EnergyPod
An Office of Electricity Grid Storage Demonstration Project

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✓ Compelling Value
✓ Engineered for Reliability
✓ Rapid Modular Deployment
DOE funding enabled Primus Power to launch our field deployment program

**Tier 1 Investors**
- $11M equity raise in May-11
  - Chrysalix
  - KP Capital
  - DBL INVESTORS

**Intellectual Property**
- 1 US patent issued
- 11 in process
- US and International

**Follow-on Grants**
- $2M ARPA-E: GRIDS Program
- $1M California Energy Commission

**Strategic Partnerships**
- $B Electrical Conglomerate for technology development
- $B Independent power producer for deployment

**Department of Energy Office of Electricity**

$14M Grid Storage Demonstration Project
We are on track for our first EnergyPod™ field deployment in 2012, with commercial deployments starting in early 2013.

- **Laboratory: 2010**
  - Proof of Principle

- **EnergyCell: 2011**
  - Technology De-Risk
  - EnergyCell Development
  - Testing
  - Full scale Alpha EnergyCell Testing
  - Jun ’11

- **EnergyPod: 2012**
  - EnergyPod™ Development
  - Reliability Testing
  - Pilot Production
  - EnergyFarm Deployment
  - Field Validation
  - Contract Production
  - First EnergyPod™ field deployment
  - Aug ’12
  - Beta EnergyCell*
  - Mar ’12
  - Commercial EnergyPod shipments start early 2013

* A string of EnergyCells is installed into an EnergyPod™
Extensive reliability engineering coupled with redundancy through Play & Play modularity yield 24/7 field performance

- over 100 man.years of flow battery experience
- unique flow battery product
- MTBF of 36 years
  - industry-leading compatibility of all structural and active materials
  - elimination of all typical flow battery failure modes
  - extensive FMEA analysis and critical component redundancy

- Primus Power’s *Molecule to Megawatts™* approach to system engineering has created a modular design that enables
  - full factory integration & testing
  - rapid deployment
  - minimal site engineering
  - system capacity flexibility throughout the life of the deployment
  - reduction of maintenance to annual inspections & service

Traditional System Costs

- Batteries 40%
- Site NRE 30%
- BOP 30%

Full factory integration removed significant deployment costs
EnergyPods™ enjoy cost, operational, emissions and installation advantages over traditional fossil fuel solutions

<table>
<thead>
<tr>
<th></th>
<th>Traditional Fossil Fuel Solution</th>
<th>Primus Power EnergyPods™</th>
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<tbody>
<tr>
<td><strong>Firming range</strong></td>
<td>4 to 50 MW</td>
<td>-25 MW to 25 MW</td>
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<tr>
<td><strong>Capital cost</strong></td>
<td>$78M</td>
<td>&lt;&lt; $78M</td>
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<tr>
<td><strong>Time to full power</strong></td>
<td>5 minutes</td>
<td>5 seconds</td>
</tr>
<tr>
<td><strong>Water in</strong></td>
<td>560,000,000 liters</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sewage out</strong></td>
<td>560,000,000 liters</td>
<td>0</td>
</tr>
<tr>
<td><strong>Natural gas</strong></td>
<td>2,900,000 mmBTU</td>
<td>0</td>
</tr>
<tr>
<td><strong>Pollutants</strong></td>
<td>NOx 37 tons</td>
<td></td>
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<tr>
<td></td>
<td>CO 130 tons</td>
<td></td>
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<tr>
<td></td>
<td>VOC 130 tons</td>
<td></td>
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<tr>
<td><strong>CO₂ emissions</strong></td>
<td>130,000 tons</td>
<td>0</td>
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<tr>
<td><strong>Sound (at the fence)</strong></td>
<td>80 dB</td>
<td>&lt;30 dB</td>
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<tr>
<td><strong>Permit and install time</strong></td>
<td>36 to 54 months</td>
<td>6 to 12 months</td>
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<tr>
<td><strong>Area</strong></td>
<td>1 acre</td>
<td>¼ acre</td>
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Annual data, based on 35 MW average use
Summary

• DOE’s Office of Electricity has facilitated the productization of Primus Power’s engineering innovations
• We’re on schedule for field deployment in 2012
• The EnergyPod™ is engineered to be a reliable, emissions-free product
• The EnergyPod™ is economically competitive and commercially attractive
• We are working closely with utility and industry partners to deploy multi-MW EnergyFarms in 2013 and 2014