STATE OF NEVADA

BRIAN SANDOVAL Governor ANGIE DYKEMA Director

STEVE HENRICKSEN Deputy Director

755 North Roop Street, Suite 202 Carson City, NV 89701 Office: (775) 687-1850 Fax: (775) 687-1869



GOVERNOR'S OFFICE OF ENERGY

Minutes for the NEW ENERGY INDUSTRY TASK FORCE TECHNICAL ADVISORY COMMITTEE on DISTRIBUTED GENERATION AND STORAGE

The TAC on DG and Storage held a public meeting on May 18, 2016 beginning at 9:00 AM at the following locations:

LAS VEGAS

Public Utilities Commission 9075 W. Diablo Drive, Conference Room B Las Vegas, Nevada 89101

CARSON CITY

Public Utilities Commission 1150 E. William Street, Conference Room B Carson City, Nevada 89701

AGENDA

1. Call to Order and Roll Call.

Chairman Susac called the meeting to order. Roll Call was taken and it was determined a quorum of the Distributed Generation and Storage TAC was present.

TAC Members Present

TAC Members Absent Adam Kramer

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

2. Public comments and discussion.

Ms. Denise Dunn introduced herself as a net metering customer. She would like to see the term of any grandfathering agreement to be longer than 20 years.

Ms. Monica Pratt voiced her support of a stakeholder process to determine net metering rates in the future.

Mr. Richard Burke introduced himself as a net metering customer. He believes that net metering ensures better energy security for Nevada.

Mr. Blake Wenn thanked the TAC for the discussions of the group and consideration of a grandfathering fix.

Mr. Shuman Moore introduced himself as a net metering customer since 2006. He discussed the benefits residential rooftop solar provides communities and would like to see a grandfathering proposal.

Mr. Travis Miller identified himself from Great Basin Solar Coalition. He expressed support for grandfathering NEM customers with a term of 25 years. He said most of their customers who applied are still supportive of installing under the previous NEM rules as long as their applications do not expire.

Mr. Randy Reed introduced himself as an engineer. He discussed the innovative environment in Nevada and voiced support for net metering.

3. Review Minutes from previous meeting

A motion was made to accept the draft minutes and seconded. The minutes were approved.

4. Grandfathering

Chairman Susac and Mr. McGinley provided some introductory comments for this issue and asked Mr. Jesse Murray, Director of Renewable Energy Programs for NV Energy, to go over the specifics of the net metering customers and applicants.

Mr. Jesse Murray introduced himself and discussed his role managing the net metering queue. He discussed that as of May 16, 2016 they have 208.9 MW of installed rooftop solar and 58.3 MW of capacity in the pipeline for projects which have applied. He gave details for what makes up the active pipeline. Mr. Murray discussed the desire to reach at least 235 MW of installed capacity and identified that at least 216 MW has a high confidence to be installed. With additional pipeline capacity, Mr. Murray believes that there should not be a problem with reaching at least 235 MW of installed capacity with the existing pipeline even when considering attrition. He discussed some of the policy considerations and the process for setting up the net metering queue. Without a policy change, most projects will expire by 12/31/16. He discussed the management problems which would occur if a policy change used a MW threshold for grandfathering as opposed to a date of application. Utilizing an application date for grandfathering would eliminate an overly lengthy queue process and make the program easier to implement and understand for customers. Clarifying discussions were had with Mr. Hollis, Mr. Balzar, Mr. Tuma, Mr. Stransky, Mr. Velotta, and Chairman Susac.

Chairman Susac took item #9 out of order and put it at this point of the agenda.

Mr. Murray provided an overview and history of the Renewable Generations Program. The program was set up to incentivize 250 MW of distributed solar but did not have precise targets for wind and hydro projects. He provided an overview of the declining rate of incentives from 2004 to now and current funding statistics. Funding for the renewable energy incentives comes from fees paid by all ratepayers. Conservative estimates show a surplus of \$26.5 million in the Solar Generations program and \$11.7 in the Wind and Hydro Generations programs. This remaining funding is expected once all commitments and goals for the programs are met. He gave an overview of potential ideas to reallocate the remaining funding for expanding solar to underserved customer sectors, support emerging technology development, increasing incentive rates, or merging the funding into one pool. Mr. McGinley added that this funding pool offers the opportunity to invest in battery pilot programs, emerging geothermal technologies, or other opportunities to modernize the state's energy infrastructure. Clarifying discussions were had with Mr. Hollis, Mr. Balzar, Mr. Tuma, Mr. Stransky, Mr. Velotta, Dr. Geddes, and Chairman Susac.

Chairman Susac discussed the desire to break up the discussion on a grandfathering proposal into a few different parts and vote on each part individually.

Chairman Susac identified the timeframe for grandfathering and offered an initial option of 20 years. Mr. Stransky identified that utility projects usually use 20 or 25 year agreements. Discussion involved length of warrantees for solar panels, other net metering infrastructure, and the payback period. Most systems have a payback period of less than 20 years but there is a value to the solar system much longer than that. Chairman Susac changed his recommendation to 25 years with the caveat that NV Energy should provide the economic impact for the Task Force. He identified that we should report to the Task Force with the reasoning for either the 20 or 25 year time frame. Dr. Geddes, Mr. McGinley, and Mr. Hollis discussed existing power purchase agreements for large scale solar. Mr. McGinley identified problems with a 25 year timeframe and thought 20 years would be better. A motion was made for 25 years and seconded. The motion passed.

Chairman Susac identified whether the grandfathering agreement would run with the home or customer. Discussion indicated support for both options. Chairman Susac offered a motion to have the agreement to run with the home and it was seconded. The motion passed. Mr. Velotta and Mr. Balzar offered a motion to have the agreement transferred to the customer as well as the home. The motion seconded. Concerns were raised that this would be difficult to manage in addition to running with the home. The motion did not pass.

Chairman Susac identified the size of installations to be grandfathered and offered that customers be allowed to reduce the size of solar participation but not increase the size of installations. Mr. Stransky, Dr. Geddes, Mr. Velotta and Mr. Hollis discussed the need to allow for maintenance of existing solar systems which might change capacity of systems slightly but not add significantly. Mr. McGinley, Mr. Hollis, and Chairman Susac identified that changes due to maintenance would not be noticeable by the utility. Discussion focused on the existing ability for net metering customers to maintain their systems. Chairman Susac offered a motion to grandfather the size of system outlined in the approve NEM application or smaller and it was seconded. The motion passed.

Chairman Susac discussed that using an application date of 12/31/15 would probably be easiest to implement and asked for comments on that idea. Ms. Scott identified that there is a lot of uncertainty with applications in the pipeline right now and would like to see at least 235 MW of installed capacity. Discussion identified support for a 12/31/15 application submission date and discussion involved clarification of what constituted a complete application. A motion was made and seconded to use the 12/31/15 application date. The motion passed.

Ms. Van Cleve identified that some jurisdictions have nullified net metering agreements when storage was installed. Discussion involved if the installation of solar would impact net metering agreements. Mr. McGinley suggested tabling the concept until it could be understood fully and thought that a docket at the PUCN was addressing the issue. Mr. Hollis recommended that this issue be considered as a separate recommendation from grandfathering.

5. Review of Committee Proposals

Mr. Tuma recommended that this TAC utilize the next few months remaining in the schedule to thoroughly review additional proposals for polices to support the development of distributed solar and storage. He offered a motion to put forward a broad placeholder for additional distributed generation and storage policy changes. The motion was seconded and passed.

6. **Overview of distributed generation benefits and costs identified by other** States Ms. Ann Marie Cuneo introduced herself as the Director of Regulatory Operations for the Public Utilities Commission of Nevada. She explained that no other state has come up with a determination for the value of distributed generation and that the PUCN's open docket will be the first attempt to do so. Ms. Cuneo gave overview of distributed solar values in Minnesota, Ohio, Oregon, Texas, Hawaii, Montana, Florida, South Carolina, and Louisiana. Discussion involved the New York compromise on net metering but they have not come up with an actual value for distributed solar yet.

7. Building codes and the use of renewable energy as a compliance tool

Mr. Nat Hodgson and Mr. Matt Walker introduced themselves from the Southern Nevada Home Builders Association. Mr. Walker gave an overview of challenges with prescriptive green building programs. He identified the goals of assigning value to energy efficiency improvements in buildings. He discussed the International Energy Conservation Code and the need to implement flexibility and market-based efficiency need. They identified that many parts of this code relate to regions which have many different climates. They would like to see IECC compliance through an energy rating index, beating performance models, or through the traditional/prescriptive approach. Utilizing multiple paths to IECC compliance could lower the cost of green building construction in Nevada, encourage distributed generation, and provide greater incentives for energy efficiency. Mr. Walker also identified the benefits provided by Energy Efficient Mortgages.

Mr. McGinley and Mr. Walker discussed how the efficiency in code provided good benchmarks but that introducing flexibility will allow builders and homeowners to optimize construction. Mr. Hodgson identified that the SNHBA is also working with agencies statewide but different climate zones could get compliance from different areas.

Mr. Velotta and Mr. Walker discussed how local governments would implement any of these building code changes.

8. Storage benefits and policies

Ms. Van Cleve introduced her presentation by identifying how energy storage supports the Task Force's goals. She gave an overview of energy storage uses and discussed opportunities to install in residential, commercial buildings, and at a utility scale. Ms. Van Cleve identified the improving battery cell energy density trend and the global battery market. She discussed Tesla's Gigafatory in Nevada and the expected production. Ms. Van Cleve also identified the barriers to storage deployment and the need to implement storage to improve and learn about deployment challenges. She identified that policies to catalyzed storage deployment should: include storage with utility planning, procurement, and interconnection; establish storage procurement targets; and include a cost-effectiveness provision to defer storage procurement if it does not benefit ratepayers.

9. Overview of Renewable Generations Program

This item was moved by Chairman Susac and covered during item #4.

10. Set time and date of next meeting.

Mr. Tuma will send out a poll to schedule the next meeting.

11. Public comments and discussion.

Ms. Marlene Adrien offered that she would like to see grandfathering to not have a timeframe and should be indefinite for customers.

Mr. Mark Polk identified himself as an employee of SolarCity who focuses on rate issues. He thanked the TAC for the grandfathering proposal and discussed the value that distributed solar provides to communities. He identified that many studies have been completed which look at the full suite of benefits provided by DG and that they will be producing a final study they have been working on with NRDC.

Ms. Denise Dunn thanked the TAC for its grandfathering proposal and appreciated the presentations at the day's meeting.

Mr. Tom Polikalas provided his support of using building codes to support energy efficient building. He identified that there has been some analysis on the positive job creation numbers when these changes are made.

12. Adjournment.

The meeting was adjourned at 2:13 p.m.