

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group
Open Energy Market Design and Policy: Commercial and Residential

**SUMMARY OF POLICY RECOMMENDATIONS FOR THE TECHNICAL WORKING GROUP (TWG)
ON OPEN ENERGY MARKET DESIGN & POLICY**

The Technical Working Group on Open Energy Market Design & Policy has been tasked with addressing the following issues related to the Energy Choice Ballot Initiative ("Question 3" or "ECI"). This list is distilled from a workflow document provided to the Energy Choice Committee, and designed to be illustrative rather than exhaustive:

1. Determine Day 1 wholesale market structure;
2. Retail Market Structure, Attributes and Retail Market Goals; and
3. Provider of Last Resort and Stable Homebuilding Development Costs.

Recommendations

1. Wholesale Market Structure's Primary Recommendation:

(A) Successful Implementation of A Restructured Energy Market for Nevada Should Include, but not limit to, Contracting with an Existing Independent Systems Operator with a Robust Wholesale Market, located in Close Geographic Proximity to the State of Nevada, and Already Integrated with Nevada and Neighboring Western States; and

(B) Nevada's Interstate Contract with the Neighboring ISO Shall Retain Nevada's Ability to Control Nevada's Own Fuel Mix, Retain Popular Demand-side Programs - like Energy Efficiency and Net Metering - and Provide Future Legislatures with the Legislative Flexibility and Power to Make Further Changes to Ensure Consumer Protection. (The subsequent committee is especially needed when Defining Nevada's Retail Market Structure)

Alternate Recommendation: Create a Nevada-only Independent Systems Operator, and Contract with a Neighboring Wholesale Markets to Increase the Availability of Robust Wholesale Market While Providing the Nevada Legislature and the Governor with the Flexibility and Power to Make Changes to the ISO to Ensure Consumer Protection when Designing its Restructured Market Structure.

Statement of Issue: On Day 1, whether Nevada Should Contract with an Existing Independent Systems Operator, an Existing Regional Transmission Organization or Create a New Nevada-only ISO?

List of Market Design and Policy Presentations: The Technical Working Group (TWG) heard numerous presentations on market structure, design and policy from the following speakers:

- (1) California's Independent System Operator (CAISO);
- (2) Energy experts from State of Texas: Mothership Energy Group (ERCOT);

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group

- Open Energy Market Design and Policy: Commercial and Residential
- (3) Rural electric cooperative Valley Electric Association;
 - (4) Regional Transmission Organizations - the Southwest Power Pool;
 - (5) The Nevada Rural Electric Association, and
 - (6) The National Energy Marketers Association.

It should also be noted that each member of this TWG is also a member of the broader Committee on Energy Choice, and benefited from the presentations made to the Governor's Committee on Energy Choice. These presentations included:

- (1) "Energy 101" by the PUCN; April 26, 2017;
- (2) "Energy Choice, A New Energy Policy for Nevada" by Energy Choice Initiative; April 26, 2017;
- (3) "Regional and National Marketplace Presentation," by CAISO's Stacey Crowley, VP, Regional and Federal Affairs; April 26, 2017;
- (4) "Federal Energy Regulatory Commission Oversight," by NV Energy; April 26, 2017;
- (5) "Implementing Electricity Customer Choice In Nevada" by Pat Wood III; May 10, 2017;
- (6) "Customer and Retail Choice in California" by Nicolas Chaset, California PUC; May 10, 2017; and
- (7) "Comments of John Hanger;" (Former PUC Commissioner of Pennsylvania); May 10, 2017.
- (8) "Nevada's Wholesale Energy Market" by NV Energy's Lauren Rosenblatt; July 11, 2017;
- (9) "Retail Market Potential: Moving from Vertical Integration to Retail Choice" by Constellation's John Orr; July 11, 2017;
- (10) Release and Overview of Workflow Document titled, "Open Energy Market Design & Policy: Commercial and Residential; July 11, 2017;
- (11) "Energy Choice and Considerations for Resource Adequacy" by NV Energy's Kevin Geraghty; September 13, 2017;
- (12) "Market Monitoring in PJM" by PJM's Joe Bowring; September 13, 2017;
- (13) "CEC Request for PUCN Investigatory Docket;" September 13, 2017;
- (14) "Electric customer choice & renewable energy: Insights from other states" by the Analysis Group's Susan Tierney; November 7, 2017;
- (15) "Historic Overview: Nevada Deregulation 1990s" by the PUCN's Hayley Williamson; November 7, 2017; and
- (16) "Energy Choice: State Policy Considerations" by NCSL's Glen Andersen; March 7, 2018.

The TWG examined the different regulatory platforms through the lens of numerous presentations that outlined above, and based on these presentations, the most practical and cost-effective solution is contracting with an existing ISO that has a robust wholesale market and is close geographic proximity to the State of Nevada. The TWG also heard from some members of the public and was reminded that ~73% of the voting public (783,185 people) supported energy choice in November 2016. It is evident that the majority of Nevadans believe that restructuring

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group

Open Energy Market Design and Policy: Commercial and Residential

its electricity market will likely provide more benefits than the status quo. Some members of the public suggested that restructured markets enable competition and competitors caters to consumer preference. It was also highlighted that when competition works, consumers win, because the competitive platform allows for more competing ideas and more efficient ways to serve the customer. Based on public input, it appears that consumers seek a broader array of energy services and are optimistic for lower prices. The TWG examined these different regulatory platforms through the lens of numerous presentations that outlined above, and based on these presentations, the most practical and cost-effective solution is contracting with an existing ISO that includes a robust wholesale market, is interconnected with Nevada and shares close geographic proximity to the State of Nevada.

The TWG members heard from the PUCN on the current regulatory landscape (“Energy 101”), as well as, presentations on various restructured markets from ISOs, RTOs, and various states. Based on these presentations, the TWG found supporting testimony for joining an existing market operator rather than creating a Nevada only market. Majority of, if not all, speakers before the TWG highlighted shortened time-frame to competition, reduced administrative costs, existing economic benefits, and consumer benefits from joining a wholesale market with state retail choice.

Specifically, energy experts that addressed the TWG highlighted the upfront costs of creating a new, Nevada-only market, whereby the immediate costs are born by the consumer in the short term. One speaker estimated costs to be around \$500M to create a Nevada-only ISO and supported this number with reference to Texas’ nodal market cost of \$600M.ⁱ Presenters also mentioned the lead time of approximately two to three years before consumers benefit from market-based pricing under a Nevada-only market. Despite the lead time, it was represented that Nevada-only market is still workable, and is still an attractive solution, but only after the market is mature and competition is thriving. However, almost all presenter preferred Nevada contracting with an existing ISO or RTO. Contracting with an ISO or RTO is the more attractive option, because the market is mature, facilitates the integration of new technologies, and offers an immediate solution with an existing governance structure. The California ISO garnered the most attention due to California’s close proximity to Nevada, along with all the consumer benefits identified by representatives from mature RTOs.

There appears to be numerous benefits of joining an existing market like CAISO. For example, the California ISO provides a low-cost, existing systems operator regulated by the Federal Energy Regulatory Commission (FERC). The CAISO, like RTOs, operates under the oversight of in the FERC. CAISO would not require Nevada to “recreate the wheel” and already serves as a platform for buying and selling wholesale electricity. For example, CAISO supports a “day-ahead” market for optimized procurement of electricity and supports the real-time “spot-market” to meet changing system demands for reliable electricity. This, too, maximizes demand response programs and innovation – like energy efficiency, smart thermostats, energy storage and distributed generation - to curtail or shift loads instead of building more electric generation. ISOs and TROs are increasing the incorporation of demand response strategies, and even providing financial incentives for distribute generation and energy storageⁱⁱ which is in line with Nevada’s recent passage of

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group

Open Energy Market Design and Policy: Commercial and Residential
Assembly Bill 405 (2017). AB 405 ensures that net metering will survive restructuring of Nevada's restructuring and continue to be an offer that enhances demand response options. However, contracting with CAISO triggered some concerns from TWG members.

The TWG's major, if not sole concern from joining CAISO, was CAISO's political governance structure, and some members of the TWG highlighted concerns of mandatory adoption of California-like policy goals. That concern was addressed during CAISO's and Valley Electric's presentation to the TWG. CAISO's CEO made clear that FERC, and only FERC, provides the governance structure of CAISO, and that California's Governor merely populates a governance structure created by the FERC (i.e., fill vacancies). In addition, Valley Electric, a Nevada-based utility, made clear that it is an existing member of CAISO, and Valley Electric provided no concern related to the political governance structure during its presentation (see, Valley Electric Presentation) or operation of CAISO.ⁱⁱⁱ Furthermore, various presentations made clear that the State of Nevada would be responsible for its energy policies and goals related to fuel mix.

As to policy goals, there was much dialogue, presentations, and questions as to whether Nevada would be required to adopt California-like policies and climate goals. In response, the CEO of CAISO, during his presentation, clarified that Nevada would "retain it[s] prerogative over resource mix"^{iv} and neither CAISO nor the FERC could change this resource mix. The PUCN would still approve new generation, and the legislative process – with Nevada Governor's consent – would continue to shape the State of Nevada's future fuel mix. This responsibility would also allow for popular demand-side management programs like energy efficiency and net metering – not California.

A very similar dialogue ensued when the TWG heard from the South West Power Pool's (SWPP) presentation, "Helping Our Members Work Together to Keep the Lights On . . . Today and in the Future." (August 8, 2017). Both the CAISO and SWPP are FERC jurisdictional entities, will remain FERC jurisdictional entities, and each state legislature retains its prerogative over its own resource mix. SWPP has members in 14 states generally in the central states of the U.S. - from Oklahoma to North Dakota – and provide net benefits to its members north of \$1.7B on an annual basis. Each of the fourteen state legislatures retain the legislative right to define the state's resource mix. Additionally, the SWPP is similar to other competitive regional transmission markets in that it matches buyers with sellers, includes a "day-ahead market" (like CAISO) and has a balancing authority to ensure reliability and optimized dispatch of electricity.^v The only drawback from joining the SWPP was its geographic distance from Nevada, and lack of transmission nodes connecting Nevada. This was a stark contrast to CAISO, which is next door to Nevada, existing transmission interconnect to Nevada, and includes a member-utility from Nevada (Valley Electric).

It should be noted that in both CAISO and SWPP scenario, the Public Utilities Commission of Nevada would maintain regulatory jurisdiction over the "wires," and NV Energy would own the "wires" for reliable transport of electricity. Absent joining an existing platform like CAISO, Nevada will need to replicate their efforts and may encounter initial struggles in establishing a state-only platform.

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group

Open Energy Market Design and Policy: Commercial and Residential

Lastly, there will be numerous issues that may arise when contracting with an ISO, and the State of Nevada should be properly positioned to handle these issues. To this end, the State of Nevada, through its Governor and Legislature leaders should create a formal committee to address specific legislative and/or regulatory actions to further restructure the state's wholesale and retail electricity market. Specifically, the committee can meet year-round to develop the mechanics of a retail market structure, and continually review and refine the energy choice initiative to promote consumer benefits.

2. **Retail Market Structure Recommendation:** The Governor, Speaker and Senate President Shall Create a Joint Committee to Address Specific Legislative and/or Regulatory Actions Needed for a Competitive Retail Electricity Market Inclusive of Providers of Last Resort. The Newly-created Committee Should be Administratively Housed in the PUCN, and Have Dedicated PUC Staff to Assist the Committee with Legislative Recommendations No Later than the Start of the 2021 Legislative Session.

Statement of Issue: Defining a retail market, includes but is not limited to, decision points on: market structure, competitive versus regulated services, whether to define territory maps for retail markets, impose price caps or not impose price caps on retailers, licensing and eligibility requirements for retailers, funding for consumer education, customer switching standards, data management and migration requirements, and any taxes applicable to retailers.

The "statement of issue" above highlights the number of issues, complexity and need to establish a committee with dedicated staff to examine the pros and cons of a retail market. The newly-created committee should be made up of energy experts and be administrate housed in the PUCN to benefit from a dedicated staff that has already begun examination of these retail market issues.

Ideally, there should be nine members: three appointed by the President of the Senate, three appointed by the Speaker of Assembly and three by the Governor. The committee should be administratively housed within the PUCN, should have dedicated staff from the PUCN and be appropriately funded. The Chair of the PUCN shall designate the appropriate staff and develop an appropriate budget request for consideration of funding by the Legislature and the Governor. Ideally, the committee should meet monthly, until it provides specific information and proposed statutory framework to the Legislature by the 2021 regular session. While this blue ribbon committee has been helpful, the success or failure of a newly-created energy market will require continued developments from energy experts, consumers, and financial resources to seamlessly transition to a restructured market that works for all consumers.

In conclusion, and based on the presentations before us, it is our opinion that joining an existing platform like an ISO or RTO will reduce uneconomic duplication of creating market governance structures, so long as, the ISO or RTO will add adequate Nevada participation in the governing board of the ISO or RTO. This is not a decision that can be made quickly or lightly, and in either scenario – forming a state-only ISO, or joining another ISO or RTO - the State should immediately undertake a significant and adequately resourced investigation to ensure implementation is in place by 2023.

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group

Open Energy Market Design and Policy: Commercial and Residential

3. **Provider of Last Resort Recommendation: Successful Implementation of a Restructured Energy Market for Nevada Should Include, but not limit to, ensuring the Public Utility Commission Has the Necessary Power to Establish Providers of Last Resort (POLR) for Back-up Electric Service in Each Area of Nevada Open to Competition. The Policy of POLR Service Shall Serve a Necessary Safety Net for Customers Whose Chosen Retail Energy Provider is Unable to Offer or Continue Electric Service. The POLR Service Should be Intended as Temporary Service, and Used Only under Rare Circumstances. These Circumstances Shall be Defined by State Law No Later than the Conclusion of the Legislative Session of 2021.**

Statement of the Issue: Another theme from the presentations to the Working Group was the need for a stable provider of last resort. Individuals and entities need to know that power will be available, and not prohibitively expensive. Valley Electric Association, Inc., informed the TWG that it is already a provider of last resort in the current regulatory construct, and assured the TWG that it is willing to serve as a provider of last resort in a restructured electricity market.^{vi} And the Southern Nevada Home Builders raised the need for policymakers to ensure that any energy savings to customers in a restructured market will not be lost to cost increases on the front end of residential development. To encourage construction and new economic growth, the Governor and Legislature should ensure that line extension policies and construction practices are implemented in a transparent and fair manner. Similarly, regulatory and tax policies should be structured to encourage and incentivize new technologies in construction that encourage a smaller energy envelope – such as on site generation, storage, and efficiency.

RESOURCES

1. **2016 BALLOT LANGUAGE:** Not later than July 1, 2023, the Legislature shall provide by law for provisions consistent with this Act to establish an open, competitive retail electric energy market, to ensure that protections are established that entitle customers to safe, reliable, and competitively priced electricity, including, but not limited to, provisions that reduce costs to customers, protect against service disconnections and unfair practices, and prohibit the grant of monopolies and exclusive franchises for the generation of electricity. The Legislature need not provide for the deregulation of transmission or distribution of electricity in order to establish a competitive market consistent with this Act

ⁱ See Presentation, Committee on Energy Choice, Technical Working Group on Open Energy, Market Design & Policy by Steve Berberich, President and CEO, slide 9; July 10, 2017: http://energy.nv.gov/uploadedFiles/energynvgov/content/Programs/TaskForces/2017/7_10_2017_Agenda%207%20Presentation%20-Steve%20Berberich.pdf

ⁱⁱ Note, MISO, PJM and NYISO have joined CAISO and ERCOT in evaluating how system operators can take advantage of aggregated these technologies.

APRIL 19TH WORK SESSION DOCUMENT
GOVERNOR'S COMMITTEE ON ENERGY CHOICE
Technical Working Group
Open Energy Market Design and Policy: Commercial and Residential

ⁱⁱⁱ See Presentation, Valley Electric Association, Inc., slid, August 8, 2017; particular emphasis on slides 2-3: http://energy.nv.gov/uploadedFiles/energyngov/content/Programs/TaskForces/2017/8_8_2017_AgendaItem4_Valley%20Electric%20Energy%20Market.pdf

^{iv} See Presentation, Committee on Energy Choice, Technical Working Group on Open Energy, Market Design & Policy by Steve Berberich, President and CEO, slide 10; July 10, 2017: http://energy.nv.gov/uploadedFiles/energyngov/content/Programs/TaskForces/2017/7_10_2017_Agenda%207%20Presentation%20Steve%20Berberich.pdf

^v See, Presentation, “Heling Our Members Work Together to Keep the Lights On . . . Today and in the Future”; August 8, 2017; particular emphasis on slides 5- 8: http://energy.nv.gov/uploadedFiles/energyngov/content/Programs/TaskForces/2017/8_8_2017_AgendaItem5_Southwest_Power_Presentation.pdf

^{vi} *Id.*, slides 14 of 16.