



GOVERNOR'S OFFICE OF ENERGY

**MINUTES for the
NEW ENERGY INDUSTRY TASK FORCE
TECHNICAL ADVISORY COMMITTEE on DISTRIBUTED GENERATION AND
STORAGE and TECHNICAL ADVISORY COMMITTEE on GRID MODERNIZATION**

JULY 19, 2016

The TACs for Grid Modernization and for DG and Storage held a public meeting on July 19, 2016 beginning at 9:00 a.m. at the following locations:

CARSON CITY
Grant Sawyer Building
401 S. Carson Street, Room 4401
Carson City, Nevada 89701

LAS VEGAS
Grant Sawyer State Office Building
555 East Washington, Suite 4401
Las Vegas, Nevada 89101

1. Call to Order and Roll Call.

Vice Chair Tuma and Chair Lacy called the joint TAC meeting to order and a quorum was established for both TACs.

Distributed Generation and Storage

TAC Members Present

Jeremy Susac
Bo Balzar
Matt Tuma
Marco Velotta
Dale Stransky
Jack McGinley
Sarah Van Cleve
Jason Geddes
Jessica Scott
Tom Ewing

TAC Members Absent

Adam Kramer
Bobby Hollis

Grid Modernization

TAC Members Present

Starla Lacey
Rebecca Wagner
John Candelaria

TAC Members Absent

Chris Tomchuck
Hank James

2. Review and Approval of Agenda

Chair Lacy, Mr. Tuma, and Ms. Wagner discussed moving up item number 8 to go directly after Public Comment.

3. Public comments and discussion.

Ms. Louise Halton introduced herself as a small business owner of a distributed generation installation company. She voiced support for crating policies which support the development of distributed resources.

Mr. Les Laseric identified himself as a business owner in support of distributed generation. He discussed problems with implementing building codes in the State.

Ms. Elizabeth Becker introduced herself as a supporter of the environment. She expressed the need to move to renewable energy and support policies that encourage distributed generation. She believes that net metering has been a good policy and would like to see the industry restored.

Mr. Louis Gamboa introduced himself as a Las Vegas resident in support of net metering. He believes that rooftop solar is good for the state and should be encouraged.

Mr. Tom Dudas introduced himself as a supporter of distributed generation. He would like to see the state support distributed generation.

Mr. Kevin McGee introduced himself as a business owner in Reno. He supports rooftop solar and does not believe that residential net metering customers should not be a separate rate class.

8. Presentation – California’s Energy Storage Mandate

This item was taken out of order to accommodate schedules.

Ms. Carla Peterman introduced herself as a Commissioner for the California Public Utilities Commission. She provided an overview of the enabling legislation in California which studied the integration of energy storage and determine if procurement targets are appropriate. Energy storage solutions were identified for the goals of grid optimization, integration of renewables, and/or the reduction of carbon emissions. The study required any procurement targets to be cost effective. The California PUC determined that procurement targets were appropriate and cost effective. They put four target dates for the integration of energy storage in transmission, distribution, and the customer side. Commissioner Peterman discussed the technical aspects of how cost effective measures allowed deferment of targets. The decision was adopted in 2013 and deployment has been going well. Mr. McGinley, Mr. Tuma, Mr. Stransky, and Ms. Van Cleve discussed cost effective

provisions and how deployment/deferral has been approached. TAC members discussed some of the technical aspects of deployment.

4. Presentation (via Teleconference) – Advanced Rail Energy Solutions (ARES) Nevada Rail Storage Project

Mr. James Kelly, CEO of ARES, introduced himself. He provided an overview of how the project uses gravity and rail to store energy. Mr. Kelly gave an overview of the ARES team and the history. He discussed the project to provide 50MW of ancillary service to the Cal ISO through the Valley Electric Association. Mr. Kelly provided an overview of the project components and why Pahrump was selected as the project site. He concluded the presentation with environmental impact measures and employment statistics.

5. Presentation – Public Utility Commission – State of Nevada, Storage Docket Update

Mr. Candelaria provided an overview of the PUCN's Storage Investigation Docket 16-01013. He reviewed the written materials and discussed the comments workshops have received. Their workshop discussed the Smith Valley project and NV Energy's efforts to integrate storage. PUCN Commissioner Noble determined that direction for procurement targets would need to come from the Legislature. They are currently setting up a process to address interconnection issues and address any concerns with energy storage. Mr. Candelaria and TAC members discussed how the process will move forward and ways to incorporate stakeholder participation. Discussion included ways to reprogram Renewable Generation funding to support storage deployment.

7. Presentation – Energy Storage Technology and Economics, Pacific Northwest National Lab

This item was taken out of order to accommodate schedules.

Mr. Patrick Balducci with the Pacific Northwest National Lab introduced himself. He provided an overview of the key questions when evaluating energy storage applications and value streams. He went over key concepts and basic technologies. Mr. Balducci provided details on benefits for peak shaving, energy arbitrage, system flexibility, and outage mitigation. He provided an overview of how to estimate values for these benefits and specific examples of energy storage utilization. He concluded his presentation with how energy storage should be integrated into resource planning and how to maximize the effectiveness of storage options. TAC members and Mr. Balducci discussed some of the technical aspects of storage integration and resource planning.

6. Presentation – Storage Procurement, Green Mountain Power

Mr. Josh Castonguay introduced himself from Green Mountain Power, based in Vermont. Mr. Castonguay gave an overview of what the utility's storage goals and procurement targets. They have been looking at ways to modernize their grid and incorporate renewable energy. Storage has helped address concerns with increasing penetration of distributed resources. Mr. Castonguay and TAC members discussed technical details of the equipment and technology being utilized in Vermont.

7. Presentation – Energy Storage Technology and Economics, Pacific Northwest National Lab

This item was moved to earlier in the meeting.

8. Presentation – California’s Energy Storage Mandate

This item was moved to earlier in the meeting.

9. BREAK – this concluded the joint section of the meeting and members of the Grid Modernization TAC were given the option to leave.

10. Presentation – Green Building Standards, Southern Nevada Home Builders Association

Mr. Matt Walker introduced himself from the Southern Nevada Home Builders Association. He provided an overview of the challenges with prescriptive green building programs. Mr. Walker discussed the International Energy Conservation Codes and the mismatch of prescriptive programs with some regions. They would like to align regulations with the cost effective implementation of green building standards. The SNHBA believes that adopting three paths to IECC compliance (prescriptive, restricted performance, and pure performance) within the State will support the development of distributed generation in new construction. Mr. Walker gave specific examples of how this could be implemented and how it has been done in other states. Mr. Velotta and Mr. Walker discussed how building officials would react to this proposal and alternative ways to get this rule change accomplished. Mr. Walker and TAC members discussed the technical, regulatory, and enforcement needs to implement these goals.

11. Presentation – Tax Credits in Nevada

Ms. Susan Fisher and Mr. Joshua Hicks were introduced to discuss utilizing tax credits and abatements to incentivize economic development in the Nevada. Overviews were given on the mechanics of transferable tax credits and how they could be utilized to support distributed generation and rooftop solar. They identified that any fiscal impact determination should be based on the PUCN’s net metering decision. TAC members and Mr. Hicks discussed some of the challenges with implementing this idea with a separation between determining rates and tax burden of the utility.

12. Review and discussion of proposals and concepts for legislative amendments to NRS Chapter 704 in order to support and incentivize net metering projects on and after January 1, 2016; and proposals and concepts for legislation to support and incentivize the use of energy storage technology.

Mr. Tuma began by giving an overview of timing for the remainder of meetings for the TAC and Task Force.

Ms. Van Cleve provided an overview of her proposal for establishing energy storage procurement targets for the utility. She discussed the benefits energy storage provides in a cost effective way. TAC members went through individually to discuss questions and/or concerns with establishing storage procurement targets. TAC members also discussed cost effectiveness, the role of storage with increasing levels of renewable energy, and the role rates play to increase the viability of storage. Ms. Van Cleve moved that her proposals be approved and it was seconded by Ms. Scott. The motion did not pass with a majority of voting members present, 5 yes and 5 no. Yes – Ms. Van Cleve, Ms. Scott, Chairman Susac, Dr. Geddes, and Mr. Ewing; No – Mr. Stransky, Mr. McGinley, Mr. Velotta, Mr. Balzar, and Mr. Tuma.

Mr. Velotta provided an overview of his motion to move to determining a value of solar and make language more clearly defined for net metering in the future. He provided a review of his written proposal but did not move forward for a vote at this meeting. TAC members discussed some of the details of the proposal with Mr. Velotta.

Ms. Scott provided an overview of her proposal to institute a minimum bill and continue net metering at retail rates. TAC members discussed the technical aspects of minimum bills and where they have been implemented in other states to support a viable distributed solar market.

TAC members discussed procedure moving forward with proposals.

13. Set time and date of future meeting.

Mr. Tuma will send out a poll to determine timing for the August and September meetings.

14. Public comments and discussion.

Mr. Tom Polikalas of the Southwest Energy Efficiency Project offered his support for flexibility when implementing building codes to encourage distributed generation. He also offered support for the decoupling as an option for Nevada.

15. Adjournment.

The meeting was adjourned at 3:40 p.m.