	0.37658137
20:44:56	0.54417387	0.338426721	0.376322604	**20:45:00**	0.042889831	-0.149586024	-0.123936162
20:45:04	0.042727306	-0.138794646	-0.124194927	**20:45:08**	0.042564782	-0.133596443	-0.124453693
20:45:12	0.542402257	0.371601759	0.375287541	**20:45:16**	0.542239733	0.377760725	0.375028775
20:45:20	0.542077209	0.38423994	0.374770009	**20:45:24**	0.541914684	0.389693234	0.374511243
20:45:28	0.54175216	0.392068776	0.374252477	**20:45:32**	0.541589636	0.394444318	0.373993711
20:45:36	0.541427111	0.397892058	0.373734945	**20:45:40**	0.541264587	0.402411986	0.373476179
20:45:44	0.541102062	0.406931914	0.373217413	**20:45:48**	0.540939538	0.405909974	0.372958647
20:45:52	0.540777014	0.404888043	0.372699881	**20:45:56**	0.540614489	0.408066177	0.372441115
20:46:00	0.540451965	0.415444383	0.372182349	**20:46:04**	0.53990878	0.422595684	0.371923583
20:46:08	0.539365594	0.431215574	0.371664817	**20:46:12**	0.538822409	0.439835465	0.371406051
20:46:16	0.538279224	0.443288936	0.371147285	**20:46:20**	0.537736039	0.441575996	0.37088852
20:46:24	0.537192853	0.439863057	0.370629754	**20:46:28**	0.536649668	0.422909273	0.370370988
20:46:32	0.536106483	0.405955489	0.370112222	**20:46:36**	0.535563298	0.388089554	0.369853456
20:46:40	0.535020112	0.369311472	0.36959469	**20:46:44**	0.534476927	0.350533389	0.369335924
20:46:48	0.533933742	0.329135994	0.369077158	**20:46:52**	0.533390556	0.3077386	0.368818392
20:46:56	0.532847371	0.292507592	0.368559626	**20:47:00**	0.532304186	0.28344297	0.36830086
20:47:04	0.53175408	0.274374223	0.368042094	**20:47:08**	0.531203974	0.275165574	0.367783328
20:47:12	0.530653869	0.275956925	0.367524562	**20:47:16**	0.530103763	0.275032086	0.367265796
20:47:20	0.529553657	0.272391048	0.36700703	**20:47:24**	0.529003552	0.269750014	0.366748264
20:47:28	0.528453446	0.263352444	0.366489498	**20:47:32**	0.52790334	0.256954873	0.366230732
20:47:36	0.527353234	0.256268827	0.365971967	**20:47:40**	0.526803129	0.261294306	0.365713201
20:47:44	0.526253023	0.266319785	0.365454435	**20:47:48**	0.525702917	0.271345264	0.365195669
20:47:52	0.525152812	0.276370745	0.364936903	**20:47:56**	0.524602706	0.286026299	0.364678137
20:48:00	0.5240526	0.30031193	0.364419371	**20:48:04**	0.522866996	0.314218749	0.364160605
20:48:08	0.521681393	0.315239298	0.363901839	**20:48:12**	0.520495789	0.316259847	0.363643073
20:48:16	0.519310186	0.318962041	0.363384307	**20:48:20**	0.518124582	0.323345882	0.363125541
20:48:24	0.516938978	0.327729723	0.362866775	**20:48:28**	0.515753375	0.332113563	0.362608009
20:48:32	0.514567771	0.336497403	0.362349243	**20:48:36**	0.513382167	0.342816381	0.362090477
20:48:40	0.512196564	0.351070499	0.361831711	**20:48:44**	0.51101096	0.359324615	0.361572945
20:48:48	0.509825356	0.352747567	0.361314179	**20:48:52**	0.508639753	0.346170514	0.361055414
20:48:56	0.507454149	0.344207141	0.360796648	**20:49:00**	0.506268546	0.346857444	0.360537882
20:49:04	0.506067173	0.350094431	0.360279116	**20:49:08**	0.5058658	0.36352214	0.36002035
20:49:12	0.505664427	0.376949844	0.359761584	**20:49:16**	0.505463054	0.381318194	0.359502818
20:49:20	0.505261681	0.382666749	0.359244052	**20:49:24**	0.505060308	0.384015304	0.358985286
20:49:28	0.504858936	0.384191326	0.35872652	**20:49:32**	0.504657563	0.384367349	0.358467754
20:49:36	0.50445619	0.383955706	0.358208988	**20:49:40**	0.504254817	0.38295638	0.357950222
20:49:44	0.504053444	0.381957063	0.357691456	**20:49:48**	0.503852071	0.3837079	0.35743269
20:49:52	0.503650699	0.385458745	0.357173924	**20:49:56**	0.503449326	0.394178959	0.356915158
20:50:00	0.503247953	0.409868558	0.356656392	**20:50:04**	0.502672745	0.425335312	0.356397627
20:50:08	0.502097537	0.436483697	0.356138861	**20:50:12**	0.501522328	0.447632082	0.355880095
20:50:16	0.50094712	0.459706709	0.355621329	**20:50:20**	0.500371912	0.47270758	0.355362563

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:50:24	0.499796704	0.48570845	0.355103797	**20:50:28**	0.499221496	0.489485745	0.354845031
20:50:32	0.498646288	0.493263039	0.354586265	**20:50:36**	0.498071079	0.500270632	0.354327499
20:50:40	0.497495871	0.510508541	0.354068733	**20:50:44**	0.496920663	0.520746449	0.353809967
20:50:48	0.496345455	0.538338038	0.353551201	**20:50:52**	0.495770247	0.555929645	0.353292435
20:50:56	0.495195039	0.576087754	0.353033669	**20:51:00**	0.49461983	0.598812401	0.352774903
20:51:04	0.495321911	0.622298402	0.352516137	**20:51:08**	0.496023991	0.635175962	0.352257371
20:51:12	0.496726071	0.648053522	0.351998605	**20:51:16**	0.497428151	0.654747437	0.351739839
20:51:20	0.498130231	0.655257709	0.351481074	**20:51:24**	0.498832312	0.65576798	0.351222308
20:51:28	0.499534392	0.659736436	0.350963542	**20:51:32**	0.500236472	0.663704855	0.350704776
20:51:36	0.500938552	0.665166107	0.35044601	**20:51:40**	0.501640632	0.66412019	0.350187244
20:51:44	0.502342713	0.663074274	0.349928478	**20:51:48**	0.503044793	0.658649831	0.349669712
20:51:52	0.503746873	0.654225353	0.349410946	**20:51:56**	0.504448953	0.642476345	0.34915218
20:52:00	0.505151033	0.623402773	0.348893414	**20:52:04**	0.504120431	0.603296376	0.348634648
20:52:08	0.503089828	0.567810099	0.348375882	**20:52:12**	0.502059225	0.532323822	0.348117116
20:52:16	0.501028623	0.504249156	0.34785835	**20:52:20**	0.49999802	0.478645045	0.347599584
20:52:24	0.498967417	0.453040917	0.347340818	**20:52:28**	0.497936814	0.424205024	0.347082052
20:52:32	0.496906212	0.395369132	0.346823286	**20:52:36**	0.495875609	0.373899321	0.346564521
20:52:40	0.494845006	0.35979559	0.346305755	**20:52:44**	0.493814404	0.345691859	0.346046989
20:52:48	0.492783801	0.32909411	0.345788223	**20:52:52**	0.491753198	0.312496362	0.345529457
20:52:56	0.490722596	0.29761613	0.345270691	**20:53:00**	0.489691993	0.283308404	0.345011925
20:53:04	0.489555669	0.269533744	0.344753159	**20:53:08**	0.489419344	0.252243396	0.344494393
20:53:12	0.48928302	0.234953046	0.344235627	**20:53:16**	0.489146696	0.226767901	0.343976861
20:53:20	0.489010372	0.227687961	0.343718095	**20:53:24**	0.488874047	0.228608021	0.343459329
20:53:28	0.488737723	0.231192341	0.343200563	**20:53:32**	0.488601399	0.238769434	0.342941797
20:53:36	0.488465075	0.243224866	0.342683031	**20:53:40**	0.488328751	0.244558639	0.342424265
20:53:44	0.488192426	0.245892412	0.342165499	**20:53:48**	0.488056102	0.254637024	0.341906734
20:53:52	0.487919778	0.263381636	0.341647968	**20:53:56**	0.487783454	0.271393821	0.341389202
20:54:00	0.487647129	0.278673577	0.341130436	**20:54:04**	0.487001285	0.285649618	0.34087167
20:54:08	0.48635544	0.284581006	0.340612904	**20:54:12**	0.485709595	0.283512394	0.340354138
20:54:16	0.485063751	0.278442992	0.340095372	**20:54:20**	0.484417906	0.269372799	0.339836606
20:54:24	0.483772062	0.260302607	0.33957784	**20:54:28**	0.483126217	0.242616365	0.339319074
20:54:32	0.482480372	0.224930121	0.339060308	**20:54:36**	0.481834528	0.204554577	0.338801542
20:54:40	0.481188683	0.18328259	0.338542776	**20:54:44**	0.480542838	0.162010613	0.33828401
20:54:48	0.479896994	0.146971274	0.338025244	**20:54:52**	0.479251149	0.131931927	0.337766478
20:54:56	0.478605304	0.120678273	0.337507712	**20:55:00**	0.47795946	0.113210313	0.337248946
20:55:04	0.477551196	0.105883971	0.336990181	**20:55:08**	0.477142933	0.094871577	0.336731415
20:55:12	0.476734669	0.083859184	0.336472649	**20:55:16**	0.476326405	0.067046722	0.336213883
20:55:20	0.475918142	0.044434209	0.335955117	**20:55:24**	0.475509878	0.021821679	0.335696351
20:55:28	0.475101615	-0.0019484	0.335437585	**20:55:32**	0.474693351	-0.025718461	0.335178819
20:55:36	0.474285087	-0.04277803	0.334920053	**20:55:40**	0.473876824	-0.05760081	0.334661287
20:55:44	0.47346856	-0.069716107	0.334402521	**20:55:48**	0.473060297	-0.073709133	0.334143755
20:55:52	0.472652033	-0.077702195	0.333884989	**20:55:56**	0.472243769	-0.084951172	0.333626223
20:56:00	0.471835506	-0.09328543	0.333367457	**20:56:04**	0.471793195	-0.099715785	0.333108691
20:56:08	0.471750884	-0.101088707	0.332849925	**20:56:12**	0.471708573	-0.10246163	0.332591159
20:56:16	0.471666262	-0.106098983	0.332332393	**20:56:20**	0.471623951	-0.110491158	0.332073628
20:56:24	0.47158164	-0.117442801	0.331814862	**20:56:28**	0.47153933	-0.132072952	0.331556096
20:56:32	0.471497019	-0.146703104	0.33129733	**20:56:36**	0.471454708	-0.150721048	0.331038564
20:56:40	0.471412397	-0.151201578	0.330779798	**20:56:44**	0.471370086	-0.150133986	0.330521032
20:56:48	0.471327775	-0.144421847	0.330262266	**20:56:52**	0.471285464	-0.138709744	0.3300035
20:56:56	0.471243153	-0.12677026	0.329744734	**20:57:00**	0.471200842	-0.112754971	0.329485968
20:57:04	0.471164801	-0.094932024	0.329227202	**20:57:08**	0.47112876	-0.065697388	0.328968436
20:57:12	0.47109272	-0.036462751	0.32870967	**20:57:16**	0.471056679	-0.00603756	0.328450904
20:57:20	0.471020638	0.024784513	0.328192138	**20:57:24**	0.470984597	0.048851148	0.327933372
20:57:28	0.470948556	0.066162365	0.327674606	**20:57:32**	0.470912515	0.083473582	0.327415841
20:57:36	0.470876474	0.112526255	0.327157075	**20:57:40**	0.470840433	0.145492731	0.326898309
20:57:44	0.470804392	0.175380771	0.326639543	**20:57:48**	0.470768351	0.196033484	0.326380777
20:57:52	0.47073231	0.216686193	0.326122011	**20:57:56**	0.470696269	0.231754794	0.325863245

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
20:58:00	0.470660228	0.246823397	0.325604479	**20:58:04**	0.469227336	0.261731685	0.325345713
20:58:08	0.467794444	0.278656958	0.325086947	**20:58:12**	0.466361551	0.295582231	0.324828181
20:58:16	0.464928659	0.312125818	0.324569415	**20:58:20**	0.463495767	0.328542177	0.324310649
20:58:24	0.462062875	0.342823543	0.324051883	**20:58:28**	0.460629982	0.350699934	0.323793117
20:58:32	0.45919709	0.358576326	0.323534351	**20:58:36**	0.457764198	0.371957377	0.323275585
20:58:40	0.456331305	0.387173317	0.323016819	**20:58:44**	0.454898413	0.405725904	0.322758053
20:58:48	0.453465521	0.434288456	0.322499288	**20:58:52**	0.452032629	0.462851008	0.322240522
20:58:56	0.450599736	0.479901945	0.321981756	**20:59:00**	0.449166844	0.493115706	0.32172299
20:59:04	0.449062592	0.504461877	0.321464224	**20:59:08**	0.448958341	0.507829423	0.321205458
20:59:12	0.448854089	0.511196969	0.320946692	**20:59:16**	0.448749837	0.512606312	0.320687926
20:59:20	0.448645586	0.513362892	0.32042916	**20:59:24**	0.448541334	0.517186511	0.320170394
20:59:28	0.448437082	0.530211198	0.319911628	**20:59:32**	0.448332831	0.543235885	0.319652862
20:59:36	0.448228579	0.55294424	0.319394096	**20:59:40**	0.448124328	0.561547133	0.31913533
20:59:44	0.448020076	0.569889222	0.318876564	**20:59:48**	0.447915824	0.577448847	0.318617798
20:59:52	0.447811573	0.585008472	0.318359032	**20:59:56**	0.447707321	0.607637823	0.318100266
21:00:00	0.947603069	1.135290393	0.8178415	**21:00:04**	0.947158699	1.158086581	0.817582735
21:00:08	0.946714329	1.166921703	0.817323969	**21:00:12**	0.446269959	0.675756826	0.317065203
21:00:16	0.445825589	0.682185612	0.316806437	**21:00:20**	0.445381219	0.687812287	0.316547671
21:00:24	0.444936849	0.690584245	0.316288905	**21:00:28**	0.444492479	0.684791983	0.316030139
21:00:32	0.444048109	0.67899972	0.315771373	**21:00:36**	0.443603738	0.665033633	0.315512607
21:00:40	0.443159368	0.648342904	0.315253841	**21:00:44**	0.442714998	0.6324912	0.314995075
21:00:48	0.442270628	0.619156543	0.314736309	**21:00:52**	0.441826258	0.605821885	0.314477543
21:00:56	0.441381888	0.592886115	0.314218777	**21:01:00**	0.440937518	0.580083368	0.313960011
21:01:04	0.441230786	0.571162866	0.313701245	**21:01:08**	0.441524053	0.572570087	0.313442479
21:01:12	0.441817321	0.573977343	0.313183713	**21:01:16**	0.442110589	0.575897644	0.312924948
21:01:20	0.442403856	0.577988948	0.312666182	**21:01:24**	0.442697124	0.578505411	0.312407416
21:01:28	0.442990392	0.574297281	0.31214865	**21:01:32**	0.443283659	0.57008915	0.311889884
21:01:36	0.443576927	0.558248113	0.311631118	**21:01:40**	0.443870195	0.543862762	0.311372352
21:01:44	0.444163463	0.528684573	0.311113586	**21:01:48**	0.44445673	0.511127867	0.31085482
21:01:52	0.444749998	0.493571161	0.310596054	**21:01:56**	0.445043266	0.481176967	0.310337288
21:02:00	0.445336533	0.470503622	0.310078522	**21:02:04**	0.445092617	0.458034267	0.309819756
21:02:08	0.444848701	0.441137521	0.30956099	**21:02:12**	0.444604784	0.424240776	0.309302224
21:02:16	0.444360868	0.400892033	0.309043458	**21:02:20**	0.444116951	0.375392615	0.308784692
21:02:24	0.443873035	0.352099866	0.308525926	**21:02:28**	0.443629118	0.335427099	0.30826716
21:02:32	0.443385202	0.318754331	0.308008395	**21:02:36**	0.443141285	0.302081567	0.307749629
21:02:40	0.442897369	0.285408799	0.307490863	**21:02:44**	0.442653452	0.270057255	0.307232097
21:02:48	0.442409536	0.258669376	0.306973331	**21:02:52**	0.44216562	0.247281496	0.306714565
21:02:56	0.441921703	0.242918377	0.306455799	**21:03:00**	0.441677787	0.240896848	0.306197033
21:03:04	0.441181436	0.237021007	0.305938267	**21:03:08**	0.440685086	0.228033644	0.305679501
21:03:12	0.440188736	0.219046282	0.305420735	**21:03:16**	0.439692386	0.227504798	0.305161969
21:03:20	0.439196035	0.24177861	0.304903203	**21:03:24**	0.438699685	0.256052422	0.304644437
21:03:28	0.438203335	0.265373758	0.304385671	**21:03:32**	0.437706985	0.269742617	0.304126905
21:03:36	0.437210634	0.268368349	0.303868139	**21:03:40**	0.436714284	0.265079704	0.303609373
21:03:44	0.436217934	0.261938859	0.303350607	**21:03:48**	0.435721583	0.259241416	0.303091842
21:03:52	0.435225233	0.256543974	0.302833076	**21:03:56**	0.434728883	0.26610899	0.30257431
21:04:00	0.434232533	0.279761493	0.302315544	**21:04:04**	0.43530071	0.296521878	0.302056778
21:04:08	0.436368888	0.319808147	0.301798012	**21:04:12**	0.437437065	0.343094418	0.301539246
21:04:16	0.438505242	0.356294855	0.30128048	**21:04:20**	0.43957342	0.366133357	0.301021714
21:04:24	0.440641597	0.373833247	0.300762948	**21:04:28**	0.441709775	0.375117308	0.300504182
21:04:32	0.442777952	0.376401369	0.300245416	**21:04:36**	0.44384613	0.362516523	0.29998665
21:04:40	0.444914307	0.343575373	0.299727884	**21:04:44**	0.445982485	0.323814839	0.299469118
21:04:48	0.447050662	0.301596141	0.299210352	**21:04:52**	0.44811884	0.27937744	0.298951586
21:04:56	0.449187017	0.257563028	0.29869282	**21:05:00**	0.450255194	0.235883379	0.298434054
21:05:04	0.449853707	0.217138279	0.298175289	**21:05:08**	0.449452219	0.20982497	0.297916523
21:05:12	0.449050731	0.20251166	0.297657757	**21:05:16**	0.448649244	0.201423951	0.297398991
21:05:20	0.448247756	0.202411438	0.297140225	**21:05:24**	0.447846268	0.204231682	0.296881459
21:05:28	0.447444781	0.20855018	0.296622693	**21:05:32**	0.447043293	0.212868682	0.296363927

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:05:36	0.446641805	0.222382747	0.296105161	**21:05:40**	0.446240317	0.237092382	0.295846395
21:05:44	0.44583883	0.251802015	0.295587629	**21:05:48**	0.445437342	0.25982843	0.295328863
21:05:52	0.445035854	0.267854845	0.295070097	**21:05:56**	0.444634367	0.266402097	0.294811331
21:06:00	0.444232879	0.255470186	0.294552565	**21:06:04**	0.444102152	0.24469967	0.294293799
21:06:08	0.443971424	0.204808507	0.294035033	**21:06:12**	0.443840697	0.164917344	0.293776267
21:06:16	0.44370997	0.126293977	0.293517502	**21:06:20**	0.443579242	0.088938423	0.293258736
21:06:24	0.443448515	0.051582852	0.29299997	**21:06:28**	0.443317788	0.036533351	0.292741204
21:06:32	0.44318706	0.021483851	0.292482438	**21:06:36**	0.443056333	0.003794142	0.292223672
21:06:40	0.442925606	-0.016535738	0.291964906	**21:06:44**	0.442794878	-0.036865619	0.29170614
21:06:48	0.442664151	-0.043187161	0.291447374	**21:06:52**	0.442533424	-0.049508704	0.291188608
21:06:56	0.442402696	-0.058254844	0.290929842	**21:07:00**	0.442271969	-0.069425581	0.290671076
21:07:04	0.442225538	-0.080546106	0.29041231	**21:07:08**	0.442179108	-0.078657398	0.290153544
21:07:12	0.442132677	-0.076768654	0.289894778	**21:07:16**	0.442086246	-0.076473297	0.289636012
21:07:20	0.442039816	-0.077771292	0.289377246	**21:07:24**	0.441993385	-0.079069287	0.28911848
21:07:28	0.441946954	-0.078988812	0.288859714	**21:07:32**	0.441900524	-0.078908302	0.288600949
21:07:36	0.441854093	-0.075156645	0.288342183	**21:07:40**	0.441807663	-0.067733769	0.288083417
21:07:44	0.441761232	-0.060310894	0.287824651	**21:07:48**	0.441714801	-0.054785183	0.287565885
21:07:52	0.441668371	-0.049259507	0.287307119	**21:07:56**	0.44162194	-0.042822679	0.287048353
21:08:00	0.441575509	-0.035474736	0.286789587	**21:08:04**	0.441539532	-0.028120543	0.286530821
21:08:08	0.441503554	-0.014198599	0.286272055	**21:08:12**	0.441467576	-0.000276654	0.286013289
21:08:16	0.441431599	0.014345966	0.285754523	**21:08:20**	0.441395621	0.029202139	0.285495757
21:08:24	0.441359643	0.04405833	0.285236991	**21:08:28**	0.441323665	0.066628291	0.284978225
21:08:32	0.441287688	0.089198253	0.284719459	**21:08:36**	0.44125171	0.112143334	0.284460693
21:08:40	0.441215732	0.135463544	0.284201927	**21:08:44**	0.441179755	0.158783745	0.283943161
21:08:48	0.441143777	0.194522698	0.283684396	**21:08:52**	0.441107799	0.230261654	0.28342563
21:08:56	0.441071822	0.266842365	0.283166864	**21:09:00**	0.441035844	0.303703664	0.282908098
21:09:04	0.441073434	0.340608813	0.282649332	**21:09:08**	0.441111025	0.367917101	0.282390566
21:09:12	0.441148615	0.39522539	0.2821318	**21:09:16**	0.441186206	0.422228454	0.281873034
21:09:20	0.441223796	0.448926302	0.281614268	**21:09:24**	0.441261387	0.475624151	0.281355502
21:09:28	0.441298977	0.498964453	0.281096736	**21:09:32**	0.441336568	0.522304755	0.28083797
21:09:36	0.441374158	0.535896606	0.280579204	**21:09:40**	0.441411749	0.53973997	0.280320438
21:09:44	0.441449339	0.543583333	0.280061672	**21:09:48**	0.44148693	0.532823223	0.279802906
21:09:52	0.44152452	0.522063113	0.27954414	**21:09:56**	0.441562111	0.518805251	0.279285374
21:10:00	0.441599701	0.523049635	0.279026609	**21:10:04**	0.441416894	0.527162625	0.278767843
21:10:08	0.441234087	0.529141827	0.278509077	**21:10:12**	0.441051281	0.531121046	0.278250311
21:10:16	0.440868474	0.529317876	0.277991545	**21:10:20**	0.440685667	0.523732351	0.277732779
21:10:24	0.44050286	0.518146827	0.277474013	**21:10:28**	0.440320053	0.515909719	0.277215247
21:10:32	0.440137246	0.513672592	0.276956481	**21:10:36**	0.439954439	0.51592036	0.276697715
21:10:40	0.439771632	0.522652988	0.276438949	**21:10:44**	0.439588825	0.529385615	0.276180183
21:10:48	0.439406019	0.525175025	0.275921417	**21:10:52**	0.439223212	0.520964436	0.275662651
21:10:56	0.439040405	0.517575144	0.275403885	**21:11:00**	0.438857598	0.51500715	0.275145119
21:11:04	0.438555038	0.512367773	0.274886353	**21:11:08**	0.438252479	0.500182179	0.274627587
21:11:12	0.437949919	0.487996584	0.274368821	**21:11:16**	0.43764736	0.478191033	0.274110056
21:11:20	0.4373448	0.470765525	0.27385129	**21:11:24**	0.43704224	0.464299419	0.273592524
21:11:28	0.436739681	0.460711478	0.273333758	**21:11:32**	0.436437121	0.457123555	0.273074992
21:11:36	0.436134562	0.448529148	0.272816226	**21:11:40**	0.435832002	0.434928257	0.27255746
21:11:44	0.435529442	0.421327384	0.272298694	**21:11:48**	0.435226883	0.410013023	0.272039928
21:11:52	0.434924323	0.398698663	0.271781162	**21:11:56**	0.434621764	0.384642178	0.271522396
21:12:00	0.434319204	0.367843561	0.27126363	**21:12:04**	0.434633784	0.351412811	0.271004864
21:12:08	0.434948364	0.354521084	0.270746098	**21:12:12**	0.435262945	0.357629358	0.270487332
21:12:16	0.435577525	0.360154034	0.270228566	**21:12:20**	0.435892105	0.362095113	0.2699698
21:12:24	0.436206685	0.364036201	0.269711034	**21:12:28**	0.436521265	0.360668627	0.269452268
21:12:32	0.436835845	0.357301053	0.269193503	**21:12:36**	0.437150426	0.356693262	0.268934737
21:12:40	0.437465006	0.358845243	0.268675971	**21:12:44**	0.437779586	0.360997225	0.268417205
21:12:48	0.438094166	0.355578805	0.268158439	**21:12:52**	0.438408746	0.350160377	0.267899673
21:12:56	0.438723326	0.338796733	0.267640907	**21:13:00**	0.439037906	0.321487874	0.267382141
21:13:04	0.438258775	0.303527066	0.267123375	**21:13:08**	0.437479644	0.300596125	0.266864609

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:13:12	0.436700513	0.297665188	0.266605843	**21:13:16**	0.435921382	0.292327988	0.266347077
21:13:20	0.435142251	0.284584529	0.266088311	**21:13:24**	0.43436312	0.27684107	0.265829545
21:13:28	0.433583989	0.269097611	0.265570779	**21:13:32**	0.432804858	0.253529929	0.265312013
21:13:36	0.432025727	0.239373438	0.265053247	**21:13:40**	0.431246596	0.229450516	0.264794481
21:13:44	0.430467465	0.219527594	0.264535716	**21:13:48**	0.429688334	0.206850862	0.26427695
21:13:52	0.428909203	0.194174129	0.264018184	**21:13:56**	0.428130071	0.181775645	0.263759418
21:14:00	0.42735094	0.169655405	0.263500652	**21:14:04**	0.42807633	0.158431995	0.263241886
21:14:08	0.428801719	0.150708125	0.26298312	**21:14:12**	0.429527108	0.142984255	0.262724354
21:14:16	0.430252498	0.130658607	0.262465588	**21:14:20**	0.430977887	0.113731183	0.262206822
21:14:24	0.431703276	0.096803758	0.261948056	**21:14:28**	0.432428665	0.084988632	0.26168929
21:14:32	0.433154055	0.073173507	0.261430524	**21:14:36**	0.433879444	0.065433498	0.261171758
21:14:40	0.434604833	0.061768587	0.260912992	**21:14:44**	0.435330223	0.058103693	0.260654226
21:14:48	0.436055612	0.056899673	0.26039546	**21:14:52**	0.436781001	0.055695636	0.260136694
21:14:56	0.437506391	0.055540604	0.259877928	**21:15:00**	-0.06176822	-0.443565458	-0.240380837
21:15:04	-0.061690878	-0.443057811	-0.240639603	**21:15:08**	-0.061613535	-0.452916845	-0.240898369
21:15:12	0.438463807	0.03722414	0.258842865	**21:15:16**	0.438541149	0.027365106	0.258584099
21:15:20	0.438618492	0.01750609	0.258325333	**21:15:24**	0.438695834	0.007647057	0.258066567
21:15:28	0.438773177	0.012264337	0.257807801	**21:15:32**	0.438850519	0.0168816	0.257549035
21:15:36	0.438927862	0.024145732	0.257290269	**21:15:40**	0.439005204	0.034056733	0.257031503
21:15:44	0.439082546	0.043967735	0.256772737	**21:15:48**	0.439159889	0.064550367	0.256513971
21:15:52	0.439237231	0.085133016	0.256255205	**21:15:56**	0.439314574	0.094468814	0.255996439
21:16:00	0.439391916	0.092557798	0.255737673	**21:16:04**	0.441674944	0.091961538	0.255478907
21:16:08	0.443957973	0.102262147	0.255220141	**21:16:12**	0.446241001	0.112562756	0.254961375
21:16:16	0.448524029	0.12662107	0.25470261	**21:16:20**	0.450807057	0.144437116	0.254443844
21:16:24	0.453090085	0.162253162	0.254185078	**21:16:28**	0.455373113	0.182451002	0.253926312
21:16:32	0.457656142	0.202648842	0.253667546	**21:16:36**	0.45993917	0.21202931	0.25340878
21:16:40	0.462222198	0.217803993	0.253150014	**21:16:44**	0.464505226	0.22357867	0.252891248
21:16:48	0.466788254	0.234819325	0.252632482	**21:16:52**	0.469071283	0.24605998	0.252373716
21:16:56	0.471354311	0.256352131	0.25211495	**21:17:00**	0.473637339	0.265695779	0.251856184
21:17:04	0.474665114	0.27429119	0.251597418	**21:17:08**	0.475692889	0.289018552	0.251338652
21:17:12	0.476720664	0.303745913	0.251079886	**21:17:16**	0.477748439	0.324696014	0.25082112
21:17:20	0.478776214	0.351868856	0.250562354	**21:17:24**	0.479803989	0.379041694	0.250303588
21:17:28	0.480831764	0.392612229	0.250044823	**21:17:32**	0.481859539	0.406182755	0.249786057
21:17:36	0.482887314	0.416029834	0.249527291	**21:17:40**	0.483915089	0.422153458	0.249268525
21:17:44	0.484942864	0.429057131	0.249009759	**21:17:48**	0.485970639	0.438300983	0.248750993
21:17:52	0.486998414	0.447544836	0.248492227	**21:17:56**	0.488026189	0.461296304	0.248233461
21:18:00	0.489053964	0.476550292	0.247974695	**21:18:04**	0.489820099	0.491648322	0.247715929
21:18:08	0.490586234	0.503643017	0.247457163	**21:18:12**	0.49135237	0.515637713	0.247198397
21:18:16	0.492118505	0.521849074	0.246939631	**21:18:20**	0.49288464	0.522277101	0.246680865
21:18:24	0.493650775	0.522705145	0.246422099	**21:18:28**	0.49441691	0.516317637	0.246163333
21:18:32	0.495183045	0.509930129	0.245904567	**21:18:36**	0.49594918	0.503988036	0.245645801
21:18:40	0.496715315	0.498491392	0.245387035	**21:18:44**	0.49748145	0.492994748	0.24512827
21:18:48	0.498247585	0.489428524	0.244869504	**21:18:52**	0.49901372	0.4858623	0.244610738
21:18:56	0.499779855	0.482296075	0.244351972	**21:19:00**	0.50054599	0.478729851	0.244093206
21:19:04	0.500745298	0.475940254	0.24383444	**21:19:08**	0.500944607	0.476494169	0.243575674
21:19:12	0.501143916	0.477048085	0.243316908	**21:19:16**	0.501343224	0.481185656	0.243058142
21:19:20	0.501542533	0.488906901	0.242799376	**21:19:24**	0.501741841	0.496628146	0.24254061
21:19:28	0.50194115	0.507399057	0.242281844	**21:19:32**	0.502140459	0.51816995	0.242023078
21:19:36	0.502339767	0.518458959	0.241764312	**21:19:40**	0.502539076	0.508266046	0.241505546
21:19:44	0.502738384	0.498073134	0.24124678	**21:19:48**	0.502937693	0.494202662	0.240988014
21:19:52	0.503137001	0.49033219	0.240729248	**21:19:56**	0.50333631	0.492844095	0.240470482
21:20:00	0.503535619	0.497483484	0.240211717	**21:20:04**	0.503572342	0.50202594	0.239952951
21:20:08	0.503609065	0.507287493	0.239694185	**21:20:12**	0.503645788	0.512549065	0.239435419
21:20:16	0.503682511	0.51199664	0.239176653	**21:20:20**	0.503719234	0.505630219	0.238917887
21:20:24	0.503755958	0.499263797	0.238659121	**21:20:28**	0.503792681	0.493484642	0.238400355
21:20:32	0.503829404	0.487705486	0.238141589	**21:20:36**	0.503866127	0.476961824	0.237882823
21:20:40	0.50390285	0.461253639	0.237624057	**21:20:44**	0.503939573	0.445545462	0.237365291

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:20:48	0.503976297	0.437400715	0.237106525	**21:20:52**	0.50401302	0.429255967	0.236847759
21:20:56	0.504049743	0.419602303	0.236588993	**21:21:00**	0.504086466	0.408439723	0.236330227
21:21:04	0.503799265	0.397084048	0.236071461	**21:21:08**	0.503512064	0.396355964	0.235812695
21:21:12	0.503224864	0.395627889	0.23555393	**21:21:16**	0.502937663	0.39152715	0.235295164
21:21:20	0.502650462	0.384053755	0.235036398	**21:21:24**	0.502363261	0.37658036	0.234777632
21:21:28	0.50207606	0.373945813	0.234518866	**21:21:32**	0.501788859	0.371311275	0.2342601
21:21:36	0.501501658	0.372330309	0.234001334	**21:21:40**	0.501214457	0.37700293	0.233742568
21:21:44	0.500927256	0.381675547	0.233483802	**21:21:48**	0.500640056	0.377086864	0.233225036
21:21:52	0.500352855	0.372498182	0.23296627	**21:21:56**	0.500065654	0.365284276	0.232707504
21:22:00	0.499778453	0.355445152	0.232448738	**21:22:04**	0.498707958	0.345139118	0.232189972
21:22:08	0.497637464	0.32891514	0.231931206	**21:22:12**	0.496566969	0.312691162	0.23167244
21:22:16	0.495496474	0.298044691	0.231413674	**21:22:20**	0.494425979	0.284975728	0.231154908
21:22:24	0.493355485	0.271906765	0.230896142	**21:22:28**	0.49228499	0.270457954	0.230637377
21:22:32	0.491214495	0.269009143	0.230378611	**21:22:36**	0.490144001	0.265570168	0.230119845
21:22:40	0.489073506	0.260141029	0.229861079	**21:22:44**	0.488003011	0.25471189	0.229602313
21:22:48	0.486932517	0.253286351	0.229343547	**21:22:52**	0.485862022	0.251860812	0.229084781
21:22:56	0.484791527	0.25371716	0.228826015	**21:23:00**	0.483721033	0.258855401	0.228567249
21:23:04	0.483338969	0.264404005	0.228308483	**21:23:08**	0.482956906	0.269952608	0.228049717
21:23:12	0.482574842	0.275501211	0.227790951	**21:23:16**	0.482192779	0.279956799	0.227532185
21:23:20	0.481810715	0.283319372	0.227273419	**21:23:24**	0.481428652	0.286681944	0.227014653
21:23:28	0.481046588	0.290044517	0.226755887	**21:23:32**	0.480664525	0.303604415	0.226497121
21:23:36	0.480282462	0.319523206	0.226238355	**21:23:40**	0.479900398	0.342518678	0.225979589
21:23:44	0.479518335	0.365514149	0.225720824	**21:23:48**	0.479136271	0.378832464	0.225462058
21:23:52	0.478754208	0.392150778	0.225203292	**21:23:56**	0.478372144	0.407135954	0.224944526
21:24:00	0.477990081	0.423788001	0.22468576	**21:24:04**	0.476863125	0.43999603	0.224426994
21:24:08	0.475736169	0.454734437	0.224168228	**21:24:12**	0.474609213	0.469472827	0.223909462
21:24:16	0.473482257	0.47709402	0.223650696	**21:24:20**	0.472355301	0.477597981	0.22339193
21:24:24	0.471228345	0.478101941	0.223133164	**21:24:28**	0.470101389	0.485373453	0.222874398
21:24:32	0.468974433	0.492644948	0.222615632	**21:24:36**	0.467847477	0.498410422	0.222356866
21:24:40	0.466720521	0.502669841	0.2220981	**21:24:44**	0.465593565	0.506929277	0.221839334
21:24:48	0.464466609	0.513884684	0.221580568	**21:24:52**	0.463339653	0.52084011	0.221321802
21:24:56	0.462212697	0.530547305	0.221063036	**21:25:00**	0.461085741	0.543006306	0.220804271
21:25:04	0.461148628	0.556174536	0.220545505	**21:25:08**	0.461211515	0.567447308	0.220286739
21:25:12	0.461274403	0.57872008	0.220027973	**21:25:16**	0.46133729	0.589248867	0.219769207
21:25:20	0.461400177	0.599033738	0.219510441	**21:25:24**	0.461463064	0.608818575	0.219251675
21:25:28	0.461525951	0.622407828	0.218992909	**21:25:32**	0.461588838	0.635997082	0.218734143
21:25:36	0.461651726	0.646929802	0.218475377	**21:25:40**	0.461714613	0.655205989	0.218216611
21:25:44	0.4617775	0.663482175	0.217957845	**21:25:48**	0.461840387	0.667989438	0.217699079
21:25:52	0.461903274	0.672496701	0.217440313	**21:25:56**	0.461966162	0.680622421	0.217181547
21:26:00	0.462029049	0.692366597	0.216922781	**21:26:04**	0.463662015	0.705046673	0.216664015
21:26:08	0.465294982	0.713499248	0.216405249	**21:26:12**	0.466927949	0.721951822	0.216146484
21:26:16	0.468560915	0.726662155	0.215887718	**21:26:20**	0.470193882	0.727630283	0.215628952
21:26:24	0.471826848	0.728598411	0.215370186	**21:26:28**	0.473459815	0.722822027	0.21511142
21:26:32	0.475092782	0.717045644	0.214852654	**21:26:36**	0.476725748	0.707310893	0.214593888
21:26:40	0.478358715	0.693617812	0.214335122	**21:26:44**	0.479991681	0.679924731	0.214076356
21:26:48	0.481624648	0.674244739	0.21381759	**21:26:52**	0.483257615	0.668564782	0.213558824
21:26:56	0.484890581	0.656608698	0.213300058	**21:27:00**	0.486523548	0.638376522	0.213041292
21:27:04	0.486562945	0.619194444	0.212782526	**21:27:08**	0.486602343	0.597284277	0.21252376
21:27:12	0.48664174	0.575374109	0.212264994	**21:27:16**	0.486681137	0.555495105	0.212006228
21:27:20	0.486720535	0.537647245	0.211747462	**21:27:24**	0.486759932	0.519799385	0.211488696
21:27:28	0.48679933	0.516082458	0.211229931	**21:27:32**	0.486838727	0.512365531	0.210971165
21:27:36	0.486878124	0.511721275	0.210712399	**21:27:40**	0.486917522	0.514149692	0.210453633
21:27:44	0.486956919	0.516578126	0.210194867	**21:27:48**	0.486996317	0.507130092	0.209936101
21:27:52	0.487035714	0.497682059	0.209677335	**21:27:56**	0.487075111	0.485699642	0.209418569
21:28:00	0.487114509	0.471182877	0.209159803	**21:28:04**	0.487579058	0.456919538	0.208901037
21:28:08	0.488043606	0.440375194	0.208642271	**21:28:12**	0.488508155	0.42383085	0.208383505
21:28:16	0.488972704	0.407756471	0.208124739	**21:28:20**	0.489437253	0.391838759	0.207865973

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:28:24	0.489901802	0.377097088	0.207607207	**21:28:28**	0.490366351	0.365883589	0.207348441
21:28:32	0.4908309	0.35467009	0.207089675	**21:28:36**	0.491295448	0.344949594	0.206830909
21:28:40	0.491759997	0.336722102	0.206572143	**21:28:44**	0.492224546	0.32849461	0.206313378
21:28:48	0.492689095	0.330206037	0.206054612	**21:28:52**	0.493153644	0.331917465	0.205795846
21:28:56	0.493618193	0.333294908	0.20553708	**21:29:00**	0.494082741	0.334338361	0.205278314
21:29:04	0.494062511	0.335092844	0.205019548	**21:29:08**	0.49404228	0.339490548	0.204760782
21:29:12	0.49402205	0.343888252	0.204502016	**21:29:16**	0.494001819	0.348549798	0.20424325
21:29:20	0.493981589	0.353475184	0.203984484	**21:29:24**	0.493961358	0.358400571	0.203725718
21:29:28	0.493941128	0.347696089	0.203466952	**21:29:32**	0.493920897	0.336991606	0.203208186
21:29:36	0.493900667	0.323799051	0.20294942	**21:29:40**	0.493880436	0.30811842	0.202690654
21:29:44	0.493860206	0.292437789	0.202431888	**21:29:48**	0.493839975	0.284516091	0.202173122
21:29:52	0.493819745	0.276594393	0.201914356	**21:29:56**	0.493799514	0.272590979	0.201655591
21:30:00	0.993779284	0.772505847	0.701396825	**21:30:04**	0.99467454	0.772966425	0.701138059
21:30:08	0.995569797	0.776366229	0.700879293	**21:30:12**	0.496465053	0.279766031	0.200620527
21:30:16	0.49736031	0.27352701	0.200361761	**21:30:20**	0.498255567	0.257649162	0.200102995
21:30:24	0.499150823	0.241771317	0.199844229	**21:30:28**	0.50004608	0.221034053	0.199585463
21:30:32	0.500941336	0.200296788	0.199326697	**21:30:36**	0.501836593	0.185075589	0.199067931
21:30:40	0.502731849	0.175370436	0.198809165	**21:30:44**	0.503627106	0.165665291	0.198550399
21:30:48	0.504522362	0.166561029	0.198291633	**21:30:52**	0.505417619	0.167456766	0.198032867
21:30:56	0.506312875	0.171248035	0.197774101	**21:31:00**	0.507208132	0.177934852	0.197515335
21:31:04	0.507445837	0.184229714	0.197256569	**21:31:08**	0.507683543	0.200665529	0.196997803
21:31:12	0.507921248	0.217101335	0.196739038	**21:31:16**	0.508158953	0.231129158	0.196480272
21:31:20	0.508396659	0.242748984	0.196221506	**21:31:24**	0.508634364	0.254368815	0.19596274
21:31:28	0.508872069	0.243832669	0.195703974	**21:31:32**	0.509109775	0.233296519	0.195445208
21:31:36	0.50934748	0.224084149	0.195186442	**21:31:40**	0.509585185	0.216195548	0.194927676
21:31:44	0.509822891	0.208306955	0.19466891	**21:31:48**	0.510060596	0.200418363	0.194410144
21:31:52	0.510298301	0.192529761	0.194151378	**21:31:56**	0.510536007	0.182268435	0.193892612
21:32:00	0.510773712	0.169634384	0.193633846	**21:32:04**	0.510450766	0.156666138	0.19337508
21:32:08	0.51012782	0.145264694	0.193116314	**21:32:12**	0.509804874	0.13386325	0.192857548
21:32:16	0.509481928	0.124964088	0.192598782	**21:32:20**	0.509158982	0.11856721	0.192340016
21:32:24	0.508836036	0.112170331	0.19208125	**21:32:28**	0.50851309	0.103822337	0.191822485
21:32:32	0.508190144	0.095474326	0.191563719	**21:32:36**	0.507867198	0.085149618	0.191304953
21:32:40	0.507544252	0.072848196	0.191046187	**21:32:44**	0.507221306	0.060546775	0.190787421
21:32:48	0.50689836	0.050851648	0.190528655	**21:32:52**	0.506575414	0.041156539	0.190269889
21:32:56	0.506252468	0.033183452	0.190011123	**21:33:00**	0.505929522	0.026932403	0.189752357
21:33:04	0.505866377	0.020836219	0.189493591	**21:33:08**	0.505803233	0.021108982	0.189234825
21:33:12	0.505740088	0.021381745	0.188976059	**21:33:16**	0.505676944	0.025337167	0.188717293
21:33:20	0.505613799	0.030520165	0.188458527	**21:33:24**	0.505550655	0.035703145	0.188199761
21:33:28	0.50548751	0.049004097	0.187940995	**21:33:32**	0.505424366	0.062305066	0.187682229
21:33:36	0.505361221	0.071318614	0.187423463	**21:33:40**	0.505298077	0.06746993	0.187164698
21:33:44	0.505234932	0.063621247	0.186905932	**21:33:48**	0.505171788	0.048564422	0.186647166
21:33:52	0.505108643	0.033507597	0.1863884	**21:33:56**	0.505045499	0.026327961	0.186129634
21:34:00	0.504982354	0.027025514	0.185870868	**21:34:04**	0.504105668	0.027238127	0.185612102
21:34:08	0.503228982	0.033218087	0.185353336	**21:34:12**	0.502352296	0.039198046	0.18509457
21:34:16	0.50147561	0.046626308	0.184835804	**21:34:20**	0.500598924	0.055502891	0.184577038
21:34:24	0.499722238	0.064379475	0.184318272	**21:34:28**	0.498845552	0.055755516	0.184059506
21:34:32	0.497968867	0.047131576	0.18380074	**21:34:36**	0.497092181	0.03909213	0.183541974
21:34:40	0.496215495	0.031637195	0.183283208	**21:34:44**	0.495338809	0.024182261	0.183024442
21:34:48	0.494462123	0.025252465	0.182765676	**21:34:52**	0.493585437	0.026322687	0.18250691
21:34:56	0.492708751	0.031474705	0.182248145	**21:35:00**	0.491832065	0.040708519	0.181989379
21:35:04	0.491791959	0.050441004	0.181730613	**21:35:08**	0.491751852	0.051603371	0.181471847
21:35:12	0.491711746	0.052765737	0.181213081	**21:35:16**	0.491671639	0.046454512	0.180954315
21:35:20	0.491631533	0.032669711	0.180695549	**21:35:24**	0.491591426	0.01888491	0.180436783
21:35:28	0.49155132	0.004328358	0.180178017	**21:35:32**	0.491511213	-0.010228177	0.179919251
21:35:36	0.491471107	-0.021553597	0.179660485	**21:35:40**	0.491431	-0.031801942	0.179401719
21:35:44	0.491390894	-0.042050288	0.179142953	**21:35:48**	0.491350787	-0.048116752	0.178884187
21:35:52	0.491310681	-0.054183216	0.178625421	**21:35:56**	0.491270574	-0.057168783	0.178366655

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:36:00	0.491230468	-0.057073417	0.178107889	**21:36:04**	0.490475464	-0.057404192	0.177849123
21:36:08	0.489720459	-0.066497014	0.177590357	**21:36:12**	0.488965455	-0.075589837	0.177331592
21:36:16	0.48821045	-0.079412015	0.177072826	**21:36:20**	0.487455446	-0.077963548	0.17681406
21:36:24	0.486700442	-0.07651508	0.176555294	**21:36:28**	0.485945437	-0.081331868	0.176296528
21:36:32	0.485190433	-0.086148656	0.176037762	**21:36:36**	0.484435429	-0.088886085	0.175778996
21:36:40	0.483680424	-0.089544156	0.17552023	**21:36:44**	0.48292542	-0.093073572	0.175261464
21:36:48	0.482170416	-0.105217056	0.175002698	**21:36:52**	0.481415411	-0.11736054	0.174743932
21:36:56	0.480660407	-0.129504024	0.174485166	**21:37:00**	0.479905403	-0.141647508	0.1742264
21:37:04	0.479614588	-0.153514296	0.173967634	**21:37:08**	0.479323773	-0.16697973	0.173708868
21:37:12	0.479032958	-0.180445163	0.173450102	**21:37:16**	0.478742144	-0.187745498	0.173191336
21:37:20	0.478451329	-0.188880807	0.17293257	**21:37:24**	0.478160514	-0.190016116	0.172673805
21:37:28	0.4778697	-0.199475893	0.172415039	**21:37:32**	0.477578885	-0.208935671	0.172156273
21:37:36	0.47728807	-0.215391437	0.171897507	**21:37:40**	0.476997256	-0.218843191	0.171638741
21:37:44	0.476706441	-0.222294946	0.171379975	**21:37:48**	0.476415626	-0.207765376	0.171121209
21:37:52	0.476124811	-0.19323577	0.170862443	**21:37:56**	0.475833997	-0.181028118	0.170603677
21:38:00	0.475543182	-0.171142347	0.170344911	**21:38:04**	0.474974659	-0.16142215	0.170086145
21:38:08	0.474406137	-0.151701917	0.169827379	**21:38:12**	0.473837614	-0.141981683	0.169568613
21:38:16	0.473269092	-0.132760567	0.169309847	**21:38:20**	0.472700569	-0.124038533	0.169051081
21:38:24	0.472132046	-0.115316463	0.168792315	**21:38:28**	0.471563524	-0.106594429	0.168533549
21:38:32	0.470995001	-0.097872394	0.168274783	**21:38:36**	0.470426479	-0.094342343	0.168016017
21:38:40	0.469857956	-0.092542964	0.167757252	**21:38:44**	0.469289433	-0.090743585	0.167498486
21:38:48	0.468720911	-0.083648869	0.16723972	**21:38:52**	0.468152388	-0.076554116	0.166980954
21:38:56	0.467583865	-0.075660986	0.166722188	**21:39:00**	0.467015343	-0.080969407	0.166463422
21:39:04	0.466921481	-0.085994926	0.166204656	**21:39:08**	0.466827619	-0.095754062	0.16594589
21:39:12	0.466733757	-0.105513199	0.165687124	**21:39:16**	0.466639895	-0.107502623	0.165428358
21:39:20	0.466546033	-0.101722335	0.165169592	**21:39:24**	0.466452171	-0.094473084	0.164910826
21:39:28	0.466358309	-0.082816872	0.16465206	**21:39:32**	0.466264447	-0.07116066	0.164393294
21:39:36	0.466170585	-0.058364025	0.164134528	**21:39:40**	0.466076724	-0.044427038	0.163875762
21:39:44	0.465982862	-0.030490052	0.163616996	**21:39:48**	0.465889	-0.021552479	0.16335823
21:39:52	0.465795138	-0.01261487	0.163099464	**21:39:56**	0.465701276	-0.001197789	0.162840699
21:40:00	0.465607414	0.012698819	0.162581933	**21:40:04**	0.464573545	0.026035085	0.162323167
21:40:08	0.463539676	0.046471459	0.162064401	**21:40:12**	0.462505808	0.066907832	0.161805635
21:40:16	0.461471939	0.08890146	0.161546869	**21:40:20**	0.46043807	0.112452341	0.161288103
21:40:24	0.459404202	0.13600324	0.161029337	**21:40:28**	0.458370333	0.153624211	0.160770571
21:40:32	0.457336464	0.17124519	0.160511805	**21:40:36**	0.456302596	0.188082364	0.160253039
21:40:40	0.455268727	0.204135746	0.159994273	**21:40:44**	0.454234858	0.220189123	0.159735507
21:40:48	0.45320099	0.24713549	0.159476741	**21:40:52**	0.452167121	0.274081856	0.159217975
21:40:56	0.451133252	0.297369802	0.158959209	**21:41:00**	0.450099383	0.31699933	0.158700443
21:41:04	0.449927825	0.337142863	0.158441677	**21:41:08**	0.449756266	0.349434645	0.158182911
21:41:12	0.449584707	0.361726433	0.157924146	**21:41:16**	0.449413148	0.377118409	0.15766538
21:41:20	0.449241589	0.395610593	0.157406614	**21:41:24**	0.44907003	0.414102768	0.157147848
21:41:28	0.448898471	0.431204668	0.156889082	**21:41:32**	0.448726912	0.448306559	0.156630316
21:41:36	0.448555353	0.47108795	0.15637155	**21:41:40**	0.448383794	0.499548823	0.156112784
21:41:44	0.448212236	0.521331039	0.155854018	**21:41:48**	0.448040677	0.523077281	0.155595252
21:41:52	0.447869118	0.524823524	0.155336486	**21:41:56**	0.447697559	0.534630127	0.15507772
21:42:00	0.447526	0.552497073	0.154818954	**21:42:04**	0.44681124	0.570040225	0.154560188
21:42:08	0.44609648	0.582958728	0.154301422	**21:42:12**	0.44538172	0.595877195	0.154042656
21:42:16	0.44466696	0.610259474	0.15378389	**21:42:20**	0.4439522	0.626105529	0.153525124
21:42:24	0.44323744	0.641951584	0.153266359	**21:42:28**	0.44252268	0.650802538	0.153007593
21:42:32	0.44180792	0.659653492	0.152748827	**21:42:36**	0.44109316	0.668504447	0.152490061
21:42:40	0.4403784	0.677355401	0.152231295	**21:42:44**	0.43966364	0.686206356	0.151972529
21:42:48	0.438948879	0.693324825	0.151713763	**21:42:52**	0.438234119	0.700443259	0.151454997
21:42:56	0.437519359	0.699050127	0.151196231	**21:43:00**	0.436804599	0.689145358	0.150937465
21:43:04	0.436569799	0.67952672	0.150678699	**21:43:08**	0.436334998	0.659909717	0.150419933
21:43:12	0.436100198	0.640292714	0.150161167	**21:43:16**	0.435865397	0.623385929	0.149902401
21:43:20	0.435630596	0.609189434	0.149643635	**21:43:24**	0.435395796	0.594992904	0.149384869
21:43:28	0.435160995	0.578457259	0.149126103	**21:43:32**	0.434926194	0.561921615	0.148867337

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:43:36	0.434691394	0.549784333	0.148608571	**21:43:40**	0.434456593	0.550842157	0.148349806
21:43:44	0.434221793	0.551899981	0.14809104	**21:43:48**	0.433986992	0.550781043	0.147832274
21:43:52	0.433752191	0.549662123	0.147573508	**21:43:56**	0.433517391	0.549893337	0.147314742
21:44:00	0.43328259	0.551474723	0.147055976	**21:44:04**	0.43282807	0.552181879	0.14679721
21:44:08	0.432373549	0.550659317	0.146538444	**21:44:12**	0.431919029	0.549136754	0.146279678
21:44:16	0.431464509	0.550311407	0.146020912	**21:44:20**	0.431009988	0.554183274	0.145762146
21:44:24	0.430555468	0.558055141	0.14550338	**21:44:28**	0.430100948	0.556135324	0.145244614
21:44:32	0.429646427	0.554215508	0.144985848	**21:44:36**	0.429191907	0.546876337	0.144727082
21:44:40	0.428737386	0.534117796	0.144468316	**21:44:44**	0.428282866	0.521359237	0.14420955
21:44:48	0.427828346	0.501206352	0.143950784	**21:44:52**	0.427373825	0.481053466	0.143692018
21:44:56	0.426919305	0.463267479	0.143433253	**21:45:00**	-0.073535216	-0.052151611	-0.356825513
21:45:04	-0.073952965	-0.0675488	-0.357084279	**21:45:08**	-0.074370715	-0.081519057	-0.357343045
21:45:12	0.425211535	0.404510668	0.142398189	**21:45:16**	0.424793785	0.39388752	0.142139423
21:45:20	0.424376035	0.386611474	0.141880657	**21:45:24**	0.423958285	0.379335427	0.141621891
21:45:28	0.423540535	0.365694359	0.141363125	**21:45:32**	0.423122786	0.352053291	0.141104359
21:45:36	0.422705036	0.337104571	0.140845593	**21:45:40**	0.422287286	0.320848184	0.140586827
21:45:44	0.421869536	0.304591796	0.140328061	**21:45:48**	0.421451786	0.281923887	0.140069295
21:45:52	0.421034036	0.259255978	0.139810529	**21:45:56**	0.420616286	0.236055026	0.139551763
21:46:00	0.420198537	0.212321031	0.139292997	**21:46:04**	0.419394506	0.18835678	0.139034231
21:46:08	0.418590476	0.172789358	0.138775466	**21:46:12**	0.417786446	0.15722194	0.1385167
21:46:16	0.416982416	0.14821921	0.138257934	**21:46:20**	0.416178385	0.145781169	0.137999168
21:46:24	0.415374355	0.143343127	0.137740402	**21:46:28**	0.414570325	0.132522784	0.137481636
21:46:32	0.413766295	0.12170245	0.13722287	**21:46:36**	0.412962264	0.108317621	0.136964104
21:46:40	0.412158234	0.094077963	0.136705338	**21:46:44**	0.411354204	0.077597458	0.136446572
21:46:48	0.410550174	0.054394398	0.136187806	**21:46:52**	0.409746144	0.031191337	0.13592904
21:46:56	0.408942113	0.020346932	0.135670274	**21:47:00**	0.408138083	0.021861199	0.135411508
21:47:04	0.408041962	0.023797423	0.135152742	**21:47:08**	0.407945842	0.023724707	0.134893976
21:47:12	0.407849721	0.023651991	0.13463521	**21:47:16**	0.407753601	0.025526269	0.134376444
21:47:20	0.40765748	0.029347558	0.134117678	**21:47:24**	0.40756136	0.03316883	0.133858913
21:47:28	0.407465239	0.029813215	0.133600147	**21:47:32**	0.407369119	0.0264576	0.133341381
21:47:36	0.407272998	0.013642387	0.133082615	**21:47:40**	0.407176877	-0.008632422	0.132823849
21:47:44	0.407080757	-0.030907232	0.132565083	**21:47:48**	0.406984636	-0.060413875	0.132306317
21:47:52	0.406888516	-0.089920571	0.132047551	**21:47:56**	0.406792395	-0.113465645	0.131788785
21:48:00	0.406696275	-0.13104917	0.131530019	**21:48:04**	0.406001847	-0.148989337	0.131271253
21:48:08	0.405307419	-0.166929504	0.131012487	**21:48:12**	0.404612991	-0.184869671	0.130753721
21:48:16	0.403918563	-0.200633093	0.130494955	**21:48:20**	0.403224135	-0.21421977	0.130236189
21:48:24	0.402529708	-0.227806448	0.129977423	**21:48:28**	0.40183528	-0.231356104	0.129718657
21:48:32	0.401140852	-0.234905761	0.129459891	**21:48:36**	0.400446424	-0.238455382	0.129201125
21:48:40	0.399751996	-0.242005038	0.12894236	**21:48:44**	0.399057568	-0.245554694	0.128683594
21:48:48	0.398363141	-0.241210783	0.128424828	**21:48:52**	0.397668713	-0.236866871	0.128166062
21:48:56	0.396974285	-0.230310792	0.127907296	**21:49:00**	0.396279857	-0.221542511	0.12764853
21:49:04	0.395894632	-0.212589989	0.127389764	**21:49:08**	0.395509406	-0.203637397	0.127130998
21:49:12	0.39512418	-0.194684876	0.126872232	**21:49:16**	0.394738955	-0.184091251	0.126613466
21:49:20	0.394353729	-0.171856559	0.1263547	**21:49:24**	0.393968504	-0.159621867	0.126095934
21:49:28	0.393583278	-0.136407025	0.125837168	**21:49:32**	0.393198053	-0.113192183	0.125578402
21:49:36	0.392812827	-0.088756623	0.125319636	**21:49:40**	0.392427602	-0.063100342	0.12506087
21:49:44	0.392042376	-0.037444044	0.124802104	**21:49:48**	0.391657151	-0.022405976	0.124543338
21:49:52	0.391271925	-0.007367924	0.124284573	**21:49:56**	0.390886699	0.010192004	0.124025807
21:50:00	0.390501474	0.030273774	0.123767041	**21:50:04**	0.389790915	0.050161617	0.123508275
21:50:08	0.389080356	0.068723077	0.123249509	**21:50:12**	0.388369797	0.087284528	0.122990743
21:50:16	0.387659238	0.097345418	0.122731977	**21:50:20**	0.386948679	0.098905747	0.122473211
21:50:24	0.38623812	0.100466067	0.122214445	**21:50:28**	0.385527561	0.107217446	0.121955679
21:50:32	0.384817002	0.113968816	0.121696913	**21:50:36**	0.384106443	0.118884649	0.121438147
21:50:40	0.383395884	0.121964925	0.121179381	**21:50:44**	0.382685325	0.125045211	0.120920615
21:50:48	0.381974766	0.126845124	0.120661849	**21:50:52**	0.381264207	0.128645036	0.120403083
21:50:56	0.380553648	0.133004203	0.120144317	**21:51:00**	0.379843089	0.139922632	0.119885551
21:51:04	0.379589316	0.147113336	0.119626785	**21:51:08**	0.379335543	0.154919942	0.11936802

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:51:12	0.37908177	0.162726543	0.119109254	**21:51:16**	0.378827997	0.16994011	0.118850488
21:51:20	0.378574224	0.176560642	0.118591722	**21:51:24**	0.37832045	0.183181174	0.118332956
21:51:28	0.378066677	0.185778041	0.11807419	**21:51:32**	0.377812904	0.188374908	0.117815424
21:51:36	0.377559131	0.190630407	0.117556658	**21:51:40**	0.377305358	0.192544534	0.117297892
21:51:44	0.377051585	0.194458661	0.117039126	**21:51:48**	0.376797812	0.205364293	0.11678036
21:51:52	0.376544039	0.216269923	0.116521594	**21:51:56**	0.376290265	0.233539842	0.116262828
21:52:00	0.376036492	0.257174048	0.116004062	**21:52:04**	0.375333595	0.280540537	0.115745296
21:52:08	0.374630697	0.311291124	0.11548653	**21:52:12**	0.373927799	0.342041703	0.115227764
21:52:16	0.373224902	0.373398404	0.114968998	**21:52:20**	0.372522004	0.405361237	0.114710232
21:52:24	0.371819106	0.437324052	0.114451467	**21:52:28**	0.371116208	0.463310519	0.114192701
21:52:32	0.370413311	0.489296968	0.113933935	**21:52:36**	0.369710413	0.507167418	0.113675169
21:52:40	0.369007515	0.516921833	0.113416403	**21:52:44**	0.368304618	0.526676247	0.113157637
21:52:48	0.36760172	0.541877835	0.112898871	**21:52:52**	0.366898822	0.557079457	0.112640105
21:52:56	0.366195924	0.567979145	0.112381339	**21:53:00**	0.365493027	0.574576967	0.112122573
21:53:04	0.365295719	0.581476128	0.111863807	**21:53:08**	0.365098412	0.579721179	0.111605041
21:53:12	0.364901105	0.577966266	0.111346275	**21:53:16**	0.364703798	0.577115931	0.111087509
21:53:20	0.36450649	0.577170211	0.110828743	**21:53:24**	0.364309183	0.57722449	0.110569977
21:53:28	0.364111876	0.576692321	0.110311211	**21:53:32**	0.363914568	0.576160188	0.110052445
21:53:36	0.363717261	0.576190272	0.10979368	**21:53:40**	0.363519954	0.577907185	0.109534914
21:53:44	0.363322646	0.579624099	0.109276148	**21:53:48**	0.363125339	0.580524049	0.109017382
21:53:52	0.362928032	0.581424035	0.108758616	**21:53:56**	0.362730724	0.576553086	0.10849985
21:54:00	0.362533417	0.565911203	0.108241084	**21:54:04**	0.362221014	0.555200713	0.107982318
21:54:08	0.361908612	0.547363628	0.107723552	**21:54:12**	0.361596209	0.539526543	0.107464786
21:54:16	0.361283806	0.534644687	0.10720602	**21:54:20**	0.360971404	0.532718132	0.106947254
21:54:24	0.360659001	0.530791577	0.106688488	**21:54:28**	0.360346598	0.530123295	0.106429722
21:54:32	0.360034196	0.529454978	0.106170956	**21:54:36**	0.359721793	0.531255884	0.10591219
21:54:40	0.35940939	0.535526012	0.105653424	**21:54:44**	0.359096987	0.539796105	0.105394658
21:54:48	0.358784585	0.539537691	0.105135892	**21:54:52**	0.358472182	0.539279277	0.104877127
21:54:56	0.358159779	0.536880465	0.104618361	**21:55:00**	0.357847377	0.532341255	0.104359595
21:55:04	0.357606252	0.527844532	0.104100829	**21:55:08**	0.357365127	0.520918309	0.103842063
21:55:12	0.357124002	0.513992086	0.103583297	**21:55:16**	0.356882877	0.496908877	0.103324531
21:55:20	0.356641753	0.469668734	0.103065765	**21:55:24**	0.356400628	0.442428574	0.102806999
21:55:28	0.356159503	0.415770989	0.102548233	**21:55:32**	0.355918378	0.389113387	0.102289467
21:55:36	0.355677254	0.364823944	0.102030701	**21:55:40**	0.355436129	0.342902633	0.101771935
21:55:44	0.355195004	0.320981332	0.101513169	**21:55:48**	0.354953879	0.311112599	0.101254403
21:55:52	0.354712754	0.301243866	0.100995637	**21:55:56**	0.35447163	0.289135706	0.100736871
21:56:00	0.354230505	0.274788118	0.100478105	**21:56:04**	0.354255542	0.260599186	0.100219339
21:56:08	0.354280579	0.249921722	0.099960574	**21:56:12**	0.354305616	0.239244261	0.099701808
21:56:16	0.354330653	0.231285376	0.099443042	**21:56:20**	0.35435569	0.226045073	0.099184276
21:56:24	0.354380727	0.22080477	0.09892551	**21:56:28**	0.354405764	0.220541252	0.098666744
21:56:32	0.354430801	0.220277734	0.098407978	**21:56:36**	0.354455838	0.230507369	0.098149212
21:56:40	0.354480875	0.251230156	0.097890446	**21:56:44**	0.354505912	0.271952945	0.09763168
21:56:48	0.354530949	0.279416325	0.097372914	**21:56:52**	0.354555986	0.286879705	0.097114148
21:56:56	0.354581023	0.295232785	0.096855382	**21:57:00**	0.35460606	0.304475575	0.096596616
21:57:04	0.354416432	0.313590397	0.09633785	**21:57:08**	0.354226804	0.32270522	0.096079084
21:57:12	0.354037176	0.331820052	0.095820318	**21:57:16**	0.353847548	0.344822475	0.095561552
21:57:20	0.35365792	0.361712499	0.095302787	**21:57:24**	0.353468292	0.378602523	0.095044021
21:57:28	0.353278664	0.388080616	0.094785255	**21:57:32**	0.353089036	0.397558727	0.094526489
21:57:36	0.352899408	0.397491988	0.094267723	**21:57:40**	0.35270978	0.387880434	0.094008957
21:57:44	0.352520152	0.378268879	0.093750191	**21:57:48**	0.352330524	0.365578436	0.093491425
21:57:52	0.352140897	0.352888001	0.093232659	**21:57:56**	0.351951269	0.340993869	0.092973893
21:58:00	0.351761641	0.329896049	0.092715127	**21:58:04**	0.352173441	0.319156731	0.092456361
21:58:08	0.352585242	0.309627314	0.092197595	**21:58:12**	0.352997043	0.300097896	0.091938829
21:58:16	0.353408844	0.291113678	0.091680063	**21:58:20**	0.353820644	0.282674658	0.091421297
21:58:24	0.354232445	0.274235638	0.091162531	**21:58:28**	0.354644246	0.262575256	0.090903765
21:58:32	0.355056047	0.250914874	0.090644999	**21:58:36**	0.355467847	0.246153622	0.090386234
21:58:40	0.355879648	0.2482915	0.090127468	**21:58:44**	0.356291449	0.250429377	0.089868702

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
21:58:48	0.35670325	0.238020377	0.089609936	**21:58:52**	0.35711505	0.225611376	0.08935117
21:58:56	0.357526851	0.214380163	0.089092404	**21:59:00**	0.357938652	0.204326737	0.088833638
21:59:04	0.357258901	0.193622654	0.088574872	**21:59:08**	0.356579149	0.197910884	0.088316106
21:59:12	0.355899398	0.202199112	0.08805734	**21:59:16**	0.355219647	0.204356273	0.087798574
21:59:20	0.354539896	0.204382366	0.087539808	**21:59:24**	0.353860144	0.204408459	0.087281042
21:59:28	0.353180393	0.209026198	0.087022276	**21:59:32**	0.352500642	0.213643937	0.08676351
21:59:36	0.351820891	0.225365352	0.086504744	**21:59:40**	0.351141139	0.244190445	0.086245978
21:59:44	0.350461388	0.263015538	0.085987212	**21:59:48**	0.349781637	0.281161392	0.085728446
21:59:52	0.349101886	0.299307247	0.085469681	**21:59:56**	0.348422134	0.316706366	0.085210915
22:00:00	0.847742383	0.793269658	0.584952149	**22:00:04**	0.847431801	0.784380016	0.584693383
22:00:08	0.847121219	0.78798913	0.584434617	**22:00:12**	0.346810636	0.291598244	0.084175851
22:00:16	0.346500054	0.295207367	0.083917085	**22:00:20**	0.346189472	0.298816481	0.083658319
22:00:24	0.34587889	0.302425595	0.083399553	**22:00:28**	0.345568307	0.295408486	0.083140787
22:00:32	0.345257725	0.288391386	0.082882021	**22:00:36**	0.344947143	0.273288557	0.082623255
22:00:40	0.344636561	0.255490489	0.082364489	**22:00:44**	0.344325978	0.23769242	0.082105723
22:00:48	0.344015396	0.224209192	0.081846957	**22:00:52**	0.343704814	0.210725963	0.081588191
22:00:56	0.343394232	0.201703503	0.081329425	**22:01:00**	0.343083649	0.197141811	0.081070659
22:01:04	0.343328131	0.192910985	0.080811893	**22:01:08**	0.343572612	0.201434761	0.080553128
22:01:12	0.343817093	0.209958536	0.080294362	**22:01:16**	0.344061574	0.214707781	0.080035596
22:01:20	0.344306056	0.215682492	0.07977683	**22:01:24**	0.344550537	0.216657204	0.079518064
22:01:28	0.344795018	0.209987556	0.079259298	**22:01:32**	0.345039499	0.203317908	0.079000532
22:01:36	0.345283981	0.195722495	0.078741766	**22:01:40**	0.345528462	0.187818493	0.078483
22:01:44	0.345772943	0.179914492	0.078224234	**22:01:48**	0.346017424	0.16699802	0.077965468
22:01:52	0.346261906	0.154081548	0.077706702	**22:01:56**	0.346506387	0.145340336	0.077447936
22:02:00	0.346750868	0.137990873	0.07718917	**22:02:04**	0.345749804	0.129898964	0.076930404
22:02:08	0.344748739	0.124261369	0.076671638	**22:02:12**	0.343747675	0.118623773	0.076412872
22:02:16	0.342746611	0.10410634	0.076154106	**22:02:20**	0.341745546	0.080709061	0.075895341
22:02:24	0.340744482	0.057311791	0.075636575	**22:02:28**	0.339743418	0.031951228	0.075377809
22:02:32	0.338742353	0.006590656	0.075119043	**22:02:36**	0.337741289	-0.02028393	0.074860277
22:02:40	0.336740225	-0.048672531	0.074601511	**22:02:44**	0.335739161	-0.076812107	0.074342745
22:02:48	0.334738096	-0.10420457	0.074083979	**22:02:52**	0.333737032	-0.131597033	0.073825213
22:02:56	0.332735968	-0.161055105	0.073566447	**22:03:00**	0.331734903	-0.192578785	0.073307681
22:03:04	0.331602645	-0.223584583	0.073048915	**22:03:08**	0.331470386	-0.23213928	0.072790149
22:03:12	0.331338127	-0.240693976	0.072531383	**22:03:16**	0.331205869	-0.242300791	0.072272617
22:03:20	0.33107361	-0.236959654	0.072013851	**22:03:24**	0.330941351	-0.231618516	0.071755085
22:03:28	0.330809092	-0.218479633	0.071496319	**22:03:32**	0.330676834	-0.197542969	0.071237553
22:03:36	0.330544575	-0.170216023	0.070978788	**22:03:40**	0.330412316	-0.136498828	0.070720022
22:03:44	0.330280058	-0.102781599	0.070461256	**22:03:48**	0.330147799	-0.06240257	0.07020249
22:03:52	0.33001554	-0.022023559	0.069943724	**22:03:56**	0.329883282	0.017989624	0.069684958
22:04:00	0.329751023	0.05763696	0.069426192	**22:04:04**	0.329715271	0.097341823	0.069167426
22:04:08	0.329679519	0.120871941	0.06890866	**22:04:12**	0.329643767	0.144402051	0.068649894
22:04:16	0.329608016	0.159068707	0.068391128	**22:04:20**	0.329572264	0.1648719	0.068132362
22:04:24	0.329536512	0.170675093	0.067873596	**22:04:28**	0.32950076	0.177709022	0.06761483
22:04:32	0.329465008	0.184742949	0.067356064	**22:04:36**	0.329429256	0.195495991	0.067097298
22:04:40	0.329393505	0.209968147	0.066838532	**22:04:44**	0.329357753	0.224440302	0.066579766
22:04:48	0.329322001	0.230539694	0.066321	**22:04:52**	0.329286249	0.236639089	0.066062235
22:04:56	0.329250497	0.244382077	0.065803469	**22:05:00**	0.329214745	0.253768654	0.065544703
22:05:04	0.328542674	0.262775936	0.065285937	**22:05:08**	0.327870602	0.279970125	0.065027171
22:05:12	0.32719853	0.297164305	0.064768405	**22:05:16**	0.326526458	0.309165286	0.064509639
22:05:20	0.325854386	0.319435194	0.064250873	**22:05:24**	0.325182314	0.329705102	0.063992107
22:05:28	0.324510242	0.343747539	0.063733341	**22:05:32**	0.32383817	0.357789951	0.063474575
22:05:36	0.323166099	0.369160888	0.063215809	**22:05:40**	0.322494027	0.377860334	0.062957043
22:05:44	0.321821955	0.386559762	0.062698277	**22:05:48**	0.321149883	0.391918716	0.062439511
22:05:52	0.320477811	0.397277669	0.062180745	**22:05:56**	0.319805739	0.401745048	0.061921979
22:06:00	0.319133667	0.405915223	0.061663213	**22:06:04**	0.319141173	0.410490484	0.061404448
22:06:08	0.319148678	0.418078887	0.061145682	**22:06:12**	0.319156184	0.425667308	0.060886916
22:06:16	0.319163689	0.436826061	0.06062815	**22:06:20**	0.319171195	0.451555181	0.060369384

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:06:24	0.3191787	0.466284284	0.060110618	**22:06:28**	0.319186206	0.483186934	0.059851852
22:06:32	0.319193711	0.500089583	0.059593086	**22:06:36**	0.319201217	0.509518516	0.05933432
22:06:40	0.319208722	0.511473661	0.059075554	**22:06:44**	0.319216228	0.513428841	0.058816788
22:06:48	0.319223733	0.503752618	0.058558022	**22:06:52**	0.319231239	0.49407636	0.058299256
22:06:56	0.319238744	0.479464552	0.05804049	**22:07:00**	0.31924625	0.459917176	0.057781724
22:07:04	0.319354761	0.440430009	0.057522958	**22:07:08**	0.319463273	0.428240671	0.057264192
22:07:12	0.319571784	0.41605135	0.057005426	**22:07:16**	0.319680296	0.405555929	0.05674666
22:07:20	0.319788807	0.396754408	0.056487895	**22:07:24**	0.319897319	0.387952887	0.056229129
22:07:28	0.320005831	0.376436369	0.055970363	**22:07:32**	0.320114342	0.364919833	0.055711597
22:07:36	0.320222854	0.348253487	0.055452831	**22:07:40**	0.320331365	0.326437305	0.055194065
22:07:44	0.320439877	0.304621132	0.054935299	**22:07:48**	0.320548388	0.28146861	0.054676533
22:07:52	0.3206569	0.258316091	0.054417767	**22:07:56**	0.320765411	0.23335184	0.054159001
22:08:00	0.320873923	0.206575856	0.053900235	**22:08:04**	0.321549785	0.180138063	0.053641469
22:08:08	0.322225647	0.152250438	0.053382703	**22:08:12**	0.322901509	0.124362816	0.053123937
22:08:16	0.323577371	0.104029189	0.052865171	**22:08:20**	0.324253233	0.086213567	0.052606405
22:08:24	0.324929095	0.068397945	0.052347639	**22:08:28**	0.325604957	0.059019233	0.052088873
22:08:32	0.326280819	0.049640513	0.051830107	**22:08:36**	0.326956681	0.039821494	0.051571342
22:08:40	0.327632543	0.029562186	0.051312576	**22:08:44**	0.328308405	0.019302878	0.05105381
22:08:48	0.328984267	-0.010018667	0.050795044	**22:08:52**	0.329660129	-0.039340229	0.050536278
22:08:56	0.330335991	-0.051347566	0.050277512	**22:09:00**	0.331011853	-0.057583524	0.050018746
22:09:04	0.330996591	-0.064231433	0.04975998	**22:09:08**	0.33098133	-0.091736363	0.049501214
22:09:12	0.330966068	-0.119241293	0.049242448	**22:09:16**	0.330950807	-0.139102659	0.048983682
22:09:20	0.330935545	-0.151320441	0.048724916	**22:09:24**	0.330920284	-0.163538223	0.04846615
22:09:28	0.330905022	-0.175756006	0.048207384	**22:09:32**	0.330889761	-0.187973788	0.047948618
22:09:36	0.330874499	-0.192524929	0.047689852	**22:09:40**	0.330859238	-0.189409463	0.047431086
22:09:44	0.330843976	-0.186293998	0.04717232	**22:09:48**	0.330828715	-0.171525954	0.046913555
22:09:52	0.330813453	-0.156757874	0.046654789	**22:09:56**	0.330798192	-0.148219591	0.046396023
22:10:00	0.33078293	-0.14175786	0.046137257	**22:10:04**	0.330892756	-0.135221566	0.045878491
22:10:08	0.331002582	-0.121036644	0.045619725	**22:10:12**	0.331112408	-0.106851722	0.045360959
22:10:16	0.331222235	-0.09156823	0.045102193	**22:10:20**	0.331332061	-0.075186152	0.044843427
22:10:24	0.331441887	-0.058804056	0.044584661	**22:10:28**	0.331551713	-0.044741426	0.044325895
22:10:32	0.331661539	-0.030678779	0.044067129	**22:10:36**	0.331771365	-0.01430823	0.043808363
22:10:40	0.331881191	0.004370239	0.043549597	**22:10:44**	0.331991017	0.023048707	0.043290831
22:10:48	0.332100843	0.049054368	0.043032065	**22:10:52**	0.332210669	0.075060039	0.042773299
22:10:56	0.332320495	0.100603054	0.042514533	**22:11:00**	0.332430321	0.12599185	0.042255767
22:11:04	0.332313421	0.151245502	0.041997002	**22:11:08**	0.332196521	0.179161786	0.041738236
22:11:12	0.332079621	0.207078071	0.04147947	**22:11:16**	0.331962721	0.21924451	0.041220704
22:11:20	0.331845821	0.226161001	0.040961938	**22:11:24**	0.331728921	0.233077493	0.040703172
22:11:28	0.331612021	0.246308274	0.040444406	**22:11:32**	0.331495121	0.259539056	0.04018564
22:11:36	0.331378221	0.276946203	0.039926874	**22:11:40**	0.331261321	0.298529712	0.039668108
22:11:44	0.331144422	0.320113221	0.039409342	**22:11:48**	0.331027522	0.346324178	0.039150576
22:11:52	0.330910622	0.372535135	0.03889181	**22:11:56**	0.330793722	0.395281281	0.038633044
22:12:00	0.330676822	0.414562618	0.038374278	**22:12:04**	0.330618569	0.433878914	0.038115512
22:12:08	0.330560317	0.449524579	0.037856746	**22:12:12**	0.330502065	0.465170243	0.03759798
22:12:16	0.330443812	0.476218722	0.037339214	**22:12:20**	0.33038556	0.48266998	0.037080449
22:12:24	0.330327308	0.489121256	0.036821683	**22:12:28**	0.330269055	0.500157887	0.036562917
22:12:32	0.330210803	0.511194481	0.036304151	**22:12:36**	0.330152551	0.522231111	0.036045385
22:12:40	0.330094298	0.533267706	0.035786619	**22:12:44**	0.330036046	0.54279224	0.035527853
22:12:48	0.329977794	0.547780521	0.035269087	**22:12:52**	0.329919541	0.552768768	0.035010321
22:12:56	0.329861289	0.557043761	0.034751555	**22:13:00**	0.329803037	0.560605502	0.034492789
22:13:04	0.330306357	0.564501988	0.034234023	**22:13:08**	0.330809678	0.568398473	0.033975257
22:13:12	0.331312998	0.572294959	0.033716491	**22:13:16**	0.331816319	0.58259871	0.033457725
22:13:20	0.332319639	0.599309729	0.033198959	**22:13:24**	0.33282296	0.616020782	0.032940193
22:13:28	0.33332628	0.631389748	0.032681427	**22:13:32**	0.333829601	0.646758678	0.032422662
22:13:36	0.334332921	0.654538386	0.032163896	**22:13:40**	0.334836242	0.654728835	0.03190513
22:13:44	0.335339563	0.654919284	0.031646364	**22:13:48**	0.335842883	0.642279603	0.031387598
22:13:52	0.336346204	0.629639922	0.031128832	**22:13:56**	0.336849524	0.614045153	0.030870066

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:14:00	0.337352845	0.595495262	0.0306113	**22:14:04**	0.336793451	0.576311904	0.030352534
22:14:08	0.336234058	0.558808092	0.030093768	**22:14:12**	0.335674665	0.541304244	0.029835002
22:14:16	0.335115272	0.532913796	0.029576236	**22:14:20**	0.334555879	0.533636746	0.02931747
22:14:24	0.333996485	0.53435966	0.029058704	**22:14:28**	0.333437092	0.523096304	0.028799938
22:14:32	0.332877699	0.511832948	0.028541172	**22:14:36**	0.332318306	0.505822365	0.028282406
22:14:40	0.331758912	0.505064521	0.02802364	**22:14:44**	0.331199519	0.504306676	0.027764874
22:14:48	0.330640126	0.505012181	0.027506109	**22:14:52**	0.330080733	0.505717722	0.027247343
22:14:56	0.32952134	0.504846184	0.026988577	**22:15:00**	-0.171038054	0.002397637	-0.473270189
22:15:04	-0.171590418	-4.67552E-05	-0.473528955	**22:15:08**	-0.172142782	-0.01091087	-0.473787721
22:15:12	0.327304853	0.478225032	0.025953513	**22:15:16**	0.326752489	0.467360917	0.025694747
22:15:20	0.326200125	0.45649682	0.025435981	**22:15:24**	0.32564776	0.445632704	0.025177215
22:15:28	0.325095396	0.432413238	0.024918449	**22:15:32**	0.324543031	0.419193772	0.024659683
22:15:36	0.323990667	0.406256428	0.024400917	**22:15:40**	0.323438303	0.393601222	0.024142151
22:15:44	0.322885938	0.380946016	0.023883385	**22:15:48**	0.322333574	0.353235669	0.023624619
22:15:52	0.32178121	0.32552534	0.023365853	**22:15:56**	0.321228845	0.299246562	0.023107087
22:16:00	0.320676481	0.27344497	0.022848321	**22:16:04**	0.32000169	0.247570397	0.022589556
22:16:08	0.319326898	0.223760446	0.02233079	**22:16:12**	0.318652107	0.199950495	0.022072024
22:16:16	0.317977316	0.180207211	0.021813258	**22:16:20**	0.317302525	0.164530593	0.021554492
22:16:24	0.316627733	0.148853976	0.021295726	**22:16:28**	0.315952942	0.147866912	0.02103696
22:16:32	0.315278151	0.146879852	0.020778194	**22:16:36**	0.314603359	0.1412719	0.020519428
22:16:40	0.313928568	0.131043056	0.020260662	**22:16:44**	0.313253777	0.120814211	0.020001896
22:16:48	0.312578986	0.104676223	0.01974313	**22:16:52**	0.311904194	0.088538248	0.019484364
22:16:56	0.311229403	0.074916767	0.019225598	**22:17:00**	0.310554612	0.063811799	0.018966832
22:17:04	0.310327942	0.052973949	0.018708066	**22:17:08**	0.310101273	0.032946152	0.0184493
22:17:12	0.309874603	0.012918355	0.018190534	**22:17:16**	0.309647934	0.000762648	0.017931768
22:17:20	0.309421264	-0.00352095	0.017673003	**22:17:24**	0.309194595	-0.007804549	0.017414237
22:17:28	0.308967925	-0.020709127	0.017155471	**22:17:32**	0.308741256	-0.033613704	0.016896705
22:17:36	0.308514586	-0.051522528	0.016637939	**22:17:40**	0.308287916	-0.074435561	0.016379173
22:17:44	0.308061247	-0.097348612	0.016120407	**22:17:48**	0.307834577	-0.117058474	0.015861641
22:17:52	0.307607908	-0.136768336	0.015602875	**22:17:56**	0.307381238	-0.154617523	0.015344109
22:18:00	0.307154569	-0.170606071	0.015085343	**22:18:04**	0.306297687	-0.186970279	0.014826577
22:18:08	0.305440804	-0.196643518	0.014567811	**22:18:12**	0.304583922	-0.206316722	0.014309045
22:18:16	0.30372704	-0.221177787	0.014050279	**22:18:20**	0.302870158	-0.241226679	0.013791513
22:18:24	0.302013275	-0.26127557	0.013532747	**22:18:28**	0.301156393	-0.248948327	0.013273981
22:18:32	0.300299511	-0.236621083	0.013015216	**22:18:36**	0.299442629	-0.238311469	0.01275645
22:18:40	0.298585746	-0.254019485	0.012497684	**22:18:44**	0.297728864	-0.269727535	0.012238918
22:18:48	0.296871982	-0.275323775	0.011980152	**22:18:52**	0.2960151	-0.280920015	0.011721386
22:18:56	0.295158217	-0.284827472	0.01146262	**22:19:00**	0.294301335	-0.288172	0.011203854
22:19:04	0.294203859	-0.291063894	0.010945088	**22:19:08**	0.294106384	-0.282127374	0.010686322
22:19:12	0.294008908	-0.273190818	0.010427556	**22:19:16**	0.293911432	-0.259706676	0.01016879
22:19:20	0.293813956	-0.241674876	0.009910024	**22:19:24**	0.293716481	-0.223643077	0.009651258
22:19:28	0.293619005	-0.197981516	0.009392492	**22:19:32**	0.293521529	-0.17231999	0.009133726
22:19:36	0.293424054	-0.152636607	0.00887496	**22:19:40**	0.293326578	-0.138931401	0.008616194
22:19:44	0.293229102	-0.125226195	0.008357428	**22:19:48**	0.293131626	-0.109301236	0.008098663
22:19:52	0.293034151	-0.093376277	0.007839897	**22:19:56**	0.292936675	-0.073774948	0.007581131
22:20:00	0.292839199	-0.05049725	0.007322365	**22:20:04**	0.292258778	-0.027507446	0.007063599
22:20:08	0.291678357	-0.00130232	0.006804833	**22:20:12**	0.291097936	0.024902789	0.006546067
22:20:16	0.290517515	0.044819024	0.006287301	**22:20:20**	0.289937094	0.058446377	0.006028535
22:20:24	0.289356672	0.072073721	0.005769769	**22:20:28**	0.288776251	0.073787354	0.005511003
22:20:32	0.28819583	0.075500987	0.005252237	**22:20:36**	0.287615409	0.076155328	0.004993471
22:20:40	0.287034988	0.075750361	0.004734705	**22:20:44**	0.286454567	0.075345393	0.004475939
22:20:48	0.285874146	0.082205922	0.004217173	**22:20:52**	0.285293725	0.089066442	0.003958407
22:20:56	0.284713304	0.095926967	0.003699641	**22:21:00**	0.284132883	0.102787492	0.003440875
22:21:04	0.284141111	0.109998901	0.00318211	**22:21:08**	0.284149339	0.122078358	0.002923344
22:21:12	0.284157567	0.134157818	0.002664578	**22:21:16**	0.284165796	0.144241072	0.002405812
22:21:20	0.284174024	0.15232812	0.002147046	**22:21:24**	0.284182252	0.160415169	0.00188828
22:21:28	0.284190481	0.158762535	0.001629514	**22:21:32**	0.284198709	0.157109902	0.001370748

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:21:36	0.284206937	0.155457268	0.001111982	**22:21:40**	0.284215165	0.153804635	0.000853216
22:21:44	0.284223394	0.152152001	0.00059445	**22:21:48**	0.284231622	0.14548272	0.000335684
22:21:52	0.28423985	0.138813437	7.69182E-05	**22:21:56**	0.284248078	0.13317482	-0.000181848
22:22:00	0.284256307	0.128566867	-0.000440614	**22:22:04**	0.283744056	0.123648664	-0.00069938
22:22:08	0.283231805	0.122671214	-0.000958146	**22:22:12**	0.282719553	0.121693763	-0.001216912
22:22:16	0.282207302	0.120340523	-0.001475677	**22:22:20**	0.281695051	0.118611502	-0.001734443
22:22:24	0.2811828	0.11688248	-0.001993209	**22:22:28**	0.280670549	0.118122811	-0.002251975
22:22:32	0.280158298	0.119363142	-0.002510741	**22:22:36**	0.279646047	0.120603472	-0.002769507
22:22:40	0.279133796	0.121843803	-0.003028273	**22:22:44**	0.278621545	0.123084134	-0.003287039
22:22:48	0.278109294	0.13149566	-0.003545805	**22:22:52**	0.277597043	0.139907186	-0.003804571
22:22:56	0.277084792	0.140616736	-0.004063337	**22:23:00**	0.276572541	0.133624311	-0.004322103
22:23:04	0.276653497	0.126985485	-0.004580869	**22:23:08**	0.276734453	0.12941993	-0.004839635
22:23:12	0.27681541	0.131854375	-0.005098401	**22:23:16**	0.276896366	0.132995258	-0.005357167
22:23:20	0.276977322	0.132842581	-0.005615933	**22:23:24**	0.277058278	0.132689903	-0.005874699
22:23:28	0.277139235	0.133768104	-0.006133465	**22:23:32**	0.277220191	0.134846303	-0.00639223
22:23:36	0.277301147	0.133563932	-0.006650996	**22:23:40**	0.277382103	0.129920993	-0.006909762
22:23:44	0.27746306	0.126278053	-0.007168528	**22:23:48**	0.277544016	0.111807902	-0.007427294
22:23:52	0.277624972	0.097337752	-0.00768606	**22:23:56**	0.277705928	0.087428018	-0.007944826
22:24:00	0.277786885	0.08207871	-0.008203592	**22:24:04**	0.277663864	0.076607805	-0.008462358
22:24:08	0.277540843	0.080232517	-0.008721124	**22:24:12**	0.277417822	0.083857228	-0.00897989
22:24:16	0.277294801	0.082419835	-0.009238656	**22:24:20**	0.27717178	0.075920345	-0.009497422
22:24:24	0.277048759	0.069420846	-0.009756188	**22:24:28**	0.276925738	0.060134084	-0.010014954
22:24:32	0.276802717	0.050847321	-0.01027372	**22:24:36**	0.276679697	0.042048341	-0.010532486
22:24:40	0.276556676	0.033737154	-0.010791252	**22:24:44**	0.276433655	0.025425957	-0.011050018
22:24:48	0.276310634	0.029698965	-0.011308783	**22:24:52**	0.276187613	0.033971973	-0.011567549
22:24:56	0.276064592	0.039201868	-0.011826315	**22:25:00**	0.275941571	0.045388667	-0.012085081
22:25:04	0.275339517	0.051289922	-0.012343847	**22:25:08**	0.274737463	0.062616135	-0.012602613
22:25:12	0.274135408	0.073942339	-0.012861379	**22:25:16**	0.273533354	0.087969347	-0.013120145
22:25:20	0.2729313	0.104697153	-0.013378911	**22:25:24**	0.272329246	0.121424959	-0.013637677
22:25:28	0.271727191	0.118094831	-0.013896443	**22:25:32**	0.271125137	0.114764707	-0.014155209
22:25:36	0.270523083	0.117744818	-0.014413975	**22:25:40**	0.269921029	0.127035168	-0.014672741
22:25:44	0.269318974	0.136325519	-0.014931507	**22:25:48**	0.26871692	0.15145609	-0.015190273
22:25:52	0.268114866	0.166586661	-0.015449039	**22:25:56**	0.267512811	0.180652093	-0.015707805
22:26:00	0.266910757	0.19365239	-0.01596657	**22:26:04**	0.267304801	0.207246442	-0.016225336
22:26:08	0.267698844	0.198640495	-0.016484102	**22:26:12**	0.268092887	0.190034547	-0.016742868
22:26:16	0.268486931	0.179018167	-0.017001634	**22:26:20**	0.268880974	0.165591357	-0.0172604
22:26:24	0.269275017	0.152164546	-0.017519166	**22:26:28**	0.269669061	0.159061456	-0.017777932
22:26:32	0.270063104	0.165958365	-0.018036698	**22:26:36**	0.270457148	0.174882429	-0.018295464
22:26:40	0.270851191	0.185833647	-0.01855423	**22:26:44**	0.271245234	0.196784865	-0.018812996
22:26:48	0.271639278	0.202898534	-0.019071762	**22:26:52**	0.272033321	0.209012206	-0.019330528
22:26:56	0.272427364	0.209671293	-0.019589294	**22:27:00**	0.272821408	0.208512188	-0.01984806
22:27:04	0.272505748	0.206930037	-0.020106826	**22:27:08**	0.272190088	0.207225819	-0.020365592
22:27:12	0.271874429	0.2075216	-0.020624358	**22:27:16**	0.271558769	0.205959989	-0.020883123
22:27:20	0.27124311	0.203779243	-0.021141889	**22:27:24**	0.27092745	0.201598496	-0.021400655
22:27:28	0.27061179	0.21364403	-0.021659421	**22:27:32**	0.270296131	0.225689563	-0.021918187
22:27:36	0.269980471	0.227943619	-0.022176953	**22:27:40**	0.269664811	0.220406206	-0.022435719
22:27:44	0.269349152	0.212868794	-0.022694485	**22:27:48**	0.269033492	0.20128161	-0.022953251
22:27:52	0.268717832	0.189694432	-0.023212017	**22:27:56**	0.268402173	0.169376864	-0.023470783
22:28:00	0.268086513	0.140328914	-0.023729549	**22:28:04**	0.268080751	0.114309582	-0.023988315
22:28:08	0.26807499	0.096821936	-0.024247081	**22:28:12**	0.268069228	0.079334295	-0.024505847
22:28:16	0.268063466	0.070398946	-0.024764613	**22:28:20**	0.268057704	0.070015889	-0.025023379
22:28:24	0.268051943	0.06963284	-0.025282145	**22:28:28**	0.268046181	0.064723372	-0.025540911
22:28:32	0.268040419	0.059813904	-0.025799676	**22:28:36**	0.268034658	0.062248631	-0.026058442
22:28:40	0.268028896	0.072027561	-0.026317208	**22:28:44**	0.268023134	0.081806491	-0.026575974
22:28:48	0.268017372	0.091585416	-0.02683474	**22:28:52**	0.268011611	0.101364346	-0.027093506
22:28:56	0.268005849	0.113523075	-0.027352272	**22:29:00**	0.268000087	0.12647507	-0.027611038
22:29:04	0.267673586	0.139235876	-0.027869804	**22:29:08**	0.267347085	0.148295504	-0.02812857

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:29:12	0.267020584	0.157355131	-0.028387336	**22:29:16**	0.266694083	0.168525725	-0.028646102
22:29:20	0.266367582	0.181807287	-0.028904868	**22:29:24**	0.266041081	0.195088848	-0.029163634
22:29:28	0.26571458	0.199127112	-0.0294224	**22:29:32**	0.265388079	0.203165384	-0.029681166
22:29:36	0.265061577	0.206141126	-0.029939932	**22:29:40**	0.264735076	0.208054352	-0.030198698
22:29:44	0.264408575	0.209967578	-0.030457463	**22:29:48**	0.264082074	0.208177566	-0.030716229
22:29:52	0.263755573	0.206387553	-0.030974995	**22:29:56**	0.263429072	0.204597541	-0.031233761
22:30:00	0.763102571	0.702807528	0.468507473	**22:30:04**	0.763923433	0.701701441	0.468248707
22:30:08	0.764744294	0.703127535	0.467989941	**22:30:12**	0.265565156	0.204553628	-0.032268825
22:30:16	0.266386018	0.209717148	-0.032527591	**22:30:20**	0.267206879	0.218618105	-0.032786357
22:30:24	0.268027741	0.227519056	-0.033045123	**22:30:28**	0.268848603	0.228453902	-0.033303889
22:30:32	0.269669465	0.229388748	-0.033562655	**22:30:36**	0.270490326	0.226629589	-0.033821421
22:30:40	0.271311188	0.220176433	-0.034080187	**22:30:44**	0.27213205	0.212588001	-0.034338953
22:30:48	0.272952911	0.201593752	-0.034597719	**22:30:52**	0.273773773	0.190599507	-0.034856485
22:30:56	0.274594635	0.181301192	-0.035115251	**22:31:00**	0.275415496	0.173698811	-0.035374016
22:31:04	0.275726833	0.16579271	-0.035632782	**22:31:08**	0.27603817	0.15128654	-0.035891548
22:31:12	0.276349507	0.136780369	-0.036150314	**22:31:16**	0.276660843	0.120615795	-0.03640908
22:31:20	0.27697218	0.102792811	-0.036667846	**22:31:24**	0.277283517	0.084969831	-0.036926612
22:31:28	0.277594854	0.071034172	-0.037185378	**22:31:32**	0.27790619	0.057098514	-0.037444144
22:31:36	0.278217527	0.04444583	-0.03770291	**22:31:40**	0.278528864	0.033076123	-0.037961676
22:31:44	0.278840201	0.021706424	-0.038220442	**22:31:48**	0.279151538	0.019344949	-0.038479208
22:31:52	0.279462874	0.016983482	-0.038737974	**22:31:56**	0.279774211	0.014622015	-0.03899674
22:32:00	0.280085548	0.012260531	-0.039255506	**22:32:04**	0.280338223	0.009864097	-0.039514272
22:32:08	0.280590899	0.007467663	-0.039773038	**22:32:12**	0.280843574	0.00507123	-0.040031804
22:32:16	0.28109625	0.006283873	-0.040290569	**22:32:20**	0.281348926	0.011105611	-0.040549335
22:32:24	0.281601601	0.015927349	-0.040808101	**22:32:28**	0.281854277	0.027942796	-0.041066867
22:32:32	0.282106952	0.039958235	-0.041325633	**22:32:36**	0.282359628	0.047733887	-0.041584399
22:32:40	0.282612303	0.051269736	-0.041843165	**22:32:44**	0.282864979	0.054805594	-0.042101931
22:32:48	0.283117654	0.065198191	-0.042360697	**22:32:52**	0.28337033	0.075590789	-0.042619463
22:32:56	0.283623006	0.081219328	-0.042878229	**22:33:00**	0.283875681	0.082083792	-0.043136995
22:33:04	0.283486842	0.084959475	-0.043395761	**22:33:08**	0.283098002	0.095016006	-0.043654527
22:33:12	0.282709163	0.105072541	-0.043913293	**22:33:16**	0.282320324	0.113558703	-0.044172059
22:33:20	0.281931484	0.120474497	-0.044430825	**22:33:24**	0.281542645	0.127390291	-0.044689591
22:33:28	0.281153806	0.122350986	-0.044948356	**22:33:32**	0.280764966	0.117311681	-0.045207122
22:33:36	0.280376127	0.115588389	-0.045465888	**22:33:40**	0.279987288	0.1171811	-0.045724654
22:33:44	0.279598448	0.118773812	-0.04598342	**22:33:48**	0.279209609	0.11508657	-0.046242186
22:33:52	0.27882077	0.111399327	-0.046500952	**22:33:56**	0.27843193	0.114149956	-0.046759718
22:34:00	0.278043091	0.123338454	-0.047018484	**22:34:04**	0.279019297	0.133340635	-0.04727725
22:34:08	0.279995503	0.132304632	-0.047536016	**22:34:12**	0.280971709	0.131268628	-0.047794782
22:34:16	0.281947915	0.136300285	-0.048053548	**22:34:20**	0.28292412	0.147399603	-0.048312314
22:34:24	0.283900326	0.158498922	-0.04857108	**22:34:28**	0.284876532	0.177598282	-0.048829846
22:34:32	0.285852738	0.196697642	-0.049088612	**22:34:36**	0.286828944	0.212864015	-0.049347378
22:34:40	0.28780515	0.226097396	-0.049606144	**22:34:44**	0.288781356	0.239330776	-0.049864909
22:34:48	0.289757562	0.24145059	-0.050123675	**22:34:52**	0.290733768	0.243570403	-0.050382441
22:34:56	0.291709974	0.244120528	-0.050641207	**22:35:00**	0.29268618	0.243100959	-0.050899973
22:35:04	0.292942406	0.241808173	-0.051158739	**22:35:08**	0.293198632	0.240983243	-0.051417505
22:35:12	0.293454858	0.240158308	-0.051676271	**22:35:16**	0.293711084	0.239333378	-0.051935037
22:35:20	0.29396731	0.2469461	-0.052193803	**22:35:24**	0.294223537	0.254558817	-0.052452569
22:35:28	0.294479763	0.256342171	-0.052711335	**22:35:32**	0.294735989	0.258125535	-0.052970101
22:35:36	0.294992215	0.256694651	-0.053228867	**22:35:40**	0.295248441	0.254192342	-0.053487633
22:35:44	0.295504667	0.250715834	-0.053746399	**22:35:48**	0.295760893	0.244316678	-0.054005165
22:35:52	0.296017119	0.23791753	-0.054263931	**22:35:56**	0.296273346	0.228538741	-0.054522697
22:36:00	0.296529572	0.218166735	-0.054781462	**22:36:04**	0.297344041	0.211236357	-0.055040228
22:36:08	0.298158511	0.213632573	-0.055298994	**22:36:12**	0.298972981	0.216028788	-0.05555776
22:36:16	0.299787451	0.214183203	-0.055816526	**22:36:20**	0.300601921	0.210923686	-0.056075292
22:36:24	0.30141639	0.208527491	-0.056334058	**22:36:28**	0.30223086	0.208721261	-0.056592824
22:36:32	0.30304533	0.208915032	-0.05685159	**22:36:36**	0.3038598	0.212196185	-0.057110356
22:36:40	0.304674269	0.216506467	-0.057369122	**22:36:44**	0.305488739	0.222999174	-0.057627888

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:36:48	0.306303209	0.236039169	-0.057886654	**22:36:52**	0.307117679	0.249079163	-0.05814542
22:36:56	0.307932148	0.25986845	-0.058404186	**22:37:00**	0.308746618	0.269907498	-0.058662952
22:37:04	0.308553828	0.276838326	-0.058921718	**22:37:08**	0.308361038	0.276245723	-0.059180484
22:37:12	0.308168248	0.27565312	-0.05943925	**22:37:16**	0.307975458	0.284257117	-0.059698015
22:37:20	0.307782668	0.295926644	-0.059956781	**22:37:24**	0.307589878	0.301843276	-0.060215547
22:37:28	0.307397088	0.290501252	-0.060474313	**22:37:32**	0.307204298	0.279159227	-0.060733079
22:37:36	0.307011508	0.266706989	-0.060991845	**22:37:40**	0.306818718	0.253884676	-0.061250611
22:37:44	0.306625928	0.234780973	-0.061509377	**22:37:48**	0.306433138	0.196833107	-0.061768143
22:37:52	0.306240348	0.158885238	-0.062026909	**22:37:56**	0.306047558	0.131985059	-0.062285675
22:38:00	0.305854768	0.105084885	-0.062544441	**22:38:04**	0.306625989	0.079220569	-0.062803207
22:38:08	0.307397211	0.054739955	-0.063061973	**22:38:12**	0.308168432	0.030259341	-0.063320739
22:38:16	0.308939653	0.02695871	-0.063579505	**22:38:20**	0.309710875	0.030718057	-0.063838271
22:38:24	0.310482096	0.034477404	-0.064097037	**22:38:28**	0.311253318	0.038236759	-0.064355802
22:38:32	0.312024539	0.041996106	-0.064614568	**22:38:36**	0.312795761	0.040984023	-0.064873334
22:38:40	0.313566982	0.038381456	-0.0651321	**22:38:44**	0.314338204	0.034457694	-0.065390866
22:38:48	0.315109425	0.026570377	-0.065649632	**22:38:52**	0.315880647	0.018683061	-0.065908398
22:38:56	0.316651868	0.018014911	-0.066167164	**22:39:00**	0.31742309	0.019753185	-0.06642593
22:39:04	0.317068581	0.018299174	-0.066684696	**22:39:08**	0.316714073	0.009281432	-0.066943462
22:39:12	0.316359565	0.000263691	-0.067202228	**22:39:16**	0.316005057	-0.004102648	-0.067460994
22:39:20	0.315650549	-0.006918501	-0.06771976	**22:39:24**	0.315296041	-0.005184192	-0.067978526
22:39:28	0.314941533	0.001100243	-0.068237292	**22:39:32**	0.314587025	0.007384697	-0.068496058
22:39:36	0.314232516	0.016986051	-0.068754824	**22:39:40**	0.313878008	0.027693044	-0.06901359
22:39:44	0.3135235	0.037886434	-0.069272355	**22:39:48**	0.313168992	0.047566246	-0.069531121
22:39:52	0.312814484	0.057246058	-0.069789887	**22:39:56**	0.312459976	0.074576194	-0.070048653
22:40:00	0.312105468	0.094456445	-0.070307419	**22:40:04**	0.313216559	0.103851886	-0.070566185
22:40:08	0.314327651	0.101888914	-0.070824951	**22:40:12**	0.315438742	0.099925933	-0.071083717
22:40:16	0.316549833	0.092715392	-0.071342483	**22:40:20**	0.317660925	0.083755649	-0.071601249
22:40:24	0.318772016	0.083676366	-0.071860015	**22:40:28**	0.319883108	0.092477533	-0.072118781
22:40:32	0.320994199	0.101278701	-0.072377547	**22:40:36**	0.322105291	0.118647837	-0.072636313
22:40:40	0.323216382	0.138872961	-0.072895079	**22:40:44**	0.324327474	0.15959574	-0.073153845
22:40:48	0.325438565	0.181811478	-0.073412611	**22:40:52**	0.326549657	0.204027215	-0.073671377
22:40:56	0.327660748	0.220487384	-0.073930143	**22:41:00**	0.32877184	0.23502903	-0.074188908
22:41:04	0.328446694	0.24799847	-0.074447674	**22:41:08**	0.328121548	0.258819646	-0.07470644
22:41:12	0.327796402	0.269640822	-0.074965206	**22:41:16**	0.327471256	0.278183284	-0.075223972
22:41:20	0.32714611	0.285966185	-0.075482738	**22:41:24**	0.326820964	0.292298127	-0.075741504
22:41:28	0.326495818	0.294277238	-0.07600027	**22:41:32**	0.326170672	0.296256348	-0.076259036
22:41:36	0.325845526	0.310548574	-0.076517802	**22:41:40**	0.325520381	0.328945174	-0.076776568
22:41:44	0.325195235	0.341569312	-0.077035334	**22:41:48**	0.324870089	0.336876054	-0.0772941
22:41:52	0.324544943	0.332182795	-0.077552866	**22:41:56**	0.324219797	0.324945063	-0.077811632
22:42:00	0.323894651	0.316859164	-0.078070398	**22:42:04**	0.324303161	0.307578223	-0.078329164
22:42:08	0.324711671	0.293400185	-0.07858793	**22:42:12**	0.325120181	0.279222137	-0.078846695
22:42:16	0.325528691	0.269497815	-0.079105461	**22:42:20**	0.325937201	0.261258081	-0.079364227
22:42:24	0.32634571	0.253566131	-0.079622993	**22:42:28**	0.32675422	0.247517539	-0.079881759
22:42:32	0.32716273	0.241468948	-0.080140525	**22:42:36**	0.32757124	0.233439406	-0.080399291
22:42:40	0.32797975	0.224749543	-0.080658057	**22:42:44**	0.32838826	0.215015382	-0.080916823
22:42:48	0.32879677	0.202148321	-0.081175589	**22:42:52**	0.32920528	0.189281261	-0.081434355
22:42:56	0.32961379	0.181094359	-0.081693121	**22:43:00**	0.3300223	0.17446751	-0.081951887
22:43:04	0.329875586	0.167339831	-0.082210653	**22:43:08**	0.329728872	0.159702552	-0.082469419
22:43:12	0.329582158	0.152065268	-0.082728185	**22:43:16**	0.329435444	0.143674161	-0.082986951
22:43:20	0.32928873	0.135031778	-0.083245717	**22:43:24**	0.329142016	0.126830238	-0.083504483
22:43:28	0.328995302	0.119951241	-0.083763248	**22:43:32**	0.328848588	0.113072235	-0.084022014
22:43:36	0.328701874	0.104536741	-0.08428078	**22:43:40**	0.32855516	0.095449094	-0.084539546
22:43:44	0.328408446	0.087118569	-0.084798312	**22:43:48**	0.328261732	0.081059431	-0.085057078
22:43:52	0.328115018	0.075000301	-0.085315844	**22:43:56**	0.327968305	0.084011954	-0.08557461
22:44:00	0.327821591	0.093023616	-0.085833376	**22:44:04**	0.328465024	0.104230764	-0.086092142
22:44:08	0.329108457	0.120611436	-0.086350908	**22:44:12**	0.32975189	0.136992105	-0.086609674
22:44:16	0.330395323	0.149105434	-0.08686844	**22:44:20**	0.331038756	0.159796312	-0.087127206

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:44:24	0.331682189	0.16845996	-0.087385972	**22:44:28**	0.332325622	0.171041918	-0.087644738
22:44:32	0.332969055	0.173623876	-0.087903504	**22:44:36**	0.333612488	0.179668432	-0.08816227
22:44:40	0.334255921	0.186867189	-0.088421036	**22:44:44**	0.334899354	0.193537621	-0.088679801
22:44:48	0.335542787	0.19862308	-0.088938567	**22:44:52**	0.33618622	0.20370854	-0.089197333
22:44:56	0.336829653	0.214832048	-0.089456099	**22:45:00**	-0.162526914	-0.272031762	-0.589714865
22:45:04	-0.162696215	-0.261244422	-0.589973631	**22:45:08**	-0.162865515	-0.256050259	-0.590232397
22:45:12	0.336965185	0.249143904	-0.090491163	**22:45:16**	0.336795885	0.255298832	-0.090749929
22:45:20	0.336626584	0.261774007	-0.091008695	**22:45:24**	0.336457284	0.267223263	-0.091267461
22:45:28	0.336287984	0.269594766	-0.091526227	**22:45:32**	0.336118684	0.271966269	-0.091784993
22:45:36	0.335949383	0.275409969	-0.092043759	**22:45:40**	0.335780083	0.279925858	-0.092302525
22:45:44	0.335610783	0.284441747	-0.092561291	**22:45:48**	0.335441483	0.283415769	-0.092820057
22:45:52	0.335272182	0.282389799	-0.093078823	**22:45:56**	0.335102882	0.285563893	-0.093337588
22:46:00	0.334933582	0.292938061	-0.093596354	**22:46:04**	0.335633655	0.300830449	-0.09385512
22:46:08	0.336333729	0.310191427	-0.094113886	**22:46:12**	0.337033803	0.319552405	-0.094372652
22:46:16	0.337733876	0.323746963	-0.094631418	**22:46:20**	0.33843395	0.322775111	-0.094890184
22:46:24	0.339134024	0.321803259	-0.09514895	**22:46:28**	0.339834097	0.305590562	-0.095407716
22:46:32	0.340534171	0.289377865	-0.095666482	**22:46:36**	0.341234244	0.272253018	-0.095925248
22:46:40	0.341934318	0.254216024	-0.096184014	**22:46:44**	0.342634392	0.236179027	-0.09644278
22:46:48	0.343334465	0.21552272	-0.096701546	**22:46:52**	0.344034539	0.194866413	-0.096960312
22:46:56	0.344734613	0.180376493	-0.097219078	**22:47:00**	0.345434686	0.172052958	-0.097477844
22:47:04	0.345142968	0.163138232	-0.09773661	**22:47:08**	0.34485125	0.164083604	-0.097995376
22:47:12	0.344559532	0.165028976	-0.098254141	**22:47:16**	0.344267814	0.164258158	-0.098512907
22:47:20	0.343976096	0.16177114	-0.098771673	**22:47:24**	0.343684377	0.159284127	-0.099030439
22:47:28	0.343392659	0.153040577	-0.099289205	**22:47:32**	0.343100941	0.146797027	-0.099547971
22:47:36	0.342809223	0.146265002	-0.099806737	**22:47:40**	0.342517505	0.151444502	-0.100065503
22:47:44	0.342225787	0.156624002	-0.100324269	**22:47:48**	0.341934069	0.161803502	-0.100583035
22:47:52	0.34164235	0.166983004	-0.100841801	**22:47:56**	0.341350632	0.176792579	-0.101100567
22:48:00	0.341058914	0.191232231	-0.101359333	**22:48:04**	0.341237823	0.205952414	-0.101618099
22:48:08	0.341416731	0.207786328	-0.101876865	**22:48:12**	0.34159564	0.209620241	-0.102135631
22:48:16	0.341774549	0.2131358	-0.102394397	**22:48:20**	0.341953457	0.218333006	-0.102653163
22:48:24	0.342132366	0.223530211	-0.102911929	**22:48:28**	0.342311274	0.228727416	-0.103170694
22:48:32	0.342490183	0.23392462	-0.10342946	**22:48:36**	0.342669092	0.241056963	-0.103688226
22:48:40	0.342848	0.250124445	-0.103946992	**22:48:44**	0.343026909	0.259191926	-0.104205758
22:48:48	0.343205817	0.253428242	-0.104464524	**22:48:52**	0.343384726	0.247664554	-0.10472329
22:48:56	0.343563635	0.246514546	-0.104982056	**22:49:00**	0.343742543	0.249978213	-0.105240822
22:49:04	0.343957662	0.253463465	-0.105499588	**22:49:08**	0.344172781	0.267139438	-0.105758354
22:49:12	0.3443879	0.280815407	-0.10601712	**22:49:16**	0.344603019	0.285432021	-0.106275886
22:49:20	0.344818138	0.28702884	-0.106534652	**22:49:24**	0.345033257	0.288625659	-0.106793418
22:49:28	0.345248376	0.289049946	-0.107052184	**22:49:32**	0.345463495	0.289474233	-0.10731095
22:49:36	0.345678614	0.289310855	-0.107569716	**22:49:40**	0.345893733	0.288559793	-0.107828481
22:49:44	0.346108852	0.28780874	-0.108087247	**22:49:48**	0.346323971	0.289807841	-0.108346013
22:49:52	0.34653909	0.291806951	-0.108604779	**22:49:56**	0.346754209	0.300775429	-0.108863545
22:50:00	0.346969328	0.316713293	-0.109122311	**22:50:04**	0.346667886	0.332343233	-0.109381077
22:50:08	0.346366443	0.343654806	-0.109639843	**22:50:12**	0.346065	0.354966378	-0.109898609
22:50:16	0.345763557	0.367204193	-0.110157375	**22:50:20**	0.345462114	0.38036825	-0.110416141
22:50:24	0.345160671	0.393532308	-0.110674907	**22:50:28**	0.344859228	0.39747279	-0.110933673
22:50:32	0.344557785	0.401413272	-0.111192439	**22:50:36**	0.344256342	0.408584052	-0.111451205
22:50:40	0.343954899	0.418985147	-0.111709971	**22:50:44**	0.343653456	0.429386243	-0.111968737
22:50:48	0.343352013	0.447141019	-0.112227503	**22:50:52**	0.34305057	0.464895814	-0.112486269
22:50:56	0.342749128	0.48521711	-0.112745034	**22:51:00**	0.342447685	0.508104944	-0.1130038
22:51:04	0.342384992	0.531135075	-0.113262566	**22:51:08**	0.342322299	0.543556766	-0.113521332
22:51:12	0.342259606	0.555978456	-0.113780098	**22:51:16**	0.342196913	0.562216503	-0.114038864
22:51:20	0.342134221	0.562270905	-0.11429763	**22:51:24**	0.342071528	0.562325307	-0.114556396
22:51:28	0.342008835	0.565837893	-0.114815162	**22:51:32**	0.341946142	0.569350443	-0.115073928
22:51:36	0.341883449	0.570355826	-0.115332694	**22:51:40**	0.341820757	0.56885404	-0.11559146
22:51:44	0.341758064	0.567352254	-0.115850226	**22:51:48**	0.341695371	0.562471942	-0.116108992
22:51:52	0.341632678	0.557591594	-0.116367758	**22:51:56**	0.341569985	0.545386717	-0.116626524

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:52:00	0.341507293	0.525857276	-0.11688529	**22:52:04**	0.341240141	0.50620596	-0.117144056
22:52:08	0.340972989	0.471174764	-0.117402822	**22:52:12**	0.340705837	0.436143568	-0.117661587
22:52:16	0.340438685	0.408523984	-0.117920353	**22:52:20**	0.340171533	0.383374954	-0.118179119
22:52:24	0.339904381	0.358225907	-0.118437885	**22:52:28**	0.339637229	0.329845096	-0.118696651
22:52:32	0.339370077	0.301464285	-0.118955417	**22:52:36**	0.339102925	0.280449554	-0.119214183
22:52:40	0.338835774	0.266800905	-0.119472949	**22:52:44**	0.338568622	0.253152255	-0.119731715
22:52:48	0.33830147	0.237009587	-0.119990481	**22:52:52**	0.338034318	0.22086692	-0.120249247
22:52:56	0.337767166	0.206441769	-0.120508013	**22:53:00**	0.337500014	0.192589125	-0.120766779
22:53:04	0.337692547	0.179010491	-0.121025545	**22:53:08**	0.337885079	0.16191617	-0.121284311
22:53:12	0.338077612	0.144821846	-0.121543077	**22:53:16**	0.338270145	0.136832728	-0.121801843
22:53:20	0.338462677	0.137948814	-0.122060609	**22:53:24**	0.33865521	0.139064901	-0.122319375
22:53:28	0.338847743	0.141845247	-0.12257814	**22:53:32**	0.339040275	0.149618367	-0.122836906
22:53:36	0.339232808	0.154269825	-0.123095672	**22:53:40**	0.339425341	0.155799625	-0.123354438
22:53:44	0.339617874	0.157329424	-0.123613204	**22:53:48**	0.339810406	0.166270063	-0.12387197
22:53:52	0.340002939	0.175210701	-0.124130736	**22:53:56**	0.340195472	0.183418912	-0.124389502
22:54:00	0.340388004	0.190894696	-0.124648268	**22:54:04**	0.340064032	0.198062599	-0.124907034
22:54:08	0.339740061	0.197185851	-0.1251658	**22:54:12**	0.339416089	0.196309102	-0.125424566
22:54:16	0.339092117	0.191431564	-0.125683332	**22:54:20**	0.338768145	0.182553234	-0.125942098
22:54:24	0.338444173	0.173674905	-0.126200864	**22:54:28**	0.338120201	0.156180527	-0.12645963
22:54:32	0.337796229	0.138686147	-0.126718396	**22:54:36**	0.337472257	0.118502466	-0.126977162
22:54:40	0.337148286	0.097422342	-0.127235927	**22:54:44**	0.336824314	0.076342228	-0.127494693
22:54:48	0.336500342	0.061494753	-0.127753459	**22:54:52**	0.33617637	0.046647269	-0.128012225
22:54:56	0.335852398	0.035585478	-0.128270991	**22:55:00**	0.335528426	0.028309381	-0.128529757
22:55:04	0.335354609	0.021122789	-0.128788523	**22:55:08**	0.335180791	0.010250146	-0.129047289
22:55:12	0.335006974	-0.000622498	-0.129306055	**22:55:16**	0.334833156	-0.01729521	-0.129564821
22:55:20	0.334659339	-0.039767974	-0.129823587	**22:55:24**	0.334485521	-0.062240755	-0.130082353
22:55:28	0.334311703	-0.085871084	-0.130341119	**22:55:32**	0.334137886	-0.109501395	-0.130599885
22:55:36	0.333964068	-0.126421214	-0.130858651	**22:55:40**	0.333790251	-0.141104245	-0.131117417
22:55:44	0.333616433	-0.153079792	-0.131376183	**22:55:48**	0.333442616	-0.156933069	-0.131634949
22:55:52	0.333268798	-0.160786381	-0.131893715	**22:55:56**	0.333094981	-0.167895608	-0.13215248
22:56:00	0.332921163	-0.176090116	-0.132411246	**22:56:04**	0.332210593	-0.182918811	-0.132670012
22:56:08	0.331500022	-0.184690072	-0.132928778	**22:56:12**	0.330789451	-0.186461334	-0.133187544
22:56:16	0.33007888	-0.190497026	-0.13344631	**22:56:20**	0.32936831	-0.195287541	-0.133705076
22:56:24	0.328657739	-0.202637523	-0.133963842	**22:56:28**	0.327947168	-0.217666014	-0.134222608
22:56:32	0.327236597	-0.232694504	-0.134481374	**22:56:36**	0.326526027	-0.237110788	-0.13474014
22:56:40	0.325815456	-0.237989658	-0.134998906	**22:56:44**	0.325104885	-0.237320404	-0.135257672
22:56:48	0.324394314	-0.232006605	-0.135516438	**22:56:52**	0.323683744	-0.226692842	-0.135775204
22:56:56	0.322973173	-0.215151697	-0.13603397	**22:57:00**	0.322262602	-0.201534747	-0.136292736
22:57:04	0.322228368	-0.183710723	-0.136551502	**22:57:08**	0.322194134	-0.15447501	-0.136810268
22:57:12	0.3221599	-0.125239296	-0.137069033	**22:57:16**	0.322125666	-0.094813028	-0.137327799
22:57:20	0.322091432	-0.063989878	-0.137586565	**22:57:24**	0.322057198	-0.039922165	-0.137845331
22:57:28	0.322022964	-0.022609871	-0.138104097	**22:57:32**	0.32198873	-0.005297577	-0.138362863
22:57:36	0.321954496	0.023756172	-0.138621629	**22:57:40**	0.321920262	0.056723726	-0.138880395
22:57:44	0.321886028	0.086612843	-0.139139161	**22:57:48**	0.321851794	0.107266633	-0.139397927
22:57:52	0.32181756	0.127920419	-0.139656693	**22:57:56**	0.321783326	0.142990096	-0.139915459
22:58:00	0.321749092	0.158059777	-0.140174225	**22:58:04**	0.321701092	0.173793577	-0.140432991
22:58:08	0.321653092	0.191544364	-0.140691757	**22:58:12**	0.321605092	0.20929515	-0.140950523
22:58:16	0.321557092	0.226664249	-0.141209289	**22:58:20**	0.321509092	0.243906121	-0.141468055
22:58:24	0.321461092	0.259013	-0.14172682	**22:58:28**	0.321413092	0.267714904	-0.141985586
22:58:32	0.321365092	0.276416809	-0.142244352	**22:58:36**	0.321317092	0.290623372	-0.142503118
22:58:40	0.321269092	0.306664826	-0.142761884	**22:58:44**	0.321221092	0.326042925	-0.14302065
22:58:48	0.321173092	0.35543099	-0.143279416	**22:58:52**	0.321125093	0.384819056	-0.143538182
22:58:56	0.321077093	0.402695505	-0.143796948	**22:59:00**	0.321029093	0.416734778	-0.144055714
22:59:04	0.320912193	0.42807341	-0.14431448	**22:59:08**	0.320795293	0.431433417	-0.144573246
22:59:12	0.320678393	0.434793424	-0.144832012	**22:59:16**	0.320561493	0.436195227	-0.145090778
22:59:20	0.320444593	0.436944267	-0.145349544	**22:59:24**	0.320327693	0.440760347	-0.14560831
22:59:28	0.320210793	0.453777494	-0.145867076	**22:59:32**	0.320093893	0.466794642	-0.146125842

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
22:59:36	0.319976993	0.476495457	-0.146384608	**22:59:40**	0.319860093	0.485090811	-0.146643373
22:59:44	0.319743193	0.49342536	-0.146902139	**22:59:48**	0.319626293	0.500977446	-0.147160905
22:59:52	0.319509393	0.508529532	-0.147419671	**22:59:56**	0.319392493	0.531151343	-0.147678437
23:00:00	0.819275593	1.058796373	0.352062797	**23:00:04**	0.819569952	1.082032907	0.351804031
23:00:08	0.819864311	1.091308374	0.351545265	**23:00:12**	0.32015867	0.600583841	-0.148713501
23:00:16	0.320453029	0.607452973	-0.148972267	**23:00:20**	0.320747388	0.613519993	-0.149231033
23:00:24	0.321041747	0.616732296	-0.149489799	**23:00:28**	0.321336106	0.611380378	-0.149748565
23:00:32	0.321630465	0.606028461	-0.150007331	**23:00:36**	0.321924825	0.592502719	-0.150266097
23:00:40	0.322219184	0.576252334	-0.150524863	**23:00:44**	0.322513543	0.560840976	-0.150783629
23:00:48	0.322807902	0.547946663	-0.151042395	**23:00:52**	0.323102261	0.53505235	-0.151301161
23:00:56	0.32339662	0.522556926	-0.151559926	**23:01:00**	0.323690979	0.510194524	-0.151818692
23:01:04	0.323581307	0.501033835	-0.152077458	**23:01:08**	0.323471634	0.50220087	-0.152336224
23:01:12	0.323361962	0.50336794	-0.15259499	**23:01:16**	0.32325229	0.505048054	-0.152853756
23:01:20	0.323142617	0.506899172	-0.153112522	**23:01:24**	0.323032945	0.507175449	-0.153371288
23:01:28	0.322923272	0.502727132	-0.153630054	**23:01:32**	0.3228136	0.498278815	-0.15388882
23:01:36	0.322703928	0.486197592	-0.154147586	**23:01:40**	0.322594255	0.471572055	-0.154406352
23:01:44	0.322484583	0.456153679	-0.154665118	**23:01:48**	0.322374911	0.438356787	-0.154923884
23:01:52	0.322265238	0.420559895	-0.15518265	**23:01:56**	0.322155566	0.407925514	-0.155441416
23:02:00	0.322045894	0.397011983	-0.155700182	**23:02:04**	0.32184116	0.384565984	-0.155958948
23:02:08	0.321636426	0.367692595	-0.156217713	**23:02:12**	0.321431692	0.350819206	-0.156476479
23:02:16	0.321226959	0.327493819	-0.156735245	**23:02:20**	0.321022225	0.302017757	-0.156994011
23:02:24	0.320817491	0.278748365	-0.157252777	**23:02:28**	0.320612758	0.262098953	-0.157511543
23:02:32	0.320408024	0.245449541	-0.157770309	**23:02:36**	0.32020329	0.228800134	-0.158029075
23:02:40	0.319998557	0.212150722	-0.158287841	**23:02:44**	0.319793823	0.196822534	-0.158546607
23:02:48	0.319589089	0.185458011	-0.158805373	**23:02:52**	0.319384356	0.174093487	-0.159064139
23:02:56	0.319179622	0.169753725	-0.159322905	**23:03:00**	0.318974888	0.167755552	-0.159581671
23:03:04	0.318747315	0.164039926	-0.159840437	**23:03:08**	0.318519742	0.155212777	-0.160099203
23:03:12	0.318292169	0.146385628	-0.160357969	**23:03:16**	0.318064596	0.155004358	-0.160616735
23:03:20	0.317837023	0.169438384	-0.160875501	**23:03:24**	0.31760945	0.18387241	-0.161134266
23:03:28	0.317381877	0.19335396	-0.161393032	**23:03:32**	0.317154304	0.197883034	-0.161651798
23:03:36	0.316926731	0.196668979	-0.161910564	**23:03:40**	0.316699158	0.193540548	-0.16216933
23:03:44	0.316471585	0.190559917	-0.162428096	**23:03:48**	0.316244012	0.188022688	-0.162686862
23:03:52	0.316016439	0.18548546	-0.162945628	**23:03:56**	0.315788866	0.195210689	-0.163204394
23:04:00	0.315561293	0.209023407	-0.16346316	**23:04:04**	0.315447153	0.225079031	-0.163721926
23:04:08	0.315333012	0.247660538	-0.163980692	**23:04:12**	0.315218871	0.270242047	-0.164239458
23:04:16	0.31510473	0.282737722	-0.164498224	**23:04:20**	0.314990589	0.291871463	-0.16475699
23:04:24	0.314876448	0.298866591	-0.165015756	**23:04:28**	0.314762308	0.299445891	-0.165274522
23:04:32	0.314648167	0.30002519	-0.165533288	**23:04:36**	0.314534026	0.285435583	-0.165792054
23:04:40	0.314419885	0.265789671	-0.166050819	**23:04:44**	0.314305744	0.245324375	-0.166309585
23:04:48	0.314191603	0.222400915	-0.166568351	**23:04:52**	0.314077463	0.199477453	-0.166827117
23:04:56	0.313963322	0.17695828	-0.167085883	**23:05:00**	0.313849181	0.154573869	-0.167344649
23:05:04	0.313473893	0.135844386	-0.167603415	**23:05:08**	0.313098606	0.128546694	-0.167862181
23:05:12	0.312723318	0.121249002	-0.168120947	**23:05:16**	0.312348031	0.12017691	-0.168379713
23:05:20	0.311972743	0.121180015	-0.168638479	**23:05:24**	0.311597455	0.123015876	-0.168897245
23:05:28	0.311222168	0.127349992	-0.169156011	**23:05:32**	0.31084688	0.131684112	-0.169414777
23:05:36	0.310471593	0.141213795	-0.169673543	**23:05:40**	0.310096305	0.155939046	-0.169932309
23:05:44	0.309721018	0.170664297	-0.170191075	**23:05:48**	0.30934573	0.178706329	-0.170449841
23:05:52	0.308970443	0.186748362	-0.170708606	**23:05:56**	0.308595155	0.185311232	-0.170967372
23:06:00	0.308219867	0.174394938	-0.171226138	**23:06:04**	0.307799648	0.163451861	-0.171484904
23:06:08	0.307379429	0.123388136	-0.17174367	**23:06:12**	0.306959209	0.083324411	-0.172002436
23:06:16	0.30653899	0.044528482	-0.172261202	**23:06:20**	0.30611877	0.007000367	-0.172519968
23:06:24	0.305698551	-0.030527766	-0.172778734	**23:06:28**	0.305278331	-0.045749829	-0.1730375
23:06:32	0.304858112	-0.060971891	-0.173296266	**23:06:36**	0.304437893	-0.078834161	-0.173555032
23:06:40	0.304017673	-0.099336604	-0.173813798	**23:06:44**	0.303597454	-0.119839046	-0.174072564
23:06:48	0.303177234	-0.12633315	-0.17433133	**23:06:52**	0.302757015	-0.132827254	-0.174590096
23:06:56	0.302336795	-0.141745956	-0.174848862	**23:07:00**	0.301916576	-0.153089255	-0.175107628
23:07:04	0.301874662	-0.164207088	-0.175366394	**23:07:08**	0.301832749	-0.162315687	-0.175625159

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:07:12	0.301790836	-0.16042425	-0.175883925	**23:07:16**	0.301748922	-0.160126201	-0.176142691
23:07:20	0.301707009	-0.161421503	-0.176401457	**23:07:24**	0.301665096	-0.162716805	-0.176660223
23:07:28	0.301623182	-0.162633638	-0.176918989	**23:07:32**	0.301581269	-0.162550435	-0.177177755
23:07:36	0.301539355	-0.158796085	-0.177436521	**23:07:40**	0.301497442	-0.151370517	-0.177695287
23:07:44	0.301455529	-0.143944949	-0.177954053	**23:07:48**	0.301413615	-0.138416545	-0.178212819
23:07:52	0.301371702	-0.132888176	-0.178471585	**23:07:56**	0.301329789	-0.126448656	-0.178730351
23:08:00	0.301287875	-0.11909802	-0.178989117	**23:08:04**	0.301380324	-0.111667275	-0.179247883
23:08:08	0.301472772	-0.097668777	-0.179506649	**23:08:12**	0.301565221	-0.083670279	-0.179765415
23:08:16	0.30165767	-0.068971106	-0.180024181	**23:08:20**	0.301750118	-0.05403838	-0.180282947
23:08:24	0.301842567	-0.039105637	-0.180541712	**23:08:28**	0.301935015	-0.016459122	-0.180800478
23:08:32	0.302027464	0.006187393	-0.181059244	**23:08:36**	0.302119913	0.029209027	-0.18131801
23:08:40	0.302212361	0.052605789	-0.181576776	**23:08:44**	0.30230481	0.076002543	-0.181835542
23:08:48	0.302397258	0.111818049	-0.182094308	**23:08:52**	0.302489707	0.147633558	-0.182353074
23:08:56	0.302582156	0.184290822	-0.18261184	**23:09:00**	0.302674604	0.221228674	-0.182870606
23:09:04	0.302852682	0.258217565	-0.183129372	**23:09:08**	0.303030759	0.285609596	-0.183388138
23:09:12	0.303208837	0.313001626	-0.183646904	**23:09:16**	0.303386914	0.340088432	-0.18390567
23:09:20	0.303564991	0.366870023	-0.184164436	**23:09:24**	0.303743069	0.393651614	-0.184423202
23:09:28	0.303921146	0.417075658	-0.184681968	**23:09:32**	0.304099224	0.440499702	-0.184940734
23:09:36	0.304277301	0.454175295	-0.185199499	**23:09:40**	0.304455379	0.458102401	-0.185458265
23:09:44	0.304633456	0.462029506	-0.185717031	**23:09:48**	0.304811533	0.451353138	-0.185975797
23:09:52	0.304989611	0.440676771	-0.186234563	**23:09:56**	0.305167688	0.43750265	-0.186493329
23:10:00	0.305345766	0.441830776	-0.186752095	**23:10:04**	0.305167508	0.445946478	-0.187010861
23:10:08	0.304989251	0.447928392	-0.187269627	**23:10:12**	0.304810993	0.449910323	-0.187528393
23:10:16	0.304632736	0.448109864	-0.187787159	**23:10:20**	0.304454478	0.442527052	-0.188045925
23:10:24	0.304276221	0.436944239	-0.188304691	**23:10:28**	0.304097963	0.434709843	-0.188563457
23:10:32	0.303919705	0.432475428	-0.188822223	**23:10:36**	0.303741448	0.434725908	-0.189080989
23:10:40	0.30356319	0.441461247	-0.189339755	**23:10:44**	0.303384933	0.448196586	-0.189598521
23:10:48	0.303206675	0.443988708	-0.189857287	**23:10:52**	0.303028418	0.43978083	-0.190116052
23:10:56	0.30285016	0.436394251	-0.190374818	**23:11:00**	0.302671903	0.433828968	-0.190633584
23:11:04	0.302769573	0.431428162	-0.19089235	**23:11:08**	0.302867243	0.419481138	-0.191151116
23:11:12	0.302964913	0.407534114	-0.191409882	**23:11:16**	0.303062583	0.397967134	-0.191668648
23:11:20	0.303160253	0.390780197	-0.191927414	**23:11:24**	0.303257923	0.384552661	-0.19218618
23:11:28	0.303355593	0.381203291	-0.192444946	**23:11:32**	0.303453264	0.377853939	-0.192703712
23:11:36	0.303550934	0.369498103	-0.192962478	**23:11:40**	0.303648604	0.356135782	-0.193221244
23:11:44	0.303746274	0.34277348	-0.19348001	**23:11:48**	0.303843944	0.33169769	-0.193738776
23:11:52	0.303941614	0.3206219	-0.193997542	**23:11:56**	0.304039284	0.306803987	-0.194256308
23:12:00	0.304136954	0.29024394	-0.194515074	**23:12:04**	0.303971894	0.273527284	-0.19477384
23:12:08	0.303806833	0.27634965	-0.195032605	**23:12:12**	0.303641772	0.279172017	-0.195291371
23:12:16	0.303476711	0.281410787	-0.195550137	**23:12:20**	0.30331165	0.283065959	-0.195808903
23:12:24	0.303146589	0.28472114	-0.196067669	**23:12:28**	0.302981529	0.28106766	-0.196326435
23:12:32	0.302816468	0.27741418	-0.196585201	**23:12:36**	0.302651407	0.276520482	-0.196843967
23:12:40	0.302486346	0.278386557	-0.197102733	**23:12:44**	0.302321285	0.280252632	-0.197361499
23:12:48	0.302156225	0.274548306	-0.197620265	**23:12:52**	0.301991164	0.268843971	-0.197879031
23:12:56	0.301826103	0.25719442	-0.198137797	**23:13:00**	0.301661042	0.239599655	-0.198396563
23:13:04	0.301798916	0.222185459	-0.198655329	**23:13:08**	0.30193679	0.21980113	-0.198914095
23:13:12	0.302074664	0.217416805	-0.199172861	**23:13:16**	0.302212537	0.212626219	-0.199431627
23:13:20	0.302350411	0.205429372	-0.199690393	**23:13:24**	0.302488285	0.198232525	-0.199949158
23:13:28	0.302626159	0.191035678	-0.200207924	**23:13:32**	0.302764032	0.176014609	-0.20046669
23:13:36	0.302901906	0.16240473	-0.200725456	**23:13:40**	0.30303978	0.153028421	-0.200984222
23:13:44	0.303177654	0.143652111	-0.201242988	**23:13:48**	0.303315528	0.131521991	-0.201501754
23:13:52	0.303453401	0.119391871	-0.20176052	**23:13:56**	0.303591275	0.107539999	-0.202019286
23:14:00	0.303729149	0.095966371	-0.202278052	**23:14:04**	0.303873924	0.084396866	-0.202536818
23:14:08	0.304018699	0.076326901	-0.202795584	**23:14:12**	0.304163475	0.068256936	-0.20305435
23:14:16	0.30430825	0.055585194	-0.203313116	**23:14:20**	0.304453025	0.038311674	-0.203571882
23:14:24	0.3045978	0.021038154	-0.203830648	**23:14:28**	0.304742576	0.008876934	-0.204089414
23:14:32	0.304887351	-0.003284287	-0.20434818	**23:14:36**	0.305032126	-0.011370391	-0.204606945
23:14:40	0.305176901	-0.015381397	-0.204865711	**23:14:44**	0.305321677	-0.019392385	-0.205124477

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:14:48	0.305466452	-0.020942501	-0.205383243	**23:14:52**	0.305611227	-0.022492633	-0.205642009
23:14:56	0.305756002	-0.02299376	-0.205900775	**23:15:00**	-0.194099222	-0.522445917	-0.706159541
23:15:04	-0.194160108	-0.522020666	-0.706418307	**23:15:08**	-0.194220994	-0.531962095	-0.706677073
23:15:12	0.30571812	-0.041903507	-0.206935839	**23:15:16**	0.305657234	-0.051844936	-0.207194605
23:15:20	0.305596348	-0.061786348	-0.207453371	**23:15:24**	0.305535462	-0.071727777	-0.207712137
23:15:28	0.305474576	-0.067192892	-0.207970903	**23:15:32**	0.30541369	-0.062658026	-0.208229669
23:15:36	0.305352805	-0.055476289	-0.208488435	**23:15:40**	0.305291919	-0.045647683	-0.208747201
23:15:44	0.305231033	-0.035819077	-0.209005967	**23:15:48**	0.305170147	-0.015318841	-0.209264733
23:15:52	0.305109261	0.005181412	-0.209523498	**23:15:56**	0.305048375	0.014434815	-0.209782264
23:16:00	0.304987489	0.012441402	-0.21004103	**23:16:04**	0.304526146	0.010209265	-0.210299796
23:16:08	0.304064803	0.018873997	-0.210558562	**23:16:12**	0.303603459	0.027538729	-0.210817328
23:16:16	0.303142116	0.039961165	-0.211076094	**23:16:20**	0.302680773	0.056141334	-0.21133486
23:16:24	0.30221943	0.072321503	-0.211593626	**23:16:28**	0.301758086	0.090883466	-0.211852392
23:16:32	0.301296743	0.109445428	-0.212111158	**23:16:36**	0.3008354	0.117190019	-0.212369924
23:16:40	0.300374057	0.121328824	-0.21262869	**23:16:44**	0.299912713	0.125467625	-0.212887456
23:16:48	0.29945137	0.135072402	-0.213146222	**23:16:52**	0.298990027	0.14467718	-0.213404988
23:16:56	0.298528683	0.153333453	-0.213663754	**23:17:00**	0.29806734	0.161041225	-0.21392252
23:17:04	0.297800919	0.168865185	-0.214181286	**23:17:08**	0.297534497	0.182821096	-0.214440051
23:17:12	0.297268076	0.196777007	-0.214698817	**23:17:16**	0.297001654	0.216955657	-0.214957583
23:17:20	0.296735233	0.243357049	-0.215216349	**23:17:24**	0.296468811	0.269758437	-0.215475115
23:17:28	0.29620239	0.282557521	-0.215733881	**23:17:32**	0.295935968	0.295356596	-0.215992647
23:17:36	0.295669547	0.304432225	-0.216251413	**23:17:40**	0.295403126	0.309784399	-0.216510179
23:17:44	0.295136704	0.315916621	-0.216768945	**23:17:48**	0.294870283	0.324389023	-0.217027711
23:17:52	0.294603861	0.332861425	-0.217286477	**23:17:56**	0.29433744	0.345841443	-0.217545243
23:18:00	0.294071018	0.360323981	-0.217804009	**23:18:04**	0.293148153	0.374415223	-0.218062775
23:18:08	0.292225288	0.385403132	-0.218321541	**23:18:12**	0.291302423	0.396391041	-0.218580307
23:18:16	0.290379558	0.401595615	-0.218839073	**23:18:20**	0.289456693	0.401016855	-0.219097838
23:18:24	0.288533828	0.400438113	-0.219356604	**23:18:28**	0.287610963	0.393043818	-0.21961537
23:18:32	0.286688098	0.385649524	-0.219874136	**23:18:36**	0.285765233	0.378700643	-0.220132902
23:18:40	0.284842368	0.372197213	-0.220391668	**23:18:44**	0.283919503	0.365693783	-0.220650434
23:18:48	0.282996638	0.361120771	-0.2209092	**23:18:52**	0.282073773	0.35654776	-0.221167966
23:18:56	0.281150908	0.351974749	-0.221426732	**23:19:00**	0.280228043	0.347401738	-0.221685498
23:19:04	0.27964722	0.344147116	-0.221944264	**23:19:08**	0.279066396	0.344236008	-0.22220303
23:19:12	0.278485573	0.344324899	-0.222461796	**23:19:16**	0.27790475	0.347997446	-0.222720562
23:19:20	0.277323927	0.355253666	-0.222979328	**23:19:24**	0.276743104	0.362509886	-0.223238094
23:19:28	0.276162281	0.372815773	-0.22349686	**23:19:32**	0.275581458	0.383121642	-0.223755626
23:19:36	0.275000635	0.382945626	-0.224014391	**23:19:40**	0.274419811	0.372287689	-0.224273157
23:19:44	0.273838988	0.361629753	-0.224531923	**23:19:48**	0.273258165	0.357294256	-0.224790689
23:19:52	0.272677342	0.352958759	-0.225049455	**23:19:56**	0.272096519	0.35500564	-0.225308221
23:20:00	0.271515696	0.359180004	-0.225566987	**23:20:04**	0.270476454	0.363081094	-0.225825753
23:20:08	0.269437212	0.367701282	-0.226084519	**23:20:12**	0.26839797	0.372321487	-0.226343285
23:20:16	0.267358728	0.371127696	-0.226602051	**23:20:20**	0.266319486	0.364119909	-0.226860817
23:20:24	0.265280244	0.357112121	-0.227119583	**23:20:28**	0.264241002	0.350691599	-0.227378349
23:20:32	0.26320176	0.344271078	-0.227637115	**23:20:36**	0.262162518	0.33288605	-0.227895881
23:20:40	0.261123276	0.316536498	-0.228154647	**23:20:44**	0.260084034	0.300186956	-0.228413413
23:20:48	0.259044792	0.291400842	-0.228672179	**23:20:52**	0.25800555	0.282614728	-0.228930944
23:20:56	0.256966308	0.272319697	-0.22918971	**23:21:00**	0.255927066	0.260515751	-0.229448476
23:21:04	0.256314293	0.249562092	-0.229707242	**23:21:08**	0.25670152	0.249236024	-0.229966008
23:21:12	0.257088747	0.248909965	-0.230224774	**23:21:16**	0.257475973	0.245211242	-0.23048354
23:21:20	0.2578632	0.238139863	-0.230742306	**23:21:24**	0.258250427	0.231068484	-0.231001072
23:21:28	0.258637654	0.228835953	-0.231259838	**23:21:32**	0.259024881	0.22660343	-0.231518604
23:21:36	0.259412107	0.228024481	-0.23177737	**23:21:40**	0.259799334	0.233099118	-0.232036136
23:21:44	0.260186561	0.23817375	-0.232294902	**23:21:48**	0.260573788	0.233987084	-0.232553668
23:21:52	0.260961015	0.229800417	-0.232812434	**23:21:56**	0.261348242	0.222988527	-0.2330712
23:22:00	0.261735468	0.213551419	-0.233329966	**23:22:04**	0.259150968	0.20234291	-0.233588731
23:22:08	0.256566468	0.185216457	-0.233847497	**23:22:12**	0.253981968	0.168090004	-0.234106263
23:22:16	0.251397469	0.152541058	-0.234365029	**23:22:20**	0.248812969	0.13856962	-0.234623795

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:22:24	0.246228469	0.124598181	-0.234882561	**23:22:28**	0.243643969	0.122246895	-0.235141327
23:22:32	0.241059469	0.119895609	-0.235400093	**23:22:36**	0.238474969	0.11555416	-0.235658859
23:22:40	0.235890469	0.109222546	-0.235917625	**23:22:44**	0.233305969	0.102890932	-0.236176391
23:22:48	0.230721469	0.100562917	-0.236435157	**23:22:52**	0.228136969	0.098234903	-0.236693923
23:22:56	0.225552469	0.099188776	-0.236952689	**23:23:00**	0.222967969	0.103424542	-0.237211455
23:23:04	0.22301098	0.109226526	-0.237470221	**23:23:08**	0.223053991	0.11502851	-0.237728987
23:23:12	0.223097003	0.120830493	-0.237987753	**23:23:16**	0.223140014	0.125539462	-0.238246519
23:23:20	0.223183025	0.129155415	-0.238505284	**23:23:24**	0.223226036	0.132771368	-0.23876405
23:23:28	0.223269047	0.136387321	-0.239022816	**23:23:32**	0.223312059	0.150200599	-0.239281582
23:23:36	0.22335507	0.166372771	-0.239540348	**23:23:40**	0.223398081	0.189621623	-0.239799114
23:23:44	0.223441092	0.212870475	-0.24005788	**23:23:48**	0.223484104	0.22644217	-0.240316646
23:23:52	0.223527115	0.240013864	-0.240575412	**23:23:56**	0.223570126	0.255252421	-0.240834178
23:24:00	0.223613137	0.272157848	-0.241092944	**23:24:04**	0.22163751	0.287859997	-0.24135171
23:24:08	0.219661883	0.302092525	-0.241610476	**23:24:12**	0.217686255	0.316325035	-0.241869242
23:24:16	0.215710628	0.323440348	-0.242128008	**23:24:20**	0.213735001	0.323438429	-0.242386774
23:24:24	0.211759374	0.323436509	-0.24264554	**23:24:28**	0.209783746	0.330202142	-0.242904306
23:24:32	0.207808119	0.336967757	-0.243163072	**23:24:36**	0.205832492	0.342227351	-0.243421837
23:24:40	0.203856865	0.34598089	-0.243680603	**23:24:44**	0.201881237	0.349734446	-0.243939369
23:24:48	0.19990561	0.356183974	-0.244198135	**23:24:52**	0.197929983	0.362633519	-0.244456901
23:24:56	0.195954356	0.371834835	-0.244715667	**23:25:00**	0.193978728	0.383787956	-0.244974433
23:25:04	0.19371321	0.396760429	-0.245233199	**23:25:08**	0.193447692	0.407837444	-0.245491965
23:25:12	0.193182174	0.418914459	-0.245750731	**23:25:16**	0.192916656	0.429247488	-0.246009497
23:25:20	0.192651138	0.438836602	-0.246268263	**23:25:24**	0.19238562	0.448425681	-0.246527029
23:25:28	0.192120102	0.461819178	-0.246785795	**23:25:32**	0.191854584	0.475212674	-0.247044561
23:25:36	0.191589066	0.485949637	-0.247303327	**23:25:40**	0.191323548	0.494030067	-0.247562093
23:25:44	0.19105803	0.502110496	-0.247820859	**23:25:48**	0.190792512	0.506422002	-0.248079624
23:25:52	0.190526994	0.510733507	-0.24833839	**23:25:56**	0.190261476	0.518663469	-0.248597156
23:26:00	0.189995958	0.530211888	-0.248855922	**23:26:04**	0.188255392	0.540881054	-0.249114688
23:26:08	0.186514825	0.547322718	-0.249373454	**23:26:12**	0.184774259	0.553764382	-0.24963222
23:26:16	0.183033693	0.556463804	-0.249890986	**23:26:20**	0.181293126	0.555421021	-0.250149752
23:26:24	0.17955256	0.554378238	-0.250408518	**23:26:28**	0.177811993	0.546590944	-0.250667284
23:26:32	0.176071427	0.538803649	-0.25092605	**23:26:36**	0.174330861	0.527057989	-0.251184816
23:26:40	0.172590294	0.511353997	-0.251443582	**23:26:44**	0.170849728	0.495650005	-0.251702348
23:26:48	0.169109162	0.487959102	-0.251961114	**23:26:52**	0.167368595	0.480268234	-0.25221988
23:26:56	0.165628029	0.466301239	-0.252478646	**23:27:00**	0.163887462	0.446058153	-0.252737412
23:27:04	0.163650855	0.426711553	-0.252996177	**23:27:08**	0.163414247	0.404636863	-0.253254943
23:27:12	0.16317764	0.382562173	-0.253513709	**23:27:16**	0.162941032	0.362518646	-0.253772475
23:27:20	0.162704425	0.344506264	-0.254031241	**23:27:24**	0.162467817	0.326493882	-0.254290007
23:27:28	0.16223121	0.322612433	-0.254548773	**23:27:32**	0.161994602	0.318730984	-0.254807539
23:27:36	0.161757995	0.317922206	-0.255066305	**23:27:40**	0.161521387	0.3201861	-0.255325071
23:27:44	0.16128478	0.322450012	-0.255583837	**23:27:48**	0.161048172	0.312837456	-0.255842603
23:27:52	0.160811565	0.3032249	-0.256101369	**23:27:56**	0.160574957	0.291077961	-0.256360135
23:28:00	0.16033835	0.276396674	-0.256618901	**23:28:04**	0.159505037	0.261359701	-0.256877667
23:28:08	0.158671725	0.244041721	-0.257136433	**23:28:12**	0.157838412	0.226723742	-0.257395199
23:28:16	0.1570051	0.209875728	-0.257653965	**23:28:20**	0.156171787	0.193184381	-0.25791273
23:28:24	0.155338475	0.177669075	-0.258171496	**23:28:28**	0.154505162	0.165681941	-0.258430262
23:28:32	0.15367185	0.153694807	-0.258689028	**23:28:36**	0.152838537	0.143200676	-0.258947794
23:28:40	0.152005225	0.134199549	-0.25920656	**23:28:44**	0.151171912	0.125198421	-0.259465326
23:28:48	0.1503386	0.126136214	-0.259724092	**23:28:52**	0.149505287	0.127074007	-0.259982858
23:28:56	0.148671975	0.127677815	-0.260241624	**23:29:00**	0.147838662	0.127947632	-0.26050039
23:29:04	0.148124702	0.128884679	-0.260759156	**23:29:08**	0.148410742	0.133464946	-0.261017922
23:29:12	0.148696782	0.138045213	-0.261276688	**23:29:16**	0.148982822	0.142889322	-0.261535454
23:29:20	0.149268862	0.147997272	-0.26179422	**23:29:24**	0.149554902	0.153105222	-0.262052986
23:29:28	0.149840943	0.142583302	-0.262311752	**23:29:32**	0.150126983	0.132061383	-0.262570518
23:29:36	0.150413023	0.119051391	-0.262829283	**23:29:40**	0.150699063	0.103553323	-0.263088049
23:29:44	0.150985103	0.088055255	-0.263346815	**23:29:48**	0.151271143	0.080316121	-0.263605581
23:29:52	0.151557183	0.072576986	-0.263864347	**23:29:56**	0.151843223	0.068756135	-0.264123113

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:30:00	0.652129263	0.568853566	0.235618121	**23:30:04**	0.650906047	0.568051356	0.235359355
23:30:08	0.649682832	0.570188371	0.235100589	**23:30:12**	0.148459616	0.072325384	-0.265158177
23:30:16	0.1472364	0.064823575	-0.265416943	**23:30:20**	0.146013184	0.047682939	-0.265675709
23:30:24	0.144789969	0.030542305	-0.265934475	**23:30:28**	0.143566753	0.008542252	-0.266193241
23:30:32	0.142343537	-0.013457801	-0.266452007	**23:30:36**	0.141120322	-0.029941789	-0.266710773
23:30:40	0.139897106	-0.040909731	-0.266969539	**23:30:44**	0.13867389	-0.051877663	-0.267228305
23:30:48	0.137450674	-0.052244714	-0.26748707	**23:30:52**	0.136227459	-0.052611765	-0.267745836
23:30:56	0.135004243	-0.050083285	-0.268004602	**23:31:00**	0.133781027	-0.044659256	-0.268263368
23:31:04	0.134298803	-0.038197449	-0.268522134	**23:31:08**	0.134816579	-0.021594688	-0.2687809
23:31:12	0.135334354	-0.004991937	-0.269039666	**23:31:16**	0.13585213	0.009202832	-0.269298432
23:31:20	0.136369906	0.020989604	-0.269557198	**23:31:24**	0.136887682	0.032776381	-0.269815964
23:31:28	0.137405458	0.02240718	-0.27007473	**23:31:32**	0.137923233	0.012037975	-0.270333496
23:31:36	0.138441009	0.002992552	-0.270592262	**23:31:40**	0.138958785	-0.004729104	-0.270851028
23:31:44	0.139476561	-0.012450751	-0.271109794	**23:31:48**	0.139994336	-0.020172398	-0.27136856
23:31:52	0.140512112	-0.027894054	-0.271627326	**23:31:56**	0.141029888	-0.037988434	-0.271886092
23:32:00	0.141547664	-0.050455539	-0.272144858	**23:32:04**	0.140707037	-0.063732367	-0.272403623
23:32:08	0.13986641	-0.075442393	-0.272662389	**23:32:12**	0.139025783	-0.087152419	-0.272921155
23:32:16	0.138185156	-0.096360161	-0.273179921	**23:32:20**	0.13734453	-0.103065622	-0.273438687
23:32:24	0.136503903	-0.109771082	-0.273697453	**23:32:28**	0.135663276	-0.118427657	-0.273956219
23:32:32	0.134822649	-0.12708425	-0.274214985	**23:32:36**	0.133982022	-0.137717539	-0.274473751
23:32:40	0.133141395	-0.150327543	-0.274732517	**23:32:44**	0.132300768	-0.162937546	-0.274991283
23:32:48	0.131460141	-0.172941254	-0.275250049	**23:32:52**	0.130619515	-0.182944944	-0.275508815
23:32:56	0.129778888	-0.191226613	-0.275767581	**23:33:00**	0.128938261	-0.197786243	-0.276026347
23:33:04	0.129298836	-0.203629855	-0.276285113	**23:33:08**	0.129659411	-0.20310452	-0.276543879
23:33:12	0.130019986	-0.202579184	-0.276802645	**23:33:16**	0.130380561	-0.19837119	-0.277061411
23:33:20	0.130741136	-0.192935619	-0.277320176	**23:33:24**	0.131101711	-0.187500066	-0.277578942
23:33:28	0.131462286	-0.173946542	-0.277837708	**23:33:32**	0.131822861	-0.160393	-0.278096474
23:33:36	0.132183435	-0.15112688	-0.27835524	**23:33:40**	0.13254401	-0.15472299	-0.278614006
23:33:44	0.132904585	-0.158319101	-0.278872772	**23:33:48**	0.13326516	-0.173123353	-0.279131538
23:33:52	0.133625735	-0.187927606	-0.279390304	**23:33:56**	0.13398631	-0.194854669	-0.27964907
23:34:00	0.134346885	-0.193904544	-0.279907836	**23:34:04**	0.134481501	-0.193089109	-0.280166602
23:34:08	0.134616116	-0.186506329	-0.280425368	**23:34:12**	0.134750732	-0.179923548	-0.280684134
23:34:16	0.134885347	-0.171892465	-0.2809429	**23:34:20**	0.135019963	-0.162413061	-0.281201666
23:34:24	0.135154578	-0.152933656	-0.281460432	**23:34:28**	0.135289193	-0.160954794	-0.281719198
23:34:32	0.135423809	-0.168975913	-0.281977963	**23:34:36**	0.135558424	-0.176412538	-0.282236729
23:34:40	0.13569304	-0.183264651	-0.282495495	**23:34:44**	0.135827655	-0.190116764	-0.282754261
23:34:48	0.135962271	-0.188443739	-0.283013027	**23:34:52**	0.136096886	-0.186770696	-0.283271793
23:34:56	0.136231502	-0.181015857	-0.283530559	**23:35:00**	0.136366117	-0.171179222	-0.283789325
23:35:04	0.136862662	-0.161126848	-0.284048091	**23:35:08**	0.137359207	-0.159644591	-0.284306857
23:35:12	0.137855751	-0.158162335	-0.284565623	**23:35:16**	0.138352296	-0.164153672	-0.284824389
23:35:20	0.13884884	-0.177618583	-0.285083155	**23:35:24**	0.139345385	-0.191083494	-0.285341921
23:35:28	0.13984193	-0.205320157	-0.285600687	**23:35:32**	0.140338474	-0.219556803	-0.285859453
23:35:36	0.140835019	-0.230562333	-0.286118219	**23:35:40**	0.141331564	-0.240490789	-0.286376985
23:35:44	0.141828108	-0.250419246	-0.286635751	**23:35:48**	0.142324653	-0.25616582	-0.286894516
23:35:52	0.142821198	-0.261912395	-0.287153282	**23:35:56**	0.143317742	-0.264578072	-0.287412048
23:36:00	0.143814287	-0.264162817	-0.287670814	**23:36:04**	0.142440379	-0.26486251	-0.28792958
23:36:08	0.141066472	-0.274324252	-0.288188346	**23:36:12**	0.139692564	-0.283785993	-0.288447112
23:36:16	0.138318656	-0.287977089	-0.288705878	**23:36:20**	0.136944749	-0.286897541	-0.288964644
23:36:24	0.135570841	-0.285817992	-0.28922341	**23:36:28**	0.134196933	-0.291003699	-0.289482176
23:36:32	0.132823026	-0.296189405	-0.289740942	**23:36:36**	0.131449118	-0.299295753	-0.289999708
23:36:40	0.13007521	-0.300322743	-0.290258474	**23:36:44**	0.128701303	-0.304221077	-0.29051724
23:36:48	0.127327395	-0.31673348	-0.290776006	**23:36:52**	0.125953487	-0.329245883	-0.291034772
23:36:56	0.12457958	-0.341758285	-0.291293538	**23:37:00**	0.123205672	-0.354270688	-0.291552304
23:37:04	0.12279244	-0.366210447	-0.291811069	**23:37:08**	0.122379207	-0.379748852	-0.292069835
23:37:12	0.121965974	-0.393287257	-0.292328601	**23:37:16**	0.121552742	-0.400660564	-0.292587367
23:37:20	0.121139509	-0.401868844	-0.292846133	**23:37:24**	0.120726277	-0.403077124	-0.293104899
23:37:28	0.120313044	-0.412609873	-0.293363665	**23:37:32**	0.119899811	-0.422142622	-0.293622431

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:37:36	0.119486579	-0.428671359	-0.293881197	**23:37:40**	0.119073346	-0.432196085	-0.294139963
23:37:44	0.118660114	-0.435720812	-0.294398729	**23:37:48**	0.118246881	-0.421264213	-0.294657495
23:37:52	0.117833649	-0.406807578	-0.294916261	**23:37:56**	0.117420416	-0.394672897	-0.295175027
23:38:00	0.117007183	-0.384860098	-0.295433793	**23:38:04**	0.116030868	-0.37538298	-0.295692559
23:38:08	0.115054552	-0.365905826	-0.295951325	**23:38:12**	0.114078237	-0.356428672	-0.296210091
23:38:16	0.113101921	-0.347450635	-0.296468856	**23:38:20**	0.112125605	-0.338971679	-0.296727622
23:38:24	0.11114929	-0.330492688	-0.296986388	**23:38:28**	0.110172974	-0.322013733	-0.297245154
23:38:32	0.109196659	-0.313534777	-0.29750392	**23:38:36**	0.108220343	-0.310247805	-0.297762686
23:38:40	0.107244028	-0.308691505	-0.298021452	**23:38:44**	0.106267712	-0.307135206	-0.298280218
23:38:48	0.105291396	-0.300283568	-0.298538984	**23:38:52**	0.104315081	-0.293431895	-0.29879775
23:38:56	0.103338765	-0.292781844	-0.299056516	**23:39:00**	0.10236245	-0.298333344	-0.299315282
23:39:04	0.1025464	-0.303193263	-0.299574048	**23:39:08**	0.10273035	-0.312786801	-0.299832814
23:39:12	0.102914299	-0.322380338	-0.30009158	**23:39:16**	0.103098249	-0.324204163	-0.300350346
23:39:20	0.103282199	-0.318258276	-0.300609112	**23:39:24**	0.103466149	-0.310843425	-0.300867878
23:39:28	0.103650099	-0.299021614	-0.301126644	**23:39:32**	0.103834049	-0.287199802	-0.301385409
23:39:36	0.104017999	-0.274237568	-0.301644175	**23:39:40**	0.104201949	-0.260134982	-0.301902941
23:39:44	0.104385898	-0.246032396	-0.302161707	**23:39:48**	0.104569848	-0.236929224	-0.302420473
23:39:52	0.104753798	-0.227826016	-0.302679239	**23:39:56**	0.104937748	-0.216243335	-0.302938005
23:40:00	0.105121698	-0.202181128	-0.303196771	**23:40:04**	0.105524541	-0.18798846	-0.303455537
23:40:08	0.105927384	-0.166695685	-0.303714303	**23:40:12**	0.106330227	-0.14540291	-0.303973069
23:40:16	0.10673307	-0.122552881	-0.304231835	**23:40:20**	0.107135913	-0.098145598	-0.304490601
23:40:24	0.107538756	-0.073738297	-0.304749367	**23:40:28**	0.107941599	-0.055260925	-0.305008133
23:40:32	0.108344442	-0.036783545	-0.305266899	**23:40:36**	0.108747285	-0.019089969	-0.305525665
23:40:40	0.109150128	-0.002180186	-0.305784431	**23:40:44**	0.109552971	0.014729594	-0.306043197
23:40:48	0.109955814	0.042532362	-0.306301962	**23:40:52**	0.110358657	0.07033513	-0.306560728
23:40:56	0.1107615	0.094479477	-0.306819494	**23:41:00**	0.111164343	0.114965406	-0.30707826
23:41:04	0.110488657	0.134808437	-0.307337026	**23:41:08**	0.109812972	0.146799718	-0.307595792
23:41:12	0.109137286	0.158791003	-0.307854558	**23:41:16**	0.1084616	0.173882477	-0.308113324
23:41:20	0.107785915	0.192074159	-0.30837209	**23:41:24**	0.107110229	0.210265831	-0.308630856
23:41:28	0.106434543	0.227067229	-0.308889622	**23:41:32**	0.105758857	0.243868618	-0.309148388
23:41:36	0.105083172	0.266349507	-0.309407154	**23:41:40**	0.104407486	0.294509878	-0.30966592
23:41:44	0.1037318	0.315991591	-0.309924686	**23:41:48**	0.103056115	0.317437332	-0.310183452
23:41:52	0.102380429	0.318883072	-0.310442218	**23:41:56**	0.101704743	0.328389173	-0.310700984
23:42:00	0.101029058	0.345955617	-0.310959749	**23:42:04**	0.101759497	0.36436023	-0.311218515
23:42:08	0.102489937	0.378140194	-0.311477281	**23:42:12**	0.103220376	0.391920123	-0.311736047
23:42:16	0.103950816	0.407163863	-0.311994813	**23:42:20**	0.104681256	0.423871378	-0.312253579
23:42:24	0.105411695	0.440578894	-0.312512345	**23:42:28**	0.106142135	0.45029131	-0.312771111
23:42:32	0.106872574	0.460003725	-0.313029877	**23:42:36**	0.107603014	0.469716141	-0.313288643
23:42:40	0.108333454	0.479428556	-0.313547409	**23:42:44**	0.109063893	0.489140972	-0.313806175
23:42:48	0.109794333	0.497120903	-0.314064941	**23:42:52**	0.110524772	0.505100798	-0.314323707
23:42:56	0.111255212	0.504569127	-0.314582473	**23:43:00**	0.111985652	0.495525818	-0.314841239
23:43:04	0.111828096	0.485953225	-0.315100005	**23:43:08**	0.111670541	0.466382267	-0.315358771
23:43:12	0.111512985	0.446811308	-0.315617537	**23:43:16**	0.11135543	0.429950568	-0.315876302
23:43:20	0.111197875	0.415800118	-0.316135068	**23:43:24**	0.111040319	0.401649632	-0.316393834
23:43:28	0.110882764	0.385160033	-0.3166526	**23:43:32**	0.110725209	0.368670433	-0.316911366
23:43:36	0.110567653	0.356579196	-0.317170132	**23:43:40**	0.110410098	0.357683065	-0.317428898
23:43:44	0.110252542	0.358786934	-0.317687664	**23:43:48**	0.110094987	0.35771404	-0.31794643
23:43:52	0.109937432	0.356641164	-0.318205196	**23:43:56**	0.109779876	0.356918424	-0.318463962
23:44:00	0.109622321	0.358545854	-0.318722728	**23:44:04**	0.110721803	0.360179327	-0.318981494
23:44:08	0.111821285	0.359583081	-0.31924026	**23:44:12**	0.112920767	0.358986836	-0.319499026
23:44:16	0.114020249	0.361087805	-0.319757792	**23:44:20**	0.115119731	0.365885989	-0.320016558
23:44:24	0.116219214	0.370684173	-0.320275324	**23:44:28**	0.117318696	0.369690673	-0.32053409
23:44:32	0.118418178	0.368697173	-0.320792855	**23:44:36**	0.11951766	0.362284319	-0.321051621
23:44:40	0.120617142	0.350452095	-0.321310387	**23:44:44**	0.121716624	0.338619853	-0.321569153
23:44:48	0.122816106	0.319393284	-0.321827919	**23:44:52**	0.123915588	0.300166715	-0.322086685
23:44:56	0.12501507	0.283307045	-0.322345451	**23:45:00**	-0.373885448	-0.231185728	-0.822604217
23:45:04	-0.37447666	-0.246686316	-0.822862983	**23:45:08**	-0.375067873	-0.260759972	-0.823121749

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:45:12	0.124340914	0.225166355	-0.323380515	**23:45:16**	0.123749701	0.214439809	-0.323639281
23:45:20	0.123158488	0.207060364	-0.323898047	**23:45:24**	0.122567275	0.199680918	-0.324156813
23:45:28	0.121976063	0.185936451	-0.324415579	**23:45:32**	0.12138485	0.172191985	-0.324674345
23:45:36	0.120793637	0.157139867	-0.324933111	**23:45:40**	0.120202424	0.14078008	-0.325191877
23:45:44	0.119611211	0.124420294	-0.325450642	**23:45:48**	0.119019998	0.101648987	-0.325709408
23:45:52	0.118428786	0.078877679	-0.325968174	**23:45:56**	0.117837573	0.055573329	-0.32622694
23:46:00	0.11724636	0.031735935	-0.326485706	**23:46:04**	0.118351221	0.008909545	-0.326744472
23:46:08	0.119456082	-0.005520017	-0.327003238	**23:46:12**	0.120560944	-0.019949574	-0.327262004
23:46:16	0.121665805	-0.027814444	-0.32752077	**23:46:20**	0.122770666	-0.029114625	-0.327779536
23:46:24	0.123875527	-0.030414805	-0.328038302	**23:46:28**	0.124980389	-0.040097288	-0.328297068
23:46:32	0.12608525	-0.049779761	-0.328555834	**23:46:36**	0.127190111	-0.06202673	-0.3288146
23:46:40	0.128294973	-0.075128526	-0.329073366	**23:46:44**	0.129399834	-0.090471172	-0.329332132
23:46:48	0.130504695	-0.112536371	-0.329590898	**23:46:52**	0.131609556	-0.134601571	-0.329849664
23:46:56	0.132714418	-0.144308115	-0.33010843	**23:47:00**	0.133819279	-0.141655987	-0.330367195
23:47:04	0.134077312	-0.139508659	-0.330625961	**23:47:08**	0.134335345	-0.139370269	-0.330884727
23:47:12	0.134593378	-0.139231879	-0.331143493	**23:47:16**	0.134851411	-0.137146496	-0.331402259
23:47:20	0.135109444	-0.133114101	-0.331661025	**23:47:24**	0.135367477	-0.129081724	-0.331919791
23:47:28	0.13562551	-0.132226234	-0.332178557	**23:47:32**	0.135883543	-0.135370743	-0.332437323
23:47:36	0.136141576	-0.14797485	-0.332696089	**23:47:40**	0.136399609	-0.170038554	-0.332954855
23:47:44	0.136657642	-0.192102259	-0.333213621	**23:47:48**	0.136915675	-0.221397796	-0.333472387
23:47:52	0.137173708	-0.250693386	-0.333731153	**23:47:56**	0.137431741	-0.274027356	-0.333989919
23:48:00	0.137689774	-0.291399775	-0.334248685	**23:48:04**	0.13822234	-0.30860855	-0.334507451
23:48:08	0.138754905	-0.325817325	-0.334766217	**23:48:12**	0.13928747	-0.3430261	-0.335024983
23:48:16	0.139820036	-0.358058131	-0.335283748	**23:48:20**	0.140352601	-0.370913417	-0.335542514
23:48:24	0.140885166	-0.383768703	-0.33580128	**23:48:28**	0.141417731	-0.386586968	-0.336060046
23:48:32	0.141950297	-0.389405233	-0.336318812	**23:48:36**	0.142482862	-0.392223462	-0.336577578
23:48:40	0.143015427	-0.395041727	-0.336836344	**23:48:44**	0.143547993	-0.397859991	-0.33709511
23:48:48	0.144080558	-0.392784688	-0.337353876	**23:48:52**	0.144613123	-0.387709385	-0.337612642
23:48:56	0.145145689	-0.380421915	-0.337871408	**23:49:00**	0.145678254	-0.370922241	-0.338130174
23:49:04	0.145213525	-0.362017111	-0.33838894	**23:49:08**	0.144748795	-0.35311191	-0.338647706
23:49:12	0.144284066	-0.344206779	-0.338906472	**23:49:16**	0.143819336	-0.333660546	-0.339165238
23:49:20	0.143354607	-0.321473245	-0.339424004	**23:49:24**	0.142889878	-0.309285944	-0.33968277
23:49:28	0.142425148	-0.286118493	-0.339941536	**23:49:32**	0.141960419	-0.262951042	-0.340200301
23:49:36	0.141495689	-0.238562873	-0.340459067	**23:49:40**	0.14103096	-0.212953983	-0.340717833
23:49:44	0.14056623	-0.187345077	-0.340976599	**23:49:48**	0.140101501	-0.172354399	-0.341235365
23:49:52	0.139636772	-0.157363739	-0.341494131	**23:49:56**	0.139172042	-0.139851201	-0.341752897
23:50:00	0.138707313	-0.119816823	-0.342011663	**23:50:04**	0.138980718	-0.099342453	-0.342270429
23:50:08	0.139254122	-0.080194468	-0.342529195	**23:50:12**	0.139527527	-0.061046491	-0.342787961
23:50:16	0.139800932	-0.050399076	-0.343046727	**23:50:20**	0.140074337	-0.048252221	-0.343305493
23:50:24	0.140347742	-0.046105376	-0.343564259	**23:50:28**	0.140621147	-0.038767471	-0.343823025
23:50:32	0.140894551	-0.031429575	-0.344081791	**23:50:36**	0.141167956	-0.025927217	-0.344340557
23:50:40	0.141441361	-0.022260415	-0.344599323	**23:50:44**	0.141714766	-0.018593604	-0.344858088
23:50:48	0.141988171	-0.016207166	-0.345116854	**23:50:52**	0.142261576	-0.013820728	-0.34537562
23:50:56	0.14253498	-0.008875035	-0.345634386	**23:51:00**	0.142808385	-0.00137008	-0.345893152
23:51:04	0.142843717	0.005992954	-0.346151918	**23:51:08**	0.142879049	0.013971891	-0.346410684
23:51:12	0.142914381	0.021950823	-0.34666945	**23:51:16**	0.142949713	0.029336721	-0.346928216
23:51:20	0.142985045	0.036129584	-0.347186982	**23:51:24**	0.143020376	0.042922448	-0.347445748
23:51:28	0.143055708	0.045691646	-0.347704514	**23:51:32**	0.14309104	0.048460844	-0.34796328
23:51:36	0.143126372	0.050888673	-0.348222046	**23:51:40**	0.143161704	0.052975131	-0.348480812
23:51:44	0.143197036	0.05506159	-0.348739578	**23:51:48**	0.143232368	0.066139552	-0.348998344
23:51:52	0.143267699	0.077217514	-0.34925711	**23:51:56**	0.143303031	0.094659763	-0.349515876
23:52:00	0.143338363	0.1184663	-0.349774641	**23:52:04**	0.143287674	0.142221561	-0.350033407
23:52:08	0.143236985	0.173360919	-0.350292173	**23:52:12**	0.143186296	0.204500269	-0.350550939
23:52:16	0.143135607	0.236245742	-0.350809705	**23:52:20**	0.143084918	0.268597346	-0.351068471
23:52:24	0.143034229	0.300948933	-0.351327237	**23:52:28**	0.14298354	0.327324171	-0.351586003
23:52:32	0.142932851	0.353699392	-0.351844769	**23:52:36**	0.142882161	0.371958614	-0.352103535
23:52:40	0.142831472	0.3821018	-0.352362301	**23:52:44**	0.142780783	0.392244985	-0.352621067

Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)	Time	Renewables No Regulation Signal (p.u.)	Renewables with Regulation Signal (p.u.)	No Renewables No Regulation Signal (p.u.)
23:52:48	0.142730094	0.407835344	-0.352879833	**23:52:52**	0.142679405	0.423425739	-0.353138599
23:52:56	0.142628716	0.434714197	-0.353397365	**23:53:00**	0.142578027	0.441700791	-0.353656131
23:53:04	0.142094777	0.448429506	-0.353914897	**23:53:08**	0.141611527	0.446504111	-0.354173663
23:53:12	0.141128276	0.444578752	-0.354432429	**23:53:16**	0.140645026	0.443557971	-0.354691194
23:53:20	0.140161776	0.443441804	-0.35494996	**23:53:24**	0.139678526	0.443325638	-0.355208726
23:53:28	0.139195276	0.442623023	-0.355467492	**23:53:32**	0.138712025	0.441920443	-0.355726258
23:53:36	0.138228775	0.441780081	-0.355985024	**23:53:40**	0.137745525	0.443326548	-0.35624379
23:53:44	0.137262275	0.444873015	-0.356502556	**23:53:48**	0.136779025	0.44560252	-0.356761322
23:53:52	0.136295774	0.446332059	-0.357020088	**23:53:56**	0.135812524	0.441290665	-0.357278854
23:54:00	0.135329274	0.430478335	-0.35753762	**23:54:04**	0.135478313	0.420042903	-0.357796386
23:54:08	0.135627351	0.412480876	-0.358055152	**23:54:12**	0.13577639	0.404918849	-0.358313918
23:54:16	0.135925429	0.400312052	-0.358572684	**23:54:20**	0.136074467	0.398660555	-0.35883145
23:54:24	0.136223506	0.397009057	-0.359090216	**23:54:28**	0.136372545	0.396615834	-0.359348981
23:54:32	0.136521583	0.396222575	-0.359607747	**23:54:36**	0.136670622	0.398298539	-0.359866513
23:54:40	0.136819661	0.402843725	-0.360125279	**23:54:44**	0.136968699	0.407388876	-0.360384045
23:54:48	0.137117738	0.40740552	-0.360642811	**23:54:52**	0.137266777	0.407422164	-0.360901577
23:54:56	0.137415815	0.40529841	-0.361160343	**23:55:00**	0.137564854	0.401034258	-0.361419109
23:55:04	0.137076635	0.396390246	-0.361677875	**23:55:08**	0.136588415	0.389316734	-0.361936641
23:55:12	0.136100196	0.382243222	-0.362195407	**23:55:16**	0.135611977	0.365012723	-0.362454173
23:55:20	0.135123758	0.337625292	-0.362712939	**23:55:24**	0.134635539	0.310237842	-0.362971705
23:55:28	0.134147319	0.283432968	-0.363230471	**23:55:32**	0.1336591	0.256628077	-0.363489237
23:55:36	0.133170881	0.232191345	-0.363748003	**23:55:40**	0.132682662	0.210122745	-0.364006769
23:55:44	0.132194443	0.188054154	-0.364265534	**23:55:48**	0.131706224	0.178038132	-0.3645243
23:55:52	0.131218004	0.16802211	-0.364783066	**23:55:56**	0.130729785	0.155766661	-0.365041832
23:56:00	0.130241566	0.141271784	-0.365300598	**23:56:04**	0.130993617	0.127516214	-0.365559364
23:56:08	0.131745668	0.117272112	-0.36581813	**23:56:12**	0.132497719	0.107028012	-0.366076896
23:56:16	0.13324977	0.099502489	-0.366335662	**23:56:20**	0.134001821	0.094695548	-0.366594428
23:56:24	0.134753873	0.089888606	-0.366853194	**23:56:28**	0.135505924	0.090058451	-0.36711196
23:56:32	0.136257975	0.090228294	-0.367370726	**23:56:36**	0.137010026	0.100891291	-0.367629492
23:56:40	0.137762077	0.12204744	-0.367888258	**23:56:44**	0.138514128	0.143203591	-0.368147024
23:56:48	0.139266179	0.151100333	-0.36840579	**23:56:52**	0.14001823	0.158997074	-0.368664556
23:56:56	0.140770281	0.167783516	-0.368923322	**23:57:00**	0.141522332	0.177459668	-0.369182087
23:57:04	0.141277594	0.18654164	-0.369440853	**23:57:08**	0.141032855	0.195623612	-0.369699619
23:57:12	0.140788117	0.204705593	-0.369958385	**23:57:16**	0.140543378	0.217675166	-0.370217151
23:57:20	0.140298639	0.234532339	-0.370475917	**23:57:24**	0.140053901	0.251389513	-0.370734683
23:57:28	0.139809162	0.260834756	-0.370993449	**23:57:32**	0.139564424	0.270280016	-0.371252215
23:57:36	0.139319685	0.270180426	-0.371510981	**23:57:40**	0.139074947	0.260536021	-0.371769747
23:57:44	0.138830208	0.250891616	-0.372028513	**23:57:48**	0.138585469	0.238168322	-0.372287279
23:57:52	0.138340731	0.225445037	-0.372546045	**23:57:56**	0.138095992	0.213518054	-0.372804811
23:58:00	0.137851254	0.202387383	-0.373063577	**23:58:04**	0.137769772	0.191354028	-0.373322343
23:58:08	0.137688291	0.181530572	-0.373581109	**23:58:12**	0.137606809	0.171707117	-0.373839874
23:58:16	0.137525328	0.162428861	-0.37409864	**23:58:20**	0.137443846	0.153695803	-0.374357406
23:58:24	0.137362365	0.144962745	-0.374616172	**23:58:28**	0.137280883	0.133008325	-0.374874938
23:58:32	0.137199402	0.121053905	-0.375133704	**23:58:36**	0.13711792	0.115998616	-0.37539247
23:58:40	0.137036439	0.117842455	-0.375651236	**23:58:44**	0.136954957	0.119686295	-0.375910002
23:58:48	0.136873476	0.106983257	-0.376168768	**23:58:52**	0.136791995	0.094280218	-0.376427534
23:58:56	0.136710513	0.082754967	-0.3766863	**23:59:00**	0.136629032	0.072407503	-0.376945066
23:59:04	0.136543301	0.062057506	-0.377203832	**23:59:08**	0.13645757	0.066699822	-0.377462598
23:59:12	0.136371839	0.071342137	-0.377721364	**23:59:16**	0.136286108	0.073853385	-0.37798013
23:59:20	0.136200377	0.074233564	-0.378238896	**23:59:24**	0.136114647	0.074613743	-0.378497662
23:59:28	0.136028916	0.079585568	-0.378756427	**23:59:32**	0.135943185	0.084557393	-0.379015193
23:59:36	0.135857454	0.096632895	-0.379273959	**23:59:40**	0.135771723	0.115812075	-0.379532725
23:59:44	0.135685992	0.134991254	-0.379791491	**23:59:48**	0.135600261	0.153491194	-0.380050257
23:59:52	0.135514531	0.171991135	-0.380309023	**23:59:56**	0.1354288	0.189744341	-0.380567789

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