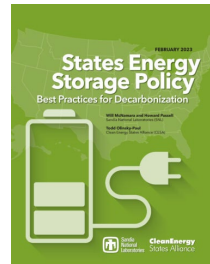




Sandia National Laboratories

CESA Support of Sandia's Energy Storage Demonstration Program



Todd Olinsky-Paul, Senior Project Director, Clean Energy States Alliance (CESA)

2023 DOE Office of Electricity Peer Review – Deployment Projects

Presentation ID #102



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Thank You!



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Director, Energy Storage Research
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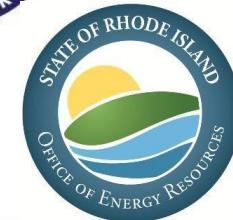
Celebrating 20 Years of State Leadership



The Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy.

CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

CleanEnergy States Alliance



Energy Storage Technology Advancement Partnership (ESTAP)

Conducted under contract with Sandia National Laboratories
Funding from US DOE Office of Electricity

Facilitate public/private partnerships to support joint federal/state energy storage demonstration project deployment

Support state energy storage efforts with technical, policy and program assistance

Disseminate information to stakeholders through webinars, reports, case studies and conference presentations

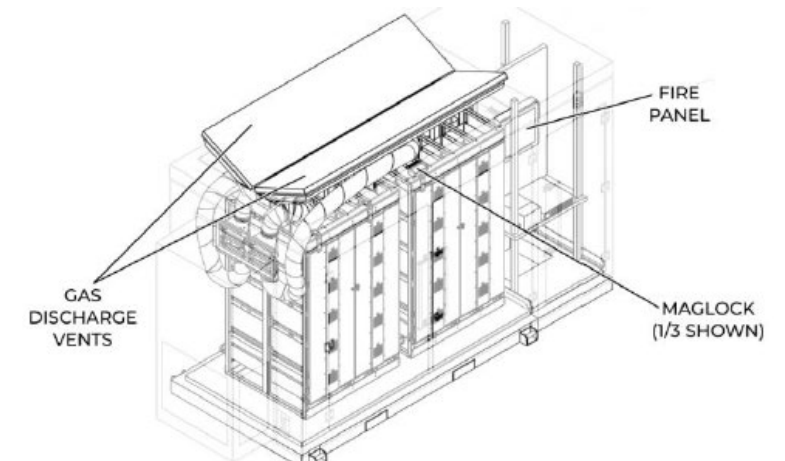


Support for Energy Storage Across the Nation



Demonstration Project Support (recent & current projects)

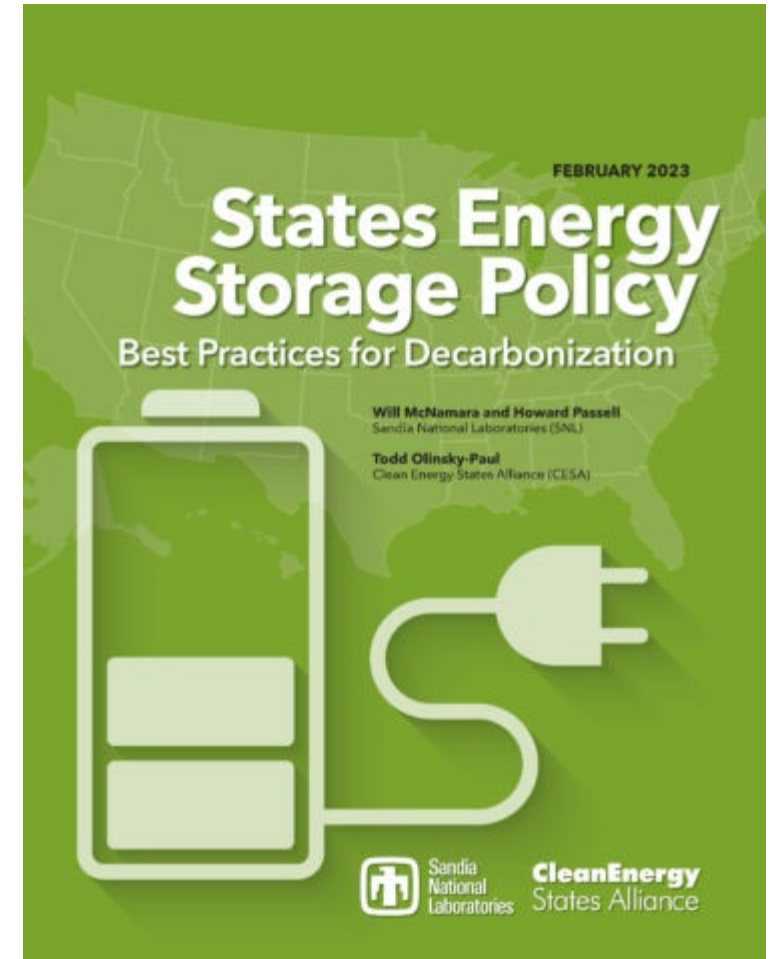
- Albuquerque Public Schools
- Vermont SHEI region (GMP & VEC)
- Decorah, Iowa (Alliant)
- EPB (Chattanooga, TN municipal utility)
- AVEC (Alaska Village Electric Cooperative)
- NELHA (Natural Energy Laboratory of Hawaii Authority)
- NRECA (National Rural Electric Cooperative Association)
- Villalba, Puerto Rico microgrid



Joint report with Sandia: States Energy Storage Policy - Best Practices for Decarbonization

- Summarizes findings from a 2022 survey of states leading in decarbonization goals and programs
- Summarizes findings from a 2022 survey of energy storage developers
- Highlights best practices, identifies barriers, and underscores the urgent need to expand state energy storage policymaking to support decarbonization in the US
- Provides a “deep dive” into key state energy storage policy priorities and the challenges being encountered by some of the leading states, in the form of a series of case studies

In addition, CESA has worked with Sandia to provide tailored energy storage workshops to states and regions including Vermont, Hawaii, Washington DC, and NECPUC

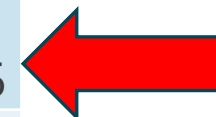


1,511 page views to date
(CESA website)

ESTAP Webinars October 2022-2023



| WEBINAR TITLE | DATE | ATTENDED | RECORDING VIEWS |
|---|----------|----------------|-----------------|
| Behind-the-Meter Energy Storage: Comparing State Policies | 11/17/22 | 143 | 122 |
| Energy Storage in the Southwest: Battery Case Studies from Albuquerque Public Schools and the Navajo Tribal Utility Authority | 12/1/22 | 77 | 65 |
| New Federal Funding for Energy Storage: Inflation Reduction Act | 12/16/22 | 219 | 348 |
| State of the US Energy Storage Industry: 2022 Year in Review | 1/10/23 | 297 | 1325 |
| Distributed Storage for Home Health and Resilience | 3/14/23 | 177 | 171 |
| States Energy Storage Policy: Best Practices for Decarbonization | 3/23/23 | 187 | 115 |
| The Energy Storage Interconnection Bottleneck | 5/23/23 | 285 | 365 |
| Battery Decommissioning, Recycling, and Reuse | 9/20/23 | 288 | 109 |
| Domestic Lithium: What The US Government is Doing to Increase Supply | 10/10/23 | 169 | 111 |
| EPB Energy Storage: Resilience and Peak Shaving in Chattanooga, Tennessee | 11/23 | IN DEVELOPMENT | |





ESTAP WEBINARS 2011 - 2023

| YEAR | NUMBER OF WEBINARS | ATTENDANCE |
|--------------|--------------------|---------------|
| 2011 | 3 | 107 |
| 2012 | 6 | 303 |
| 2013 | 11 | 844 |
| 2014 | 6 | 694 |
| 2015 | 7 | 1,252 |
| 2016 | 11 | 2,074 |
| 2017 | 7 | 1,864 |
| 2018 | 4 | 983 |
| 2019 | 9 | 2,949 |
| 2020 | 6 | 1,842 |
| 2021 | 4 | 789 |
| 2022 | 9 | 1,878 |
| 2023 | 6 (to date) | 1,403 |
| TOTAL | 89 | 16,982 |



CESA Energy Storage Working Group (ESWG)

| DATE | TOPIC |
|----------------|--|
| October 2022 | Maine update, Maryland update |
| November 2022 | New Jersey update, Energy Storage straw poll |
| December 2022 | CEG Peakers Report, Cooling Report, Technical Assistance Fund |
| January 2023 | New York update and NY Energy Storage Roadmap |
| February 2023 | Lynn Heller, Equity in Financing; SMUD Community Storage Program |
| March 2023 | Massachusetts update, Sandia/CESA Best Practices for Decarbonization Report |
| April 2023 | CEG Interconnection Report |
| May 2023 | Michigan update, CEG PURPA presentation, New Mexico update |
| June 2023 | Voltus, Enel NA |
| July 2023 | Virginia update, Connecticut update |
| August 2023 | Rhode Island update, Washington DC update |
| September 2023 | California update, CA LDES Program, Washington State update, Maryland update |
| October 2023 | Maine update, New Jersey update |

CESA DIRECT POLICY SUPPORT TO STATES – RECENT EXAMPLES

- New Jersey – support program development (Storage Incentive Program)
- Pennsylvania – support working group (PA DEP Energy Storage Consortium Steering Committee)
- Maine – Support program development (Energy Storage PON and upcoming RFI)
- Maryland – Support program development (Energy storage incentive rate setting and equity recommendations)
- Connecticut – Support program design and implementation (Technical support for multifamily affordable housing participants in Energy Storage Solutions program; support for program design)
- Washington, DC – support grant program (review PON submissions)
- Vermont – Support legislative initiatives (testimony before legislative committee)
- Virginia – Participation in RACER award project (Planning/feasibility studies for remote community resilience hubs)
- Washington State – Support review of bidders for energy storage program contract

Some ESTAP Statistics

- The ESTAP distribution list has 7,912 subscribers
- CESA's ESTAP webpage had 1,409 pageviews in the past year (October 2022 through October 2023)
- The Sandia/CESA report "States Energy Storage Policy: Best Practices for Decarbonization" had 1,511 pageviews on CESA's website
- ESTAP has produced 90 energy storage webinars since 2011 (including one scheduled for November)
- Webinar attendance since 2011 totals 16,982 (not including views of the recorded, archived webinars)

New/upcoming work

- Non-lithium demonstration projects with states and Sandia/DOE
- Possible collaboration with CEG on equity projects
- Equity best practices report in development with Sandia
- LDES consortium support and participation



Thank You

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