



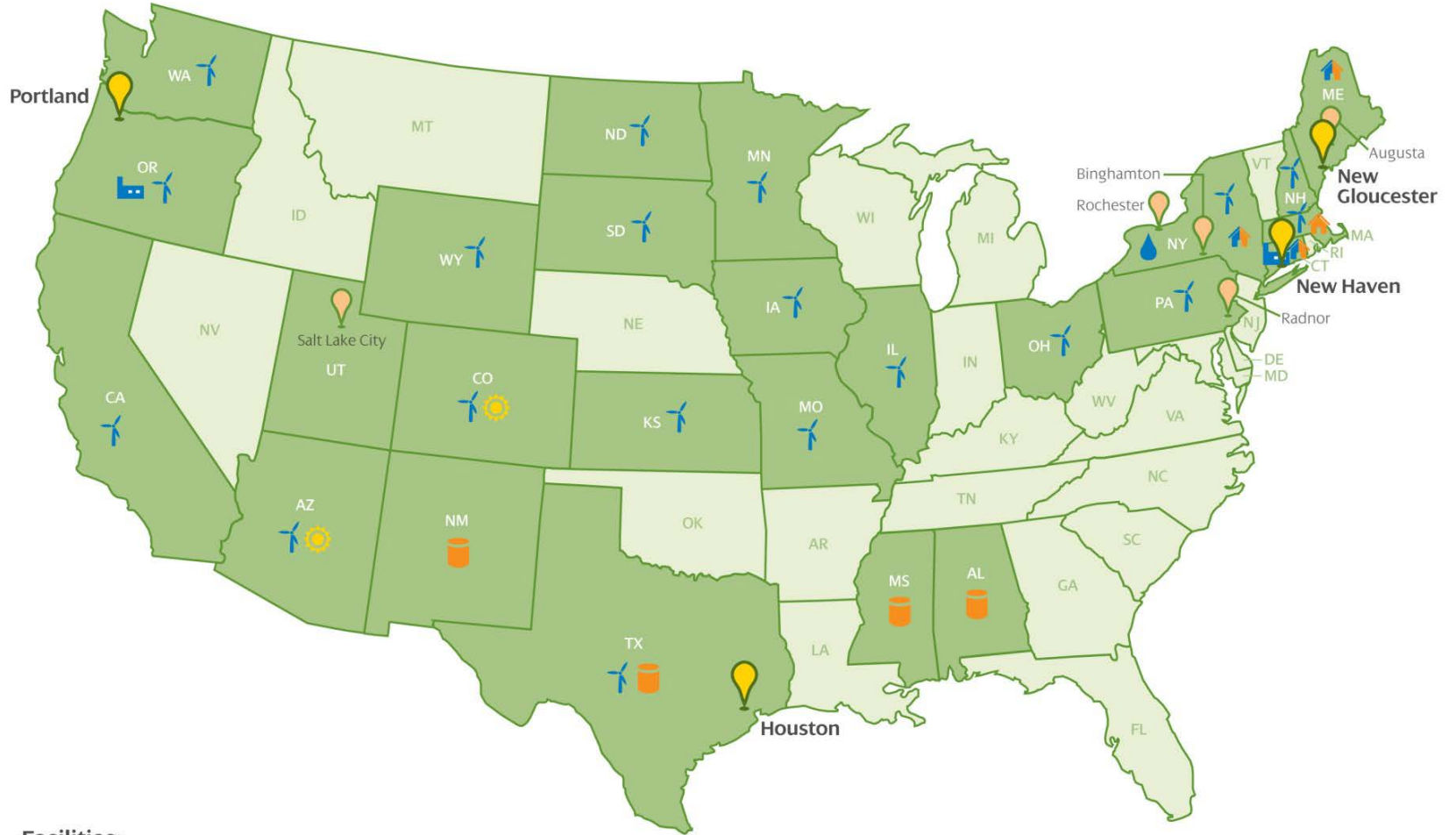
E2Tech Forum

February 3, 2016

Energy & Technology

Outline

1. AVANGRID
2. Environment & Energy Technology
3. Smart Energy Technology
 - AMI
 - Automation
 - Control Center
4. Future Energy Vision
5. Getting Connected



Facilities:

-  **Corporate Offices**
-  Business Offices
-  Wind Power
5,645 MW
-  Solar Power
50 MW
-  Natural Gas Storage
67.5 BCF
(Excludes contracted storage)
-  Hydroelectric Plants
118 MW
-  Thermal Generation
886 MW
-  Electricity/Natural Gas Distribution Networks
(2014)
31,898 GWh
210,750,499 DTH
Note: solid orange icon (MA) indicates natural gas distribution only

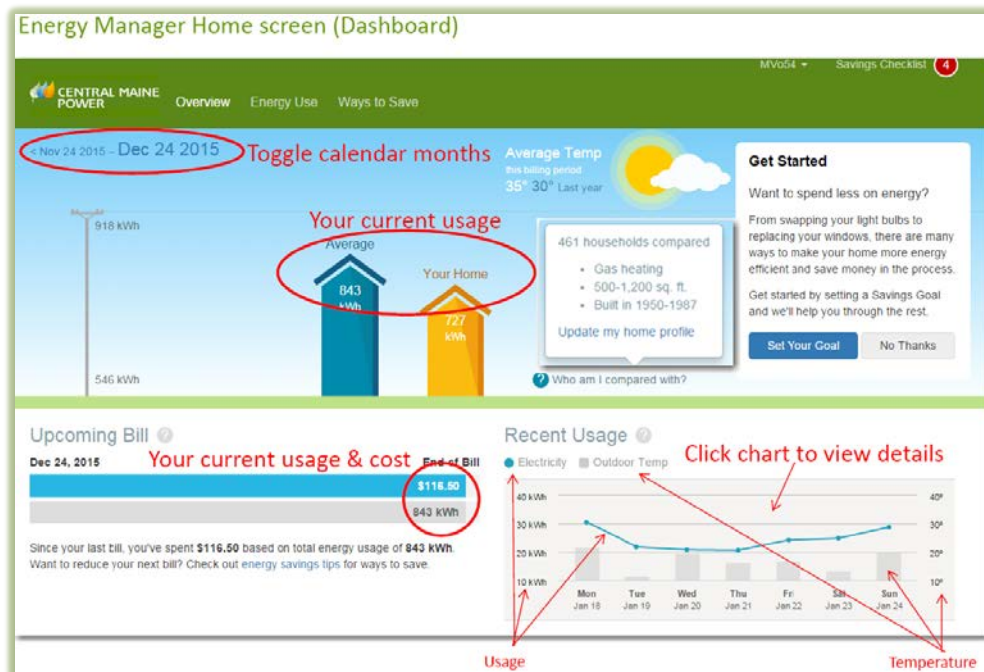
... We seek to provide clean energy through sustainable sources and are committed to reducing our corporate carbon footprint...

- **Reduced Emissions**

- Recent capital improvements at our NY hydroelectric stations avoided 408,000 tons of CO₂ , 2,100 tons of sulfur dioxide (SO₂) and 570 tons of nitrogen oxides (NOX).
- AMI at CMP avoids an estimated 1,050 tons of CO₂ exhaust emissions. The Maine AMI enables gains in efficiency and energy conservation that reduce the need for extra generation and eliminate an estimated 42,000 tons of CO₂, 46 tons of NOX, and 107 tons of SO₂ emissions annually.

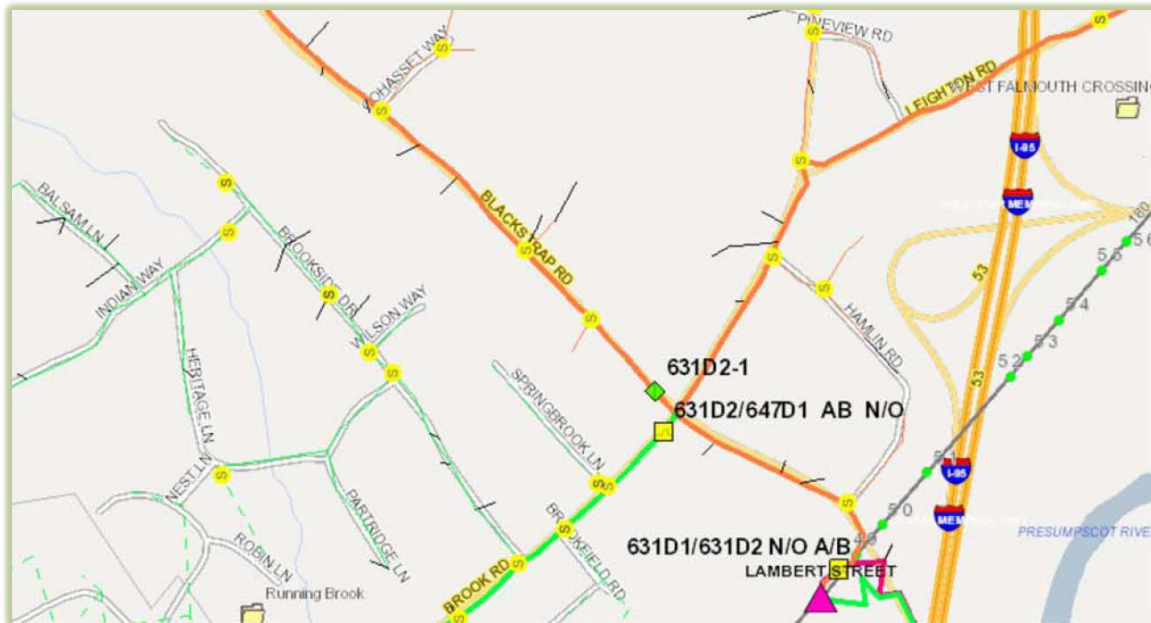
Advanced Metering Infrastructure (AMI)

- Consists of smart meters and the associated communication network.
- Provide more detailed usage and power quality information (e.g., outages, voltage).
- Facilitates real-time monitoring and controlling the grid.
- Provides more consumer information and control.



Automation

- Is real-time monitoring, metering, and control of grid equipment (e.g., transformers, breakers, voltage regulators).
- Automation allows greater penetration of distributed resources.
 - Enables real-time grid 'tuning' and configuration changes.
 - Allows communication with resources for coordinated control.

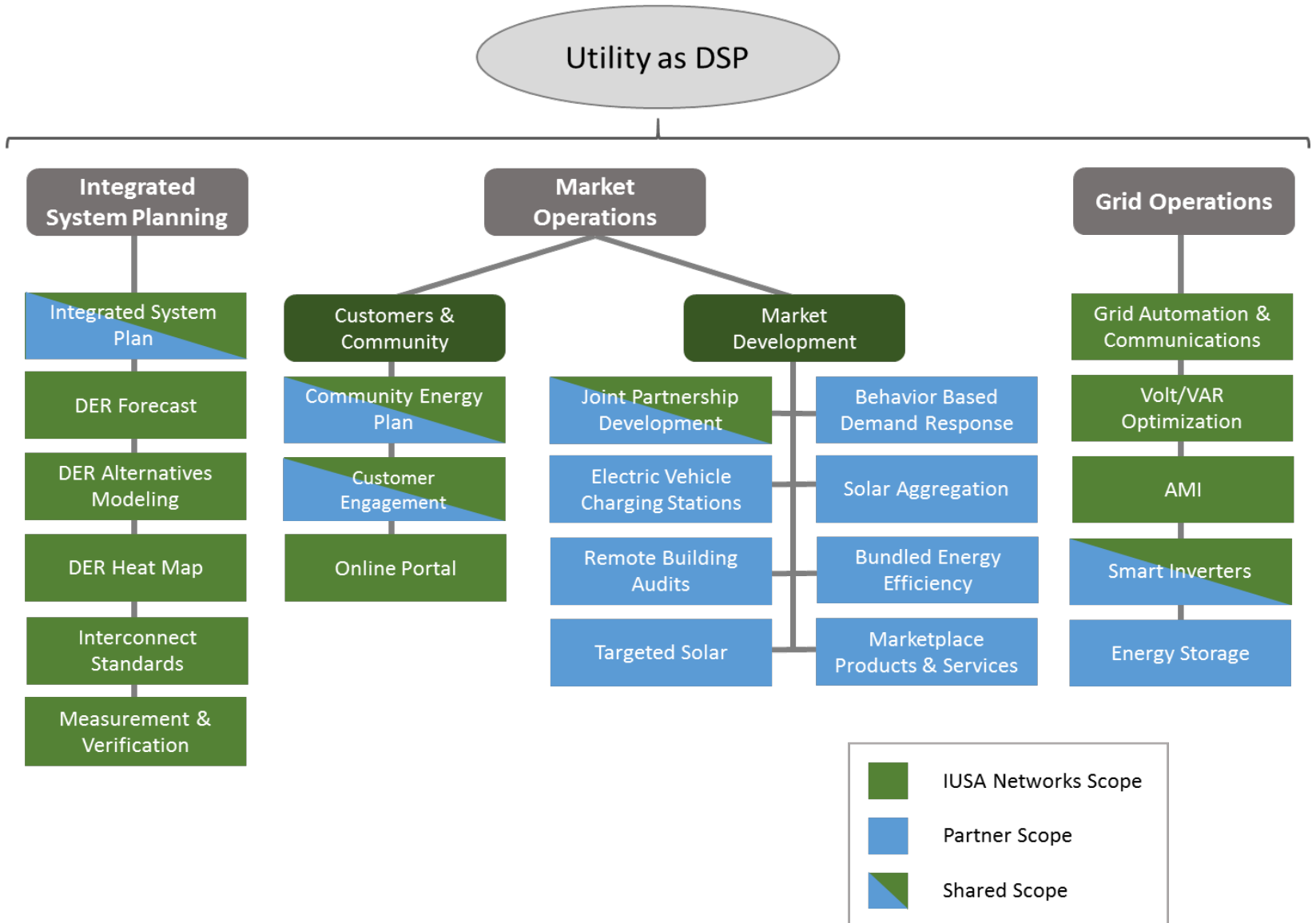


Control Center

- The control center is where the grid and grid resources are operated.
- Increased automation removes 'blind spots.'
- We are making upgrades to our control system to prepare for a future of increased distributed resources.
 - SCADA\EMS\DMS\OMS...



Future Energy Vision



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your account

small generator interconnection procedures

- Online Services
- Billing and Payment Options
- Manage Your Account
- Payment Options
- Customer Service
- Get Connected
- Get Assistance
- Small Generator Interconnection Procedures**
- Net Energy Billing
- Smart Meter Information
- Energy Manager
- Landlord Services
- Beware of Payment Scams

The Maine Public Utilities Commission has issued rules and procedures for Small Generator Interconnections under Chapter 324. These rules and procedures establish statewide standards for the interconnection of small renewable energy facilities to the energy grid. The purpose of these rules and procedures is to increase the efficiency of the interconnection process, encourage the increased use of renewable energy and distributed generation. We have provided a link to the forms and agreements that need to be completed in order to begin the process.

Click here to view Chapter 324 Rules and click here to access the **entire packet of Forms and Agreements** (MS Word). *Please note that this will link directly to the MPUC web site which still lists the **old application fee of \$20 instead of \$50**.*

or you can access individual documents below in order to begin the process:

- [Forms and Agreements 1: Definitions](#)
- For commercial customers submitting applications, please provide your tax id number.**
- [Forms and Agreements 2 - Level 1: Application for Certified, Inverter-Based Generating Facilities not greater than 10 kW](#)
- [Forms and Agreements 3 - Level 1: Interconnection Agreement](#)
- [Forms and Agreements 4 - Levels 2, 3 & 4: Interconnection Application](#)
- [Forms and Agreements 5 - Levels 2, 3, & 4: Interconnection Agreement](#)
- [Forms and Agreements 6: Certificate of Completion](#)
- [Forms and Agreements 7: Feasibility, Impact and Facilities Study Agreements](#)
- [Forms and Agreements 8: Interconnection System Impact Study Agreement](#)
- [Forms and Agreements 9: Interconnection Facilities Study Agreement](#)

As required by order of the Maine Public Utilities Commission, Small Generator Interconnection Applications will be evaluated under applicable screening criteria based on the overall AC generation capacity of the customer-generation facility at the point of interconnection.



Thank you!

Questions?