

# The Status of Transmission and Distribution System Intersections: A Grid Revolution

National Council on Electricity Policy (NCEP)

[Annual Meeting and Workshop](#)

May 8-9, 2018

Warwick Hotel ▪ Denver, Colorado

Webinar access is available for this meeting. Please register at the following sites.

[Day 1 – NCEP Annual Meeting + Workshop](#)

[Day 2 – NCEP Annual Meeting + Workshop](#)

## Meeting Purpose & Approach:

- Educate and engage NCEP members and colleagues on the current state of play for intersection points along the transmission and distribution grids.
- Showcase examples of planning, operations, and market developments underway and needed for integrating higher levels of distributed energy resources (DER) into the distribution grid, and associated impacts and intersection points on the transmission grid.
- Hear insights and lessons learned from state regulators, energy directors, utility managers, technologists, legislators, and consumer advocates who have been involved in recent DER-related distribution and transmission changes.
- Highlight meeting participants' own questions, experiences, and research needs.

**Background:** *As investments in new energy-related technologies, products, and activities are underway— many of which impact planning, operations, and markets along both the transmission and distribution parts of the grid—state policy-makers and others are being called upon to make decisions that will affect customer services and utility grid modernization efforts. Increasingly, energy decision makers at local, state, and regional levels are foreseeing that their decisions will impact how the grid operates at customer locations, across the distribution system, and into the transmission system. The intersection points of these stakeholders and systems are not fully understood, as technologies and processes are evolving all the time.*

*NCEP's annual meeting will explore this evolution and specifically the impact that DERs are and will have on the transmission and distribution systems in the contexts of planning, operations, and markets. Such DERs include energy efficiency, distributed generation (e.g., solar photovoltaics), energy storage, demand response, electric vehicles, and more. NCEP will leverage the discussions at the annual meeting and workshop to write a paper for state electricity decision makers about the current state of play, and remaining questions to be answered.*

**Format:** *Each panel includes two example “snapshots,” that highlight recent experiences with transmission and distribution grid intersections. During these snapshots, the following questions will be addressed, so that all state decision-makers will have the opportunity to learn from others' experiences and make better informed decisions moving forward.*

- *What is the policy backdrop that created the opportunity for this action or decision?*
- *What was done? Who was involved? What went well and why?*
- *What impact has the activity or initiative had in the state and/or on the grid?*
- *What do you wish you would have known beforehand?*
- *What would you advise other state level decision makers to do differently based on your experience?*

**Monday, May 7<sup>th</sup>**

2:00 pm – 5:00 pm: **Optional Site Visit to National Renewable Energy Laboratory (NREL)**  
NCEP Annual Meeting and Workshop participants are invited to NREL for a presentation on its Distribution System 3D Visualization Model, as well as a short tour of the Energy Systems Integration Facility. More information is available at: [www.electricitypolicy.org](http://www.electricitypolicy.org).

**Tuesday, May 8<sup>th</sup>**

8:30 am **Executive Committee Meeting (closed session)**

9:45 am **Break and NCEP Meeting Attendees Check-In**

10:15 am **NCEP Annual Meeting**

- Welcome
  - *Honorable Elizabeth “Lib” Fleming*, South Carolina Public Service Commission and NCEP President
  - *Jeannette Brinch*, National Council on Electricity Policy
  - *Honorable Jeffrey Ackermann*, Colorado Public Utilities Commission
- Review of the Meeting and Workshop Agenda

10:45 am **The Grid Revolution Underway – National Perspectives**

*Moderator: John Chatburn*, Idaho Governor’s Office of Energy and Mineral Resources  
*Presenters:*

- *Juliet Homer*, Pacific Northwest National Laboratory – How and Where Distributed Energy Resources Impact Transmission and Distribution and Who Is Doing What About It
- *David Kathan*, Federal Energy Regulatory Commission (FERC)
- *Larry Mansueti*, U.S. Department of Energy (DOE), Office of Electricity Delivery and Energy Reliability – DOE Initiatives on the Intersections of the Transmission and Distribution Grids

12:00 pm **Working Lunch: Updates from NCEP Partners**

- *David Whiteley*, Eastern Interconnection Planning Collaborative (EIPC)
- *Tanya McCloskey*, Pennsylvania Office of Consumer Advocate, representing National Association of State Utility Consumer Advocates (NASUCA)
- *Michael Dowd*, Virginia Department of Environmental Quality, representing National Association of Clean Air Agencies (NACAA)
- *Glen Andersen*, National Conference of State Legislators (NCSL)
- *Dan Lauf*, National Governors Association (NGA)
- *Stephen Goss*, National Association of State Energy Officials (NASEO)

## SESSION I: PLANNING FOR A MORE INTEGRATED GRID

1:15 pm **Planning for Distribution-Level Services that Support the Transmission System**

*Moderator: Honorable Paul Kjellander*, Idaho Public Utilities Commission

*Snapshot Presenters:*

- *Lorenzo Kristov*, Electric System Policy, Structure, Market Design
- *Steve Rourke*, Independent System Operator New England (ISO-NE)

2:00 pm **Regional Transmission Planning that Incorporates Non-Wires Solutions on the Distribution System**

*Moderator: Honorable Betty Ann Kane*, DC Public Service Commission

*Snapshot Presenters:*

- *Honorable Bruce Williamson*, Maine Public Utility Commission – Non-Wires Alternatives at Boothbay Harbor
- *Ryan Fedie*, Bonneville Power Authority (BPA) – Deferring Transmission System Expansion

2:45 pm **Snapshots & Input from Workshop Participants**

*Facilitator: Danielle Sass Byrnett*, NARUC Center for Partnerships & Innovation

- What other projects, policies, or examples offer insights into these topics?
- Where can attendees find good resources to inform their decision making?
- What lingering questions do you have about this topic? What research is needed?

3:15 pm **Break**

## SESSION II: EVOLVING GRID OPERATIONS

3:30pm **Evolving Transmission & Distribution System Operations: Examples of Enhanced Visibility, Coordination, and Communications**

*Moderator: Honorable Nick Wagner*, Iowa Utilities Board

*Snapshot Presenters:*

- *Matthew Tisdale*, Gridworks
- *Samantha Ruiz*, Hawaii Public Service Commission

4:15 pm **Enhancing Transmission and Distribution System Interface for Resilience Benefits**

*Moderator: Tanya McCloskey*, Pennsylvania Office of Consumer Advocate

*Snapshot Presenters:*

- *Honorable Mary-Anna Holden* and *Tom Walker*, New Jersey Board of Public Utilities
- *Jeff Bladen*, Midcontinent Independent System Operator (MISO)

- 5:00 pm      **Snapshots & Input from Workshop Participants**  
*Facilitator: Kerry Worthington, NARUC Center for Partnerships & Innovation*
- What other projects, policies, or examples offer insights into these topics?
  - Where can attendees find good resources to inform their decision making?
  - What lingering questions do you have about this topic? What research is needed?
- 5:30 pm      **Adjourn Day 1**
- 6:15 pm      **No-Host Dinner** (location to be announced)

**Wednesday, May 9<sup>th</sup>**

- 8:00 am      **Continental Breakfast**
- 8:30 am      **Day 2 Welcome/Overview of the Agenda**

**SESSION III: THE POTENTIAL FOR MARKETS**

- 8:45 am      **DER Investments that Are Providing Services to the Transmission & Distribution System**  
*Moderator: Honorable Elizabeth “Lib” Fleming, South Carolina Public Service Commission*  
*Snapshot Presenters:*
- *Leia Guccione, Rocky Mountain Institute (RMI)*
  - *Tom Stanton, National Regulatory Research Institute (NRRI)*
- 9:30 am      **The Value of Distributed Energy Resources to the Grid**  
*Moderator: Michael Dowd, Virginia Department of Environmental Quality*  
*Snapshot Presenters:*
- *Kerry Stroup, PJM Interconnection*
  - *Lise Trudeau, Minnesota Department of Commerce – The Value of Solar*
- 10:15 am      **Break**
- 10:30 am      **Tracking Results and Quantifying DER Impacts on the Transmission and Distribution Systems**  
*Moderator: Representative Tom Sloan, Kansas House of Representatives*  
*Snapshot Presenters:*
- *Rich Hydzik, Avista on behalf of NERC’s Essential Reliability Services Working Group and DER Task Force, DER Connection Modeling and Reliability Considerations*
  - *Grace Relf, ACEEE – What We Can Learn from Experiences with Energy Efficiency in Regional Markets*

- 11:15am      **Snapshots & Input from Workshop Participants**  
*Facilitator: Jan Brinch, National Council on Electricity Policy*
- What other projects, policies, or examples offer insights into these topics?
  - Where can attendees find good resources to inform their decision making?
  - What lingering questions do you have about this topic? What research is needed?
- 12:15 pm      **Luncheon Roundtable: Support for and Recognition of Customer Needs and Expectations**  
*Moderator: Honorable Paul Kjellander, Idaho Public Utilities Commission*  
*NCEP Perspectives:*
- *Alex Whitaker*, Office of Governor John Hickenlooper, Colorado
  - *Representative Jeff Morris*, Washington House of Representatives
  - *John Chatburn*, Idaho Governor's Office of Energy and Mineral Resources
  - *Cindy Schonhaut*, Colorado Office of Consumer Counsel
- 1:30 pm      **Wrap Up & Next Steps**
- Workshop Summary
  - Questions Unanswered
  - Research Needed
  - Next Steps
- 2:00 pm      **Adjourn**