

MINUTES

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

June 16, 2016

The Technical Advisory Committee (TAC) held a public meeting on June 16, 2016
at the following locations:

Public Utilities Commission
1050 E. William Street, Conference Room A
Carson City, NV

Videoconference
Public Utilities Commission
9075 West Diablo Drive, Suite 250
Conference Room A
Las Vegas, NV

1. Call to order and Roll Call: Chairman Kyle Davis called the meeting to order at 2:05 pm, calling roll and confirming a quorum.

Technical Advisory Members Present

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

Technical Advisory Members Absent

Starla Lacey, Member
Kathryn Arbeit, Member
David Emme, Member
Lisa Briggs, Member

2. Public comments and discussion: Pam Stuckey with Renewable Envoy in Las Vegas stated that as demand for energy increases, CO2 levels continue to raise, oil reserves are dwindling, yet we can't think of a better solution than to engineer even more dangerous methods. Art can make renewable energy visible, desirable and beautiful. The ideas are there, technologies are rapidly developing. Possibilities just need to reach public consensus and what better way then through public art. Change public opinion proves that sustainable does not mean a lower standard of living. We can shake off the seeds of cynicism about an uncertain future and overcome the burden of stubborn resistance of self-interest and short sighted statuesque. The need to replace aliquoted infrastructure becomes an opportunity once people realizes the potential return on the research and development. The ability to synchronize public art, urban design and renewable energy has been a long time coming. Art strengthens the economy. The US Bureau of Economic Analysis reports that the culture sector is a 799 billion dollar industry. That supports 4.1 million jobs and generates 22.3 billion dollars in government revenue. This is from the Americans for the

Arts. The visible impact of renewable energy infrastructure such as wind farms and solar are becoming more hotly debated. Land Art Generator Initiative is working to provide custom solutions for cherished places that can inspire people about the beauty of our post carbon future. Renewable Envoy is working to bring projects to Nevada.

Tom Dudas, retired citizen in Las Vegas spoke briefly about the need to amending SB358 and a June 4, 2016 article in the Las Vegas review Journal.

Janette Dean, from Washoe Valley, stated she's a graduate of UNR who studied environmental policy, human rights and social change. Humanity must take much more decisive action to reduce carbon dioxide and methane emission in Nevada. Today there is a presentation on the important economic rationale for earlier retirement of North Valmy Generating Station coal plant. While economic reasons for earlier retirement are certainly important to Nevada ratepayers and should be fully considered by the PUC, I would also like to remind the PUC that all human beings need a livable planet. The effects of continued carbon emissions and resulting global warming endanger ratepayers not just through their pocketbooks, but through catastrophic wildfire endangering homes, communities, environments and pollute the air they breathe. Drought and increasing water shortages caused by global warming also harm ratepayer's access to water.

In summary, Ms. Dean encourages the PUC to find as many ways as they can to limit carbon emission in Nevada, possible by requiring our main utility, NV Energy, to reduce their carbon emissions more quickly. Two of the best ways to achieve this, are through earlier retirement of North Valmy Generating station as well as more robust regulation of our public utility to allow far more renewable energy from all generating sources available to be incorporated into our electric grid.

David Sarge from Carson City stated he thinks it time to look to the future for Nevada and create renewable energy and that means closing the Valmy coal plant.

Paul Lenard from Reno, stated that it's just a question of which side you're on, future generation or the power of money. You can either bow to the power of money, as you have in the past over and over again or you can change. He really encourages change.

Janette Dean wanted to clarify that her comments are also directed to the Governor's Office of Energy as well as the PUC.

3. Results of the Green Bank Study: Mr. Jeffrey Schub, Executive Director and Mr. Rob Youngs, Program Director of the Northern Division of Coalition for Green Capital gave a presentation on the Nevada Green Bank Study. Mr. Schub stated that the Coalition for Green Capital is a non-profit based in Washington DC and has been working with local governments to help them explore and understand the concept of Green Banks and how to implement them. Nevada Legislation passed SB360 which directed the Inter Committee on Energy to conduct a study and investigation for the potential of a Green Bank in Nevada. Some important keys of the study are that a Nevada Green Bank would accelerate deployment of clean energy by providing financing for covering upfront cost of clean energy solutions. Today

approximately 85% of Nevada's total energy comes from fossil fuels. Also current clean energy programs and policies mostly focus on rebates.

Mr. Schub informed the members on how a Green Bank uses public capital to leverage private investment. Public capital is preserved through loans instead of rebates. Private sector investment creates business development and jobs. Green Banks support solutions for lower energy cost for citizens and businesses. Also promotes products designed to reduce monthly cash expenses and can facilitate market growth by working with contractors and lenders. Mr. Schub presentation was extensive, explaining all the primary consideration for a Green Bank creation, including the legal authority, structure and funding.

4. The Economic Case for Retiring North Valmy Generating Station: Ms. Barbara Boyle with the Sierra Club made the presentation to the members. Ms. Boyle stated that Valmy is located between Winnemucca and Battle Mountain, built in the 1980s, Valmy lacks many basic pollution controls. The plant is a major source of sulfur dioxide, oxides of nitrogen and mercury pollution, emitting 2,635,215 metric tons of carbon dioxide in 2014. Valmy currently supplies up to one-quarter of Northern Nevada's electricity. Half of the plant is owned by Idaho Power, with about half its power going to Idaho. Currently both boilers are scheduled to retire in 2025 and analyses indicate the plant must close by then to comply with the Clean Power Plan.

There are no true barriers to early retirement. Idaho Power showed earlier retirement was cost savings and NV Energy previously sought 2021/2015 retirement. Valmy economics have continued to deteriorate as gas remains low and solar/wind has become competitive. Early retirement also avoids costly environmental compliance updates. Upgrades are estimated to cost about \$171 million, making the plant even less economical. Replacement with 100% renewable energy is cost-competitive and provides Nevada economic development and jobs.

Ms. Boyle answered questions from the members.

5. Discussion – Policy ideas to make Nevada the nation's leading producer and consumer of clean and renewable energy: Chairman Davis asked the committee members if there were any ideas on how the committee can achieve their goals. The members discussed ideas they would like to see presented to the committee.

6. Public comments and Discussion: There were no public comment is Las Vegas or Carson City.

7. Adjournment: Meeting was adjourned at 4:50 PM.

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