



# Grid Modernization Initiative Northwest Region Workshop

**April 26, 2016**

**12:30 Registration**

**1:00 Welcome and Introductions**

- *Eric Lightner, Office of Electricity Delivery & Energy Reliability*

**1:15 Grid Modernization Initiative (GMI) Overview**

Overview of the vision and technical areas of the GMI

- *Bill Parks, Office of Electricity Delivery & Energy Reliability*
- *Kevin Lynn, Office of Energy Efficiency & Renewable Energy*

**1:45 Technology Sessions**

Sessions will have a 10-minute presentation of the technology area followed by a facilitated stakeholder discussion to solicit input and feedback on the priorities outlined in DOE's multiyear program plan.

**Session 1: Devices & Integrated Systems**

Sound Conference Room  
Presenter: Rob Pratt, PNNL  
Facilitator: Art Anderson, NREL

**Session 2: Sensing & Measurement**

Cove Conference Room  
Presenter: Jeff Dagle, PNNL  
Facilitator: Carl Imhoff, PNNL

*Discussion Questions:*

- *Will the proposed research plan lead to practical applications and solve industry needs?*
- *Are there technology areas that are not addressed?*
- *Is the plan realistic but ambitious enough to respond to new developments?*

**2:45 Coffee Break**

**3:15 Session 3: Security & Resilience**

Sound Conference Room  
Presenter: Paul Skare, PNNL  
Facilitator: Art Anderson, NREL

**Session 4: System Operations & Control**

Cove Conference Room  
Presenter: Jeff Dagle, PNNL  
Facilitator: Carl Imhoff, PNNL

*Discussion Questions:*

- *Will the proposed research plan lead to practical applications and solve industry needs?*
- *Are there technology areas that are not addressed?*
- *Is the plan realistic but ambitious enough to respond to new developments?*

**4:15 Break**



**4:30 Session 5: Design & Planning Tools**

Sound Conference Room  
Presenter: Harry Huang, PNNL  
Facilitator: Art Anderson, NREL

*Discussion Questions:*

- *Will the proposed research plan lead to practical applications and solve industry needs?*
- *Are there technology areas that are not addressed?*
- *Is the plan realistic but ambitious enough to respond to new developments?*

**Session 6: Institutional Support**

Cove Conference Room  
Presenter: Michael Kintner-Meyer, PNNL  
Facilitator: Carl Imhoff, PNNL

*Discussion Questions:*

- *What information or tools are needed to better allow policy makers to understand the technology impacts of policy decisions?*
- *How could DOE better provide the information needed for the evaluation of technology investments to support policy goals?*
- *What methods would be most effective for providing support to policy maker requests?*

**5:30 Adjourn**

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## April 27, 2016

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**8:00 Continental Breakfast**

**8:30 Welcome and GMI Workshop Overview**

- *Eric Lightner, Office of Electricity Delivery & Energy Reliability*

**8:45 Technical Session Key Themes**

- *Carl Imhoff, PNNL*
- *Art Anderson, NREL*

**9:00 Regional Stakeholder Panel: The Modern Grid & Its Challenges**

Industry perspectives on the current and future challenges of grid modernization.

*Moderator: Michael Pesin, Office of Electricity Delivery and Energy Reliability*

*Panelists:*

- *Elliott Mainzer, Administrator and CEO, Bonneville Power Authority*
- *Curt Kirkeby, Sr. Electrical Engineer, Technology Strategy, Avista Utilities*
- *Ralph Kappelhoff, Executive Software Development Leader, GE Grid Solutions*
- *Steve Wright, General Manager, Chelan County PUD*
- *Paul Kjellander, Commissioner, Idaho Public Utilities Commission*

**10:00 Regional Sessions**

Each session will discuss the technology challenges associated with the implementation of grid modernization policies and thoughts on overcoming these challenges.



<b>10:15</b>	<b>Pursuing Resiliency in Today's Modern Grid</b> Room: Maritime Event Center Facilitator: Ward Camp, Edison Energy LLC <i>Discussion Questions:</i> <ul style="list-style-type: none"><li>• <i>Does the definition of resiliency change with increasing distributed energy resources?</i></li><li>• <i>What is the balance between traditional resiliency measures and the deployment of other technologies (e.g., system-wide control and visibility, microgrids, customer-owned distributed energy resources)?</i></li><li>• <i>What are the limiting factors (or barriers) to increasing resiliency to natural hazards (hurricanes, tornadoes, droughts, or other threats)?</i></li></ul>
<b>11:15</b>	<b>Break</b>
<b>11:30</b>	<b>Clean Energy Goals and Ensuring System Reliability, Flexibility, and Affordability</b> Room: Maritime Event Center Facilitator: Ward Camp, Edison Energy LLC <i>Discussion Questions:</i> <ul style="list-style-type: none"><li>• <i>What are the technology implications of the sustainability goals being proposed/adopted by communities and large customers?</i></li><li>• <i>What is the role of microgrids, storage, energy efficiency, and demand response in achieving these goals?</i></li><li>• <i>What opportunities will these solutions provide?</i></li></ul>
<b>12:30</b>	<b>Lunch</b>
<b>1:15</b>	<b>Regional Session Key Themes</b> <ul style="list-style-type: none"><li>• <i>Bill Parks, Office of Electricity Delivery &amp; Energy Reliability</i></li><li>• <i>Kevin Lynn, Office of Energy Efficiency &amp; Renewable Energy</i></li></ul>
<b>1:30</b>	<b>Regional Partnerships and Demonstrations</b> Presentation of proposed areas for future demonstrations followed by a facilitated discussion of stakeholder perspectives on the attributes of regional importance. <ul style="list-style-type: none"><li>• <i>Facilitator: Ward Camp, Edison Energy LLC</i></li></ul>
<b>2:30</b>	<b>Closing Remarks</b>
<b>2:45</b>	<b>Adjourn</b>