

DOCKETED

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RETI 2.0 Western Outreach Project: Las Vegas Workshop



September 1, 2016

10:00 a.m. – 4:00 p.m. PDT

Nevada Gaming Control Board

Room 2450

555 East Washington Avenue,

Las Vegas, NV 89101

Webinar Connection:

<http://westgov.adobeconnect.com/wieb2016/>

Phone: 888-407-5039

Passcode: 39296759

Website for presentations forthcoming:

<http://westernenergyboard.org/>

<http://www.energy.ca.gov/reti/reti2/documents/>

Submit comments to focus questions by Sept. 8:

tcarr@westernenergyboard.org



Panel #1

- **10:00 – 12:00 p.m. Panel #1 – Setting the Stage: The Future of Renewable Energy Markets in the West**
- Introduction
 - Brian Turner, RETI 2.0 – *RETI 2.0 background and CA renewable demand*
- Panelists:
 - David Hurlbut, National Renewable Energy Laboratory
 - Angela Dykema, Nevada Governor's Energy Office
 - Josh Norquist, Ormat Technologies, Inc.
 - Michael Wong, E.ON Climate & Renewables North America, LLC



Panel #1 Focus Questions

- **Renewable demand –**
 - *How much additional renewable energy development in the west is likely? To serve state RPS mandates? To meet Clean Power Plan compliance? Driven by economics like declining costs, customer preferences and tax credits? To meet other policy objectives?*
- **Renewable supply –**
 - *Where, and in which technologies, is development of renewable energy most likely to occur in the next 15 years? Where are renewable developers pursuing projects? Where (and in which technologies) are utilities most interested in procurement? What role are consumer preferences playing in affecting supply?*
- **Patterns of trade –**
 - *How will the future mix of renewable energy change the historic pattern of daily or seasonal power flows in the Western Interconnection? What load areas in the West could potentially import surplus generation from California on a daily or seasonal basis?*



Panel #2

- **1:00 – 2:20 p.m. Panel #2 – Today’s Grid: Existing Capacity, Constraints, and Current Trends**
- Panelists:
 - H. Patrick Harwood, Western Area Power Administration
 - Ron Belval, Tucson Electric Power
 - Walter Spansel, NV Energy
 - James Gazewood, Bureau of Land Management



Panel #2 Focus Questions

- *Existing transmission capacity and known constraints –*
 - *What is the existing transmission capacity to deliver power from high-quality renewable energy areas to California load centers? Where are there known constraints that limit additional deliveries? What is the capacity or constraints to delivering California surplus renewables to potential out-of-state markets? What are the constraints to delivering out-of-state renewables to other load centers when California is in surplus? How is the deployment of advanced bulk electric system sensing and control technology expected to affect the need for transmission?*
- *Generation fleet trends –*
 - *How will the current or potential coal plant closures affect the availability of transmission capacity for renewables to California? Will changes to the utilization of northwest hydro resources change the availability of transmission for renewable imports or exports to California? Are there other grid-scale storage projects that could materially impact the availability or need for transmission to deliver renewable energy to or from California?*



Panel #2 Focus Questions continued

- *Institutional changes –*
 - *How would increased use of “energy-only” (as opposed to fully-deliverable) renewables procurement affect transmission availability and need, and how likely are utilities to be interested in out-of-state energy-only procurement? How could the use of dynamic scheduling and other transmission contracting affect deliverability of renewables to California? How could the expansion of Energy Imbalance Market affect transmission availability? What other institutional reforms or balancing area agreements could improve utilization of existing capacity? Where are non-transmission alternatives processes in place and how will that affect the need for transmission?*



Panel #3

- **2:20 – 3:50 p.m. Panel #3 – Future Expansion: Examining New Transmission to Access High-Quality Renewables**
- *Project Overviews:*
 - Bill Hosie, Duke American Transmission Company (Zypher project)
 - Doug Fant, Southwestern Power Group (SunZia project)
 - Keith Sparks, Clean Line Energy Partners (Centennial West and Western Spirit projects)
 - Doug Patterson, Black Forest Partners (Southline project)
 - John Jontry, San Diego Gas & Electric (AC to DC Conversion project)
- *Panelists:*
 - Rebecca Wagner, Wagner Strategies
 - Ian Dowdy, Sonoran Institute
- 3:50 – 4:00 Public Comments



Panel #3 Focus Questions

- *Current expansion proposals –*
 - *Is the RETI 2.0 list of regional transmission project proposals complete? Is the WECC Common Case Transmission Assumptions accurate? How could the transmission cost assumptions for out-of-state renewable energy in the CPUC RPS Calculator be improved? Which proposals have received the most interest from utilities in other states and why? What potential expansion scenarios do you think are most likely? Where have proposals not been made, but should? Where would other kinds of line upgrades or new technology obviate the need for expansion?*
- *Costs and benefits of transmission expansion options –*
 - *What are the pros and cons of different configurations of transmission expansion? How would different expansion options affect deliverability directly to California? Indirect (commercial) deliverability to California? Exports from California? Ability to defer imports during excess supply? Which configuration of potential transmission expansion options is most likely to support efficient dispatch and utilization of renewable diversity across the west? How should advanced transmission technologies and non-wires alternatives be considered in evaluating expansion options?*



Panel #3 Focus Questions continued

- *Next steps –*
 - *What additional planning initiatives could California pursue, alone or with federal or western state partners, to facilitate the more efficient utilization of existing transmission capacity for accessing renewable energy or the most efficient expansion of any new needed transmission capacity?*



- Lunch Break
- 12:05 to 1:05 PDT