

PUBLIC UTILITIES COMMISSION OF NEVADA
MEMORANDUM

DATE: July 11, 2016

TO: The Commission
Stephanie Mullen, Executive Director
Via: Anne-Marie Cuneo, DRO *AMC*
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SUBJECT: Report on: Chair Duties for the NARUC Staff Subcommittee on Energy Resources and the Environment; and activities related to the NARUC Task Force on Environmental Regulation and Generation; from January 1, 2016, through July 1, 2016.

NARUC Staff Subcommittee on Energy Resources and the Environment:

The Energy Resources and the Environment (ERE) Committee and Staff Subcommittee serve as a venue for State regulators to discuss ways to provide utility customers with environmentally sustainable and affordable energy services. Particularly, ERE focuses on energy efficiency, environmental protection, renewable and distributed resources, consumer protection, low-income weatherization and assistance, and public interest research and development. As Chair of the ERE Staff Subcommittee, I am responsible for developing the Subcommittee's annual mission statement, and for supporting the ERE Committee in advancing their topics of priority, which currently include the U.S. Environmental Protection Agency (EPA) regulations for new and existing electric generating units, continuing the dialogue among various stakeholders on different rate design mechanisms and cost/benefit evaluation methodologies that can be used to value distributed generation for the purpose of creating advanced net metered policies, and making the ERE Committee more relatable to other National Association of Regulatory Utility Commissioners (NARUC) committees/subcommittees and their issues. To further both the Subcommittee mission statement and Committee priority topics, I identify topics and relevant speakers for the purpose of building multiple in-person panels which are held during NARUC's three yearly meetings.

Specifically for the NARUC Winter Meeting that was held in February 2016, I developed the following panel sessions:

- Exploring ways to properly include distributed generation in rate design;
- Discussing 'best practices' for developing a community/shared solar program;
- Exploring energy storage technologies;
- Learning how to utilize 'data optimization' to more accurately measure energy efficiency savings and integrate renewable energy in real-time;

- Listening to participants from the 2015 United Nations Climate Change Conference discuss its potential implications for future utility regulation;
- Discussing the evolution of the distribution system and how regulators can proactively undertake prudent planning and investment for increased DG adoption; and
- Discussing methods for the efficient siting of gas pipelines in the wake of increased demand due to the EPA's 111(d) plan.

For the upcoming NARUC Summer Meeting to be held in July 2016, I developed the following panel sessions all of which are relevant to the work done here at the PUCN:

- Community Solar lessons learned, including how to tailor programs to include low- and mid-income customers;
- Using Big Data to provide more accurate Energy Efficiency Measurement & Verification;
- Exploring whether the Clean Power Plan or market forces (low natural gas pricing and dropping costs of renewable energy) are responsible for driving carbon emissions down;
- A discussion of the form, function and future for net energy metering and alternative policies;
- Assessing the options for overcoming cost barriers to install energy efficiency measures and renewable energy technology; and
- A TED talk aimed at dissecting an all-electric world, with speakers exploring the positive and negative implications of a fully electrified economy, including speakers from GM, the Manhattan Institutes, EPRI and co-author of *All Electric America: A Climate Solution and the Hopeful Future*.

As the Chair of the Subcommittee I am also the liaison between the ERE Commissioners and outside agencies, including think tanks, national laboratories, utilities and other governmental regulators, for the purpose of disseminating timely information and facilitating Commission dialogue on innovative ways to provide utility customers with environmentally-sustainable energy services. To do so, I coordinate educational presentations to be held during the Committee's monthly teleconference meetings and the Subcommittee's bi-monthly teleconference meetings. Specifically, since the NARUC Winter meeting in February 2016, I have coordinated featured presentations from the following agencies:

- Mark Lowry from Pacific Economics Group Research and Tim Woolf from Synapse Energy Economics presented their report on Performance-Based Regulation in a High DER Future. The report explores key elements and variations of comprehensive, performance-based regulation and its advantages and disadvantages from the perspectives of utilities and customers—all in the context of a potential future with a high reliance on energy efficiency, peak load management, distributed generation and storage;
- Ryan Wiser from Lawrence Berkeley National Laboratory (Berkeley Lab) discussed how renewable portfolio standard policies have spurred substantial growth in renewable electricity generation over the past decade, but face an uncertain future. This presentation reported on recent and ongoing research at Berkeley Lab, as well as the National Renewable Energy Laboratory exploration into the multi-faceted set of impacts, costs, and benefits from state RPS programs to-date;

- David Farnsworth from Great River Energy gave a brief presentation on his company's DryFining technology, which can help states meet their energy and environmental goals by 1) retaining reliable base-load generation sources, 2) reducing their carbon footprint and greatly reduce emissions of regulated pollutants, and 3) helping to keep consumers' electricity rates affordable;
- Danny Waggoner from the Public Utility Commission Program was one of the moderators in the negotiations that led to a landmark joint position between utilities and solar companies on transitioning away from net metering in New York State. He discussed how the Solar Progress Partnership came about, what held it together, and the potential for replicating it in other states;
- (Subcommittee) The Energy Storage Technology Advancement Partnership (ESTAP) is a federal/state funding and information sharing project, managed by Clean Energy States Alliance (CESA), that aims to accelerate the deployment of electrical energy storage technologies in the U.S. ESTAP has brokered joint federal/state demonstration projects in several states, including a microgrid now under development in Eugene, Oregon that will use batteries and solar PV to provide grid services as well as supplying a utility operations center, a communications facility and a water pumping station with backup power in the event of a grid outage. Todd Olinsky-Paul discussed ESTAP's recent storage projects as well as CESA's work to advance state energy storage policy; and
- (Subcommittee) Dr. Eric Woychik from Strategy Integration, LLC discussed the steps to integrate and optimize Distributed Energy Resources (DERs). Dr. Woychik also discussed using distribution marginal costs to compare the potential outcomes of integrating customized, customer-specific DER packages at distribution feeder locations, and how to target customers and locations to maximize value.

NARUC Task Force on Environmental Regulation and Generation:

The Task Force on Environmental Regulation and Generation (TFERG) was created to assist NARUC's efforts in responding to, and educating members about, the EPA's proposed regulations.

I did not participate in TFERG meetings during the first half of 2016.