



**Quadrennial Energy Review
Second Installment
Electricity: Generation to End Use
Stakeholder Meeting #6: Los Angeles, CA
May 10, 2016
Tom Bradley Tower Room
Los Angeles City Hall
200 North Spring Street
Los Angeles, CA**



Los Angeles is the fifth of six regional QER public input meetings, all of which are based on wholesale market footprints as a convenient approach to capturing and assisting the Interagency QER Task Force in understanding the nation's regional electricity diversity, which is also characterized by differing resource mixes, state policies, and a host of other factors. The Los Angeles meeting covers the footprint of the state of California, the grid operations, and flow of energy, much of which is managed by the California Independent System Operator.

8:30 AM

Doors Open

9:30 – 10:30 AM

Opening Remarks by Deputy Secretary of Energy Elizabeth Sherwood-Randall, Deputy Mayor for Los Angeles City Services Barbara Romero, and USDA Rural Development Rural Business-Cooperative Service Administrator Sam Ridders

10:30 – 11:45 AM

Panel 1

Bulk Power Generation and Transmission: How Can We Plan, Build, and Operate the Appropriate Amount for Future Needs?

The first panel will speak to the many responsibilities and challenges involved in maintenance and operation of the bulk power system of generation and transmission: The system's role in reliability, including how to maintain reliability with an evolving resource mix; cyber- and physical security; the structure of centrally organized and bilateral wholesale electricity markets; the planning, financing, cost-allocation and state and federal siting processes needed to build new generation and transmission; resource diversity; policies affecting how much, if, and when to build, including reducing greenhouse gas emissions and other environmental impacts; multiple jurisdictions and overlapping regulations; changing load growth patterns; innovation and new technologies; increasing interdependencies; and many more.

- Dr. Keith Casey, Vice President of Market and Infrastructure Development, California Independent System Operator (CAISO)
- Jan Smutny-Jones, Executive Director, Independent Energy Producers Association
- Marcie Edwards, General Manager, Los Angeles Department of Water and Power
- Rodney Cobos, Assistant Business Manager, Southern California Pipe Trades
- Mike Florio, Commissioner, California Public Utilities Commission

11:45 – 12:45 PM

Lunch – on your own

12:45 – 2:00 PM

Panel 2

Electricity Distribution and End Use: How Do We Manage Challenges and Opportunities?

The second panel will consider the implications of a broad array of existing and emerging technologies, as well as new uses on the distribution grid and grid-edge, which together provide both technical and policy challenges and opportunities to the delivery of energy services to customers. Among many others, some of these factors affecting the developing distribution grid include: energy efficiency; demand response; distributed generation; digital communications, sensors and control systems; “smart” meters; greater customer engagement; storage; microgrids; electric vehicles. Additionally, seventeen states and the District of Columbia have adopted some form of electric retail choice programs allowing end-use customers to buy electricity from competitive retail suppliers.

Separately, these factors can be challenging for grid operators. Taken together, these evolving characteristics will tend to have impacts which must figure into the planning, operations, reliability, resiliency, and economics of the distribution grid. These new sets of circumstances raise important questions on infrastructure financing and development, affordability, rate design, appropriate valuation, as well as numerous jurisdictional and regulatory issues. Regardless of the challenges these changes present to industry planners and government regulators, they also can create opportunities for customers to enjoy the benefits of new and improved services and with carbon reduction and other environmental improvements, with services sometimes provided by new market entrants.

- Susan Kennedy, Founder and Chief Executive Officer, Advanced Microgrid Solutions
- Michelle Bertolino, Electric Utility Director, City of Roseville, and President, California Municipal Utilities Association (CMUA)
- Lars Lee-Potreck, Vice President, Product Management and Product Marketing, Energy Management, Smart Grid Solutions & Services, Siemens AG
- Ronald O. (R.O.) Nichols, Senior Vice President for Regulatory Affairs and Nuclear, Southern California Edison
- Michael Yaki, Senior Counsel for Market Expansion and Policy, Renovate America
- David Geier, Vice President, Electric Transmission & System Engineering, San Diego Gas & Electric

2:00 – 3:15 PM

Panel 3

Generating and Delivering Electricity to Meet GHG Targets

The electricity sector has been shaped by Federal and State policy since Samuel Insull and others noted in the late 1800's the advantages of the economies of scale that "natural monopolies" of vertically integrated electricity companies could provide to customers. Since then, Federal and State regulation of the electric power industry have been predicated on the goals of protecting the public interest, encouraging the financial health of the actors in the system, diminishing negative

externalities, and importantly, ensuring that electricity service is reliable, safe and affordable. The regulatory environment for the electric power sector is changing rapidly in the United States in large part due to the imperative to reduce greenhouse gas (GHG) emissions that contribute to global warming. States have adopted a range of policies to incentivize a greater percentage of low-carbon generation in the electricity sector, including renewable portfolio standards, voluntary renewable energy goals, and energy efficiency resource standards or goals. Some states have also adopted GHG emissions reductions goals, including California with its AB 32 legislation, and the Northeast and Mid-Atlantic States participating in the Regional Greenhouse Gas Initiative (RGGI). At the Federal level, the President's Climate Action Plan includes a range of GHG reductions, including the Clean Power Plan rule for the electricity sector. Fast-changing technology improvements, such as the shale gas revolution and in renewables generation, are also contributing GHG reductions in the electricity sector.

The electric power industry--from consumers to generators to distribution and transmission entities to those who finance activities across the spectrum of activities--are all responding to these factors. Balancing those imperatives is the focus of this panel. How is the generation mix evolving in response to these policies? How can state electricity resource and reliability planning processes incorporate GHG reduction strategies, and vice versa? How must grid operations and planning change to meet goals? Are there new needs for financing of energy projects? What changes may be required by the entities providing essential services? How should new market entrants be integrated into the system, considering operational, regulatory and market concerns? How does long-range planning affect decisions in the short term?

- Arlen Orchard, Chief Executive Officer and General Manager, Sacramento Municipal Utility District (SMUD)
- Melissa Lavinson, Vice President, Federal Affairs and Policy and Chief Sustainability Officer, Pacific Gas and Electric (PG&E)
- Jana Ganion, Energy Director, Blue Lake Rancheria
- Sonia Aggarwal, Director of Strategy, Energy Innovation

3:15 PM

Public Comment Period (“Open Mic”)

Each member of the audience who chooses to speak will be permitted five minutes to speak and offer written materials for inclusion in the QER record. Participants will be asked to sign up to speak when they check in.