



GOVERNOR'S OFFICE OF ENERGY

MINUTES
Committee on Energy Choice's
Technical Working Group on Open Energy Market Design & Policy:
Commercial & Residential

August 8, 2017

The Technical Working Group on Open Energy Market Design & Policy: Residential & Commercial held a public meeting on August 8, 2017, beginning at 1:00 P.M. at the following location:

Legislative Counsel Bureau
401 S. Carson Street, Room 2135
Carson City, NV 89701

The meeting was also available via videoconference at:

Grant Sawyer State Building
555 East Washington Avenue, Room 4401
Las Vegas, NV 89101

- 1. Call to order and Roll Call:** The meeting was called to order at 1:00 PM by Chair Jeremy Susac. Chair Susac thanked all for attending the first meeting of the working group. The agenda item was opened up for roll call and a quorum was confirmed.

The following Technical Working Group members were present/absent:

Working Group Members Present

Jeremy Susac
Andrew Abboud
Adam Laxalt
Kevin Sagara

Working Group Members Absent

Christopher Brooks

- 2. Public Comment and Discussion:** Chair Susac opened Agenda Item No. 2 and asked if anyone from the public sought to make a comment on the matter in both Carson City and Las Vegas locations. No public comment was provided.

Chair Susac closed agenda item No. 2.

- 3. Approval of Minutes from July 10, 2017 Meeting:** Chair Susac opened agenda item No. 3 and asked for any changes or a motion. Mr. Laxalt made a motion to approve the minutes and it was seconded. The motion carried unanimously.

Chair Susac closed agenda item No. 3

- 4. Presentation – Tom Husted, CEO, Kristin Metke, Exec. VP of Engineering & Compliance, & Angela Evans, Exec. VP of Operations, for Valley Electric Association:** Chair Susac opened this agenda item and welcomed Mr. Husted. Mr. Husted proceeded with his presentation and introduce Angela Evans.

Ms. Evans began with some history on the Grant Sawyer building and provided the following facts: there are 17,500 members across 6,800 square miles and a population base of 40,000. We serve in Clark, Nye, Esmeralda, and Mineral counties in Nevada as well as Inyo and Mono counties in California. We are the first non-California member of the CAISO and only Nevada utility in an organized wholesale market.

Our vision is to continue to be our consumers’/members’ innovative energy partner and stay on the leading edge of energy developments that provide solutions and alternatives in a changing industry. Also to promote structured regionalized markets that foster efficient utilization of generation, transmission, and delivery resources — resulting in lower costs, innovative technologies, and environmental stewardship. It is also our vision to employ technology and communications to bridge to a smart grid/smart community, empowering consumers, choices, and markets. Our vision is dynamic and drives towards constant innovation.

With the advent of fiber optic communication we are constantly driving towards innovation, we are an energy company of tomorrow that requires an integrative smart system that is also interactive. The ISO would be an integral part of the system.

Mr. Husted added, the utility used to be more like a dictatorship, the utility of today is more of a partnership with the end-use consumer.

Ms. Evans continued, in 2009 VEA embarked on one of the largest solar water heater programs in the US. It introduced renewables to all of its members and as a consequence 2,000 members signed up for the program. In 2013 VEA joined the CAISO, and today we are the fourth largest transmission operator within the CAISO. In 2015 VEA completed the largest community solar project, and in 2016 we completed the first charging station in Beatty.

Attorney General Laxalt asked Ms. Evan to please elaborate on the first two projects.

Mr. Husted stated, many of our consumers wanted to have the opportunity to participate in roof top solar but a lot of them didn’t have the finances, property, or ability so we took it upon ourselves to work with our member-owners and develop the largest community solar project in the US. We have a net metering program within VEA and we are working with a large back-up

battery manufacturer which will offer our members the option to have lower prices provided that they install a battery pack.

Mr. Susac asked, why is the feed-in tariff different than just a normal exchange?

Mr. Husted replied, that allows the end-use consumer to participate on the market whether it be purchasing or selling back their unused commodity on real time basis.

Mr. Susac continued, I guess my understanding of a feed-in tariff was a little bit different where it had a set price, are you familiar with that concept of a feed-in tariff?

Mr. Husted answered, yes I am. This is an evolutionary concept that really builds upon that feed-in tariff that you are referring to which was created for a larger generation. It allows the end-use consumer to interact in real time.

Mr. Susac asked how many net metering customers they have and the success of that program in their territory.

Mr. Husted replied, we have approximately 200 members participating, which is a very small percentage. That is due to the retail rate of VEA and the demographics.

Mr. Susac asked what is the retail rate?

Mr. Husted answered, 10.9 cents, so less than the national average.

Ms. Evans continued, we provide wholesale and retail electric services, own and operate regional electrical transmission systems, optical fiber services and infrastructure, own and operate military electrical distribution system, and comprehensive operating/dispatch system.

Mr. Husted introduced Kirstin Metke to discuss Regionalization and existence in the CAISO. Ms. Metke proceeded, we believe there is need for regionalization. We are the only Nevada utility that is a full participant in an organized wholesale market and the first member of CAISO outside of California. Right now Nevada lacks a robust regulated market. In the west there are 38 different balancing authorities. Which is completely inefficient.

Mr. Husted interjected, when we talk about 38 balancing authorities in the west and that being inefficient, we use the example of the highways being run by every single state and how inefficient that would be. There is room for improvement here for sure.

Attorney General Laxalt asked, generally speaking, how has it been to work with CAISO and what are the pros and cons.

Mr. Husted replied, it has been wonderful, we don't feel like we are an outside entity.

Ms. Metke continued, it has prompted the additional development of additional renewables, lowered pricing with wholesale markets, unified governance policies, and gives us independent oversight.

Mr. Abboud asked if regionalization promotes any other energy growth or just renewables.

Mr. Husted responded, there are other innovations like with storage. In our particular area there was a great amount of interest for renewables but we see those resources really going back and forth across the state line. Yesterday we signed an interconnection agreement that will be built in the Amargosa Valley which will go to California.

Attorney General Laxalt asked for an explanation on the 4 gigs.

Mr. Husted continued, we have had proposed generation within our service territory so they apply to interconnect within our transmission grid and at one point we had proposed generation of about 4 gigs which is three times that of Hoover Dam. In this case we were simply a transporter.

Ms. Metke continued, we joined the CAISO in 2013. We did it for renewable energy development, robust markets, fair governance and, lower costs and increased revenues. Being in an ISO is not costly or burdensome, it allows us to operate more fully and efficiently.

Mr. Sagara asked what was the most difficult thing about being a part of an ISO?

Mr. Husted replied, under the old structure everyone was an island, not being a part of an ISO would be taking a step backwards.

Mr. Sagara asked about the governing board issue with the CAISO and whether they were concerned.

Mr. Husted responded, the CAISO's governance is very transparent, fair, and open. It allows for all parties to come together and work for benefits as a whole.

Ms. Metke continued, VEA is creating a SMART Utility, it's establishing SMART communities, and it's building SMART partnerships. We installed our first smart meters approximately 20 years ago.

Mr. Husted added, on the retail market structure we see the PUCN as being a regulation provider for those retail energy providers. It allows for it to be a fair and transparent process. The PUCN is very well situated and it is something they do on a daily basis which is to provide customer protection and education. Utility commissions take the same position in many other states. There could be additional unique business model differences. VEA has been a proponent for energy choice. Hand in hand with energy choice comes Community Choice Aggregation for meeting the needs of low income and vulnerable populations. Conservation funding through distribution allows for these programs to continue on without reservation. The provider of last resort is broken down into areas in many states. So a state may have a number of particular areas

and each area could have a provider of last resort. It also allows for community choice aggregation.

Mr. Abboud asked, what is the best way to select a provider of last resort?

Mr. Husted answered, we are a provider of last resort, and we service areas no one else would serve. If energy choice becomes law we intend to become a provider of last resort. There are examples in Pennsylvania and Texas and they are models that work very well.

Mr. Susac interjected, the markets of Texas are much larger than Nevada. What would be the role of the PUCN of setting the rate?

Mr. Husted replied, it depends on how those rates are regulated. The rates would be established by those board of directors who are all members if the law permitted. Those rates would be established as market based rates. The distribution rates are already established and are regulated by the PUCN, transmission rates are regulated by FERC, and the only rate left would be the commodity which would be established by the market. In a cooperative every one becomes a member of that co-op, they would be no different than any other consumer.

Mr. Sagara asked, should we allow affiliates of the incumbent utility to participate in their own service territory?

Mr. Husted answered, it depends on if you're bringing generation with that. I believe they should be allowed to participate.

Mr. Susac asked, do you have any suggestions for Nevada regarding the ISO?

Mr. Husted replied, at the end of the day it's about numbers. You have to look at generation, capacity, transmission, and how much flexibility. Obviously, California is a very large market. Nevada is a very small state from an energy standpoint, it has the ability to start a larger west RTO/ISO.

Mr. Abboud stated, I think this is one of the most important presentations we have had. I encourage you to continue to participate in this process.

Mr. Susac thanked Mr. Husted for his presentation and closed agenda Item No. 4

5. Presentation – Bruce Rew, VP of Operations, & Carl Monroe, Executive VP & COO of Southwest Power Pool: Chair Susac opened agenda item No 5 and welcomed the presenter.

Mr. Rew began his presentation, Southwest Power Pool has been around since 1941. Something that is very important to us is the culture and how we function as an RTO, we're helping our members work together. We are a very collaborative organization. SPP identifies five things that we think really make a difference: we are relationship-based and member-driven, we have independence through diversity, we are evolutionary vs. revolutionary, and the fact that reliability and economics are inseparable.

Mr. Monroe added, one of the important things to look at is the governance as well as how the states are involved.

Mr. Rew continued, SPP has membership in 14 states and we have experience in adding additional members. All the parties that have joined are voluntary so there must be some value we are providing for them. FERC Order 2000 requires the following: tariff administration and design, congestion management, parallel path flow, ancillary services, OASIS administration, market monitoring, planning and expansion, and interregional coordination. This shows that there are FERC guidelines in terms of what an RTO is and what it should do. There is a lot of value in RTOs. You are able to select the most efficient units to run and the benefits have been shown through analysis.

Mr. Sagara asked, there's a need to have a deep whole sale market in order to provide market liquidity, is SPP at the level of CAISO?

Mr. Monroe replied, from the wholesale market perspective we look at it as a very deep market. The market settles the trade at each point in the system so any generator can compete at that bid location.

Mr. Rew added, we have over 800 generating units that participate in the market.

Mr. Susac asked, how did you achieve over 30% reserves?

Mr. Monroe answered, there were a lot of gas generators in our area and more recently it is the renewables.

Mr. Rew continued, we offer a day ahead and real time market. We do not have a capacity market but SPP does have a lot of excess capacity at the moment. The yearly savings are about a half million dollars.

Mr. Monroe added, SPP is currently in discussions with the Mountain West Transmission Group to join SPP including the Integrated Marketplace. MWTG will use SPP's market systems and experience to provide a lower cost and lower risk market. Mr. Monroe proceeded to explain the SPP and MWTG connections.

Mr. Sagara asked, how many interconnections does Nevada have with SPP? If Nevada were to join, would there be issues around wheeling?

Mr. Monroe answered, currently there would be none, and there are transmission facilities that go from Nevada through other states so fiscally we are connected. There would be a need for arrangements in this case. From a planning transmission we will be part of a group interacting with Nevada. We understand how to deal with a multi-state RTO. Mr. Monroe reviewed several regulatory considerations. He continued exploring the cost-benefit considerations.

Mr. Rew continued discussing a partnership between SPP and the state of Nevada. He stated, we know there is an opportunity to grow the market and there will be benefits. We recognize the market rules for choice in Nevada will need to be captured. We don't have any other states that are implementing that at the moment but some that have explored it.

Mr. Monroe added, there's a lot of interest in expanding regionalization.

Attorney General Laxalt asked, at some point in time will you be able to put numbers behind this?

Mr. Monroe responded, you can actually prepare an RFI to request costs from us and the CAISO so you have the information you need to make a decision. You could even ask the Mountain West to do the same.

Attorney General Laxalt also asked, do you have all different types of energy?

Mr. Monroe answered, of course coal and gas are the largest and wind is now the third largest but we have all different types of energy.

Mr. Sagara asked, what would be the steps we need to take if Nevada were to choose to join SPP?

Mr. Monroe stated, the Mountain West intended to have a decision by July after which several more steps will need to be taken and we expect that to take about 8-9 months and it is another 12 months to be fully integrated in the market.

Attorney General Laxalt asked, is the Mountain State group already part of your group and now they are looking for a more formal process?

Mr. Monroe answered, no, they are not members of SPP.

Chair Susac thanked the presenters for their time and closed item no 5.

6. Presentation – Hank James, Executive Director, of the NV Rural Electric Association:

Chair Susac opened Agenda Item No 6 and welcomed Mr. James.

Mr. James proceeded with his presentation, NREA was founded in 1974 to represent the collective interests of Nevada's rural electric distribution systems providing service to rural Nevadans not being served by the I.O.U. NREA advocates for owner-member/consumers with national and state legislators, agencies, local governments, and like-minded organizations about the importance of the services our utility members provide. NREA members are not-for-profit associations of persons who procure and distribute electric service on behalf of their owner-members.

Each NREA member is an individual association of people with a common purpose to acquire and distribute electricity (aggregated load) solely for the members of their Association. Local,

democratically elected boards are at the center of each member's electric distribution system with a common mission to provide safe, reliable, and low-cost electric service for their owner-member/consumers. PUCN oversight is limited as prescribed in various NRS enabling statutes relative to the Association's entities. NREA members do not have customers, any margin left over are allocated back to the members with a check or a credit. The total utility plan investment is just under \$300 million. The total annual revenue is about \$185 million.

Mr. Abboud asked, is the \$293 million the total value of all of their assets?

Mr. James responded, yes. He continued, the democratic structure of NREA Board members enable each utility system Board to make progressive changes to their own energy policies only if their owner-members/consumers want change. All owner-members have one vote regardless of the amount of energy purchased. NREA utility members have no excess margin component when setting rates. Rate components = Energy + Demand + Cost of Business. We provide electricity for over 50% of the land mass and serve 10% of Nevada's population. NREA utility members serve an average 5.2 consumers per mile of distribution power line, compared to over 34 consumers per mile. Nevada's rural distribution systems seek to acquire and distribute least-cost renewable/carbon-free generation resources with high reliability to meet native demand as they arise. Mr. James then proceeded to mention all utility members. Mr. James discussed the numbers and details for NREA. He then continued, NREA Members have always provided "Choice" to their member/consumers. We see additional energy costs for NREA owner-members in an Open Energy Market Structure would include: alternative power providers' profit margin; Transmission and retail wheeling costs; NREA's existing PPA Divestiture/Liquidation costs; and Additional Transition costs.

Mr. Abboud asked, can you provide back up for these numbers?

Mr. James answered, absolutely we can provide that.

Mr. Sagara asked, why would the PPAs have to be liquidated?

Mr. James replied, some of these PPAs are less than 3 cents in some cases.

Attorney General Laxalt asked, when was this contract signed until 67?

Mr. James, it was signed in the last year.

Mr. Susac asked, the electric co-ops have served and because of that they have received federal dollars, do your assets reflect or discount these federal dollars.

Mr. James answered, I think it's a great question and I think it should. We create and administer policies to achieve equitable and environmentally responsible livelihood for all owner/member consumers.

Mr. Susac thanked Mr. James for his presentation and closed agenda item no. 6.

- 7. Public Comments and Discussion:** Chair Susac moved on to public comment and asked if anyone from the public sought to make a comment on the matter in both Carson City and Las Vegas locations. Seeing none Chair Susac closed agenda item No. 7
- 8. Adjournment:** Chair Susac thanked all for their participation and attendance and adjourned the Meeting.