

MINUTES

New Energy Industry Task Force Technical Advisory Committee on Clean Energy Source

June 6, 2016

The Technical Advisory Committee (TAC) held a public meeting on June 6, 2016
at the following locations:

Legislative Building
401 S. Carson Street, Room 2134
Carson City, NV 89701

Videoconference
Grant Sawyer State Building
555 East Washington, Suite 4412
Las Vegas, NV 89101

1. Call to order and Roll Call: Chairman Kyle Davis called the meeting to order at 9:00 am, calling roll and confirming a quorum.

Technical Advisory Members Present

Anne-Marie Cuneo, Member
Bob Johnston, Member
David Emme, Member
Dennis Laybourn, Member
Jennifer Taylor, Vice Chair
Joe Johnson, Member
Josh Nordquist, Member
Kyle Davis, Chair
Lisa Briggs, Member
Tom Polikalas, Member

Technical Advisory Members Absent

Starla Lacey, Member
Kathryn Arbeit, Member

2. Public comments and discussion: Zoe Berkery, Manager of Federal Policy for the Business Council for Sustainable Energy, stated that BCSE is a national organization and has members with facilities, projects and jobs in Nevada. BCSE strongly supports forward-looking state policies and programs that create pathways for increased deployment of clean energy technologies and that help overcome any financial barriers to clean energy deployment. BCSE supports a Green Bank structure that works for Nevada as well as encourages Nevada to continue compliance and planning under the Environmental Protection Agency's Clean Power Plan.

BCSE would like to offer the following recommendations for Nevada's state plan:

- Nevada should adopt a "trade ready" approach in either a mass-based or rate-based plan, and should consider market-based elements to ensure cost-effective compliance.

- The plan should allow the full portfolio of clean energy technologies and resources to be utilized for compliance planning. This includes rate-payer and non-rate payer programs and actions, including third party delivered energy efficiency, whether implemented in mass-based complementary programs or integrated rate-based compliance programs.
- Further, if the plan allocates or auctions allowances under its plan, it should provide allowance value to clean energy technologies and resources to spur further investment.
- The plan should consider how set-asides or other mechanisms can be used to foster increased deployment of energy efficiency and renewable energy.

In addition, under a mass based state plan, BCSE supports an updating, output based allocation, together with an allocation approach that:

- Recognizes and reward the emissions attributes of different generation sources and energy efficiency;
- Provides allowances to new entrants; and
- Addresses leakage concerns.

The BCSE and its members are committed to helping the state of Nevada adopt clean energy solutions to its unique circumstances and would like to be a resource to this committee, the full Task Force, the Governor's Office of Energy and the Nevada Division of Environmental Protection during this process.

Tom Tudas of Las Vegas stated what he learned from the last meeting is that this committee is not paid and that their contributions and efforts to the responsible power supply network is something that he hopes is not tenuous. May it be considered by the Legislation that there is an ongoing Task Force that is on the payroll. That would afford full attention by the government body of Nevada, as well as interaction with federal, city and county efforts to lead this forward. Not to deviate too far from agenda item 4, policy on discussions on the continuous fossil fuel supply into the state of which there is none in the state. In the event of disruption in the like of the current threat of foreign and or internal possibilities of disruption there is true addressment to the continuous security to that supply. Being a solar person, he would think that an increase in the solar contribution be given full consideration in that security picture. Thank you.

James Katzen of Las Vegas stated Nevada has been a gross exporter of energy and suggested it's time to do a study on how much generation is lost between Nevada and California to see where it goes, then make adjustments for the inefficiency of sending energy to California. It could be used much more efficient locally if we could come to an equitable agreement now that there are more people in Nevada than 80 years ago. I'm for bringing back the now proven advantages of roof top solar and local generation where the energy doesn't have to be pumped and lose in transmission lines. We need to bring back the advantages and continue to grow the power base generation to neighborhoods, instead of distant locations to neighborhoods with the inefficiency of transmission loss.

3. Review and Approval of Minutes from Previous Meetings: Chairman Davis asked if there were any corrections to the minutes, hearing none, he stated that at the end of the April 15, 2016 minutes there is a

duplicated statement. Vice Chair Taylor moved to approve the minutes as corrected, Mr. Polikalas seconded, motion carried unanimously.

Chairman Davis stated that the committee would hear agenda item 6 before item 5 because the presenter Mr. Chris Van Atten's flight was delayed.

4. Policy Discussion on Proposal to Constrain Fossil Fuel Use: Mr. Josh Nordquist with Ormat Technologies addressed the members regarding the Renewable Portfolio Standard (RPS). Mr. Nordquist asked Chairman Davis to review the results of the subcommittee's recommendations to the Task Force. Chairman Davis informed the members of what was discussed at the May 26, 2016 Task Force meeting regarding their recommendation to increase the RPS. The amendment that Mr. Nordquist presented today gives the members the opportunity for further discussion because the recommendation to simply increase the RPS did not move forward at the Task Force meeting.

Mr. Nordquist stated that he wanted the members to discuss issues brought up at the Task Force meeting, so that their recommendation could be taken back at the July meeting. There was then extensive discussion by the committee regarding the information Mr. Nordquist presented on the amended recommendation to constrain fossil fuel use rather than increase the RPS.

6. Mass Allocation Methodologies: Ms. Marie Robinson with Advanced Energy Economy (AEE) made a presentation on Mass-Based Plan Considerations. Ms. Robinson stated that under a mass based plan, each state has a set budget of emission allowances. States can determine how allowances will be distributed initially. The initial distribution of allowances is a key planning decision for states. How allowances are distributed will not generally impact emissions outcome, but will impact other metrics. Such as compliance cost, consumer impact, investment certainty and energy system outcomes. Nevada has many allocation methods to consider, such as historical, updating output or performance based allowances, auction and auction by load serving entities. These are the primary options but not the only methods states can choose.

AEE has developed a performance based approach for states to consider as well. The benefits are that technologies compete on price and performance, rewards action, removes market barriers and can be used to address leakage. Ms. Robinson also talked about what considerations are important when weighing different options.

Ms. Robinson then answered questions from the committee on her presentation.

5. IPM Modeling of Final Clean Power Plan: Mr. Chris Van Atten with MJ Bradley & Associates presented an Integrated Planning Model (IPM) of the EPA's Clean Power Plan to the members. Mr. Van Atten stated that the results were compiled by working with stakeholders, utility companies and the Natural Resources Defense Council to model EPA's final Clean Power Plan rule. What he would be going through today is State and regional specific from the computer modeling runs.

Mr. Van Atten's presentation was extensive, both the power point and audio recording of the meeting are available at http://energy.nv.gov/Programs/New_Energy_Industry_Task_Force/ Mr. Van Atten answered a variety of questions from the committee members as well.

7. Discussion-Decision Points for Clean Power plan: Chairman Davis stated there had been some discussion on this at their first meeting but was thinking there is an opportunity to work through some of the key decision points. He was interested in some of the points the committee would be interested in as well. Mr. Nordquist stated that Nevada is one of the states that are already close to achieving compliance and any decisions we make to go above and beyond that bring in additional value to the state.

Mr. Johnston had brought up the possibility before and would like to pursue the creating of a base case projection of carbon emissions. NV Energy had indicated a willingness to prepare a base case and this would be based on integrated resource plans. A representative from NV Energy said she would pass the request on to Starla Lacy.

Mr. Polikalas stated he would like to build upon the modeling of impact on bills, the rate classes and maximum economic potential to abate CO2. Chairman Davis asked Mr. Polikalas to take the lead on those issues.

Vice Chair Taylor asked about CEIP compliance and the impact of communities under CEIP compliance and would like to see something Nevada based. Chairman Davis agreed that would be interested and would let Vice Chair Taylor take the lead on that topic.

8. Future Agenda Topics: Chairman Davis stated the next meeting would have a presentation on Green Banks on the agenda and a follow to Mr. Nordquist's presentation today and some discussion of carbon emissions. Vice Chair Taylor stated there were items sent back from the Task Force meeting, one being weatherization funding, perhaps Ms. Cuneo could talk about. Ms. Cuneo said she could gather the information she has and how it's distributed by her office. After further discussion on this topic, Chairman Davis decided to defer this topic to the July meeting.

Mr. Johnson wanted to make sure that a discussion related to Valmy would be on the next agenda.

Chairman Davis sent the next meeting for July 12, 2016 at 1pm.

9. Public comments and Discussion: Fred Voltz of Carson City stated he has a number of questions and concerns about what was presented here today. The first is the Bradley Report states, page 23, overstates natural gas cost now and in the future. Practically on the impact of supply on long term fracking, this material impacts costs differentials between fossil fuels and renewables and should really be revised to reflect the realities of today and the realities on the future. Second there's a need for a total bottom line such as capital costs as well as ongoing costs to rate payers by each and every year. Not just picking 2030 as a base line and ignoring the 14 years before and the 10 years after. For each one of the alternatives

expressing that is in dollars, not percentage increases and decreases. Also missing is the environmental costs, not just the benefits for the clean energy programs, such as the impact from manufacturing, transporting and installing hardware to the environment, along with wildlife casualties. Another point, the AEE report did not include a formal exchange operated by the capital markets, such as Goldman Sacks. The attendance cost for each trading credit given the addition of extra middle men.

The IRP used today and the question would be is how realistic is this growth and how will it be accomplished. Recently Germany has backed off from its renewal projects because of cost and what can this State learn from Germany. In terms of the bill proposal that was in the package today, it seems that net would be inserted before economic benefits and environmental benefits on the Task Force proposed bill page. We have to look at cost and well as the benefits.

John Fredrick with the organization Climate Parents, stated thank you for your work and effort, interesting discussion today, he wanted to flag in the study today that all scenarios lead to an increase to emissions by 2030, some of them under clean Power Plan, mass and rate base scenario. I would encourage the committee to see the Clean Power Plan as a very low floor and continue to look for other ways to achieve clean energy goals and emission deductions through RPS increases and Josh's proposal. Other avenues are need and encourage you to look at other options. Germany is increasing in a rapid rate of renewables. Keep pushing for clean energy sources.

9. Adjournment: Meeting was adjourned at 12:37 PM.

A full account of the meeting was captured in an audio recording, available on the Governor's Office of Energy's website.