

**NEW ENERGY INDUSTRY TASK FORCE
FINAL RECOMMENDATIONS**

SEPTEMBER 30, 2016

Recommendations for Legislation from May 26th Task Force Meeting:

- 1. Recommendation:** The New Energy Industry Task Force (Task Force) recommends that the 2017 Legislature consider a bill to require a utility to offer net metering to customer-generators in a manner consistent with systems under NRS Chapter 704 as it existed before the enactment of Senate Bill 374 by the 78th Session of the Nevada Legislature and notwithstanding any statute, rule, or determination of any kind by the Public Utilities Commission of Nevada (PUCN) to the contrary; provided that the customer-generator had an installed approved system or active Net Energy Metering (NEM) application on or before December 31, 2015. For purpose of these sections, "active NEM application" means a completed net metering application time-stamped by the utility on or before December 31, 2015 that has not expired. The grandfathered systems will be subject to the size of the solar system approved or outlined in the active application, will last for 20 continuous years, and remain with the home.

Background: The NEM program at NV Energy currently has 208.9 megawatts (MW) of installed capacity, provided by 23,737 customers in northern and southern Nevada. The PUCN's NEM decision has changed reimbursement rates for these customers who made a financial commitment through owned or leased systems. Grandfathering these customers under the original terms of the NEM program for 20 years will provide a reasonable amount of time to recoup the investment of these systems. In addition, the 208.9 MW is short of the NEM goal to install 235 MW of capacity within the state. Utilizing a size cap would be difficult to manage administratively under any grandfathering program so an application date should be used to eliminate a lengthy queue. Establishing December 31, 2015 as the application cut-off date would allow a maximum of 273.3 MW of installed capacity for NEM Phase 1. This date will provide flexibility for expected attrition of projects and reach the target of 235 MW.

Conclusion: The original recommendation brought to the Task Force by the Technical Advisory Committee (TAC) on Distributed Generation and Storage included a term of 25 years; however, the Task Force agreed that existing customer-generators should be grandfathered at the prior net metering rates for a term of 20 years.

Vote: 9 in favor; 1 opposed; 1 abstained

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage and has been adopted into Bill Draft Request (BDR) 58-168 by the Governor's Office.

2. **Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to amend the Integrated Resource Planning (IRP) process, as set out in NRS 704.736, et seq., including the following revisions:
- Establish preference in NRS 704.746 for measures to reduce demand and increase supply that provide the greatest economic and environmental benefits and the greatest opportunity for the creation of new jobs in the state.
 - Establish preference in NRS 704.746 for measures that diversify energy portfolios and reduce fuel-price and carbon-price risk.

Background: This recommendation would establish clear legislative direction for the PUCN to adequately evaluate the costs and benefits of clean energy sources. While NRS 704.746 allows the PUCN to give preference to measures that provide the greatest economic and environmental benefits to the State, the primary focus has been on the "least cost" plan as measured by the present worth of revenue requirements. Some believe this focus on "least cost" undervalues economic and environmental benefits of clean energy sources, does not adequately assess fuel price risk and carbon price risk of over-reliance on natural gas fired generation, and does not diversify energy portfolios.

Conclusion: The Task Force believes this recommendation would require the PUCN to give preference for measures that provide the greatest economic and environmental benefits, the greatest opportunity for the creation of new jobs in the state, diversify energy portfolios and reduce fuel and carbon-price risk, and help to position Nevada to lead the nation as a producer and consumer of clean and renewable energy by amending NRS 704.746 Section 5 as follows:

5. The Commission ~~may~~ *[shall]* give preference to the measures and sources of supply set forth in paragraph (c) of subsection 4 that:
- (a) Provide the greatest economic and environmental benefits to the State;
 - (b) Are consistent with the provisions of this section;
 - (c) Provide levels of service that are adequate and reliable; and
 - (d) Provide the greatest opportunity for the creation of new jobs in this State; *[and*
 - (e) Diversify electricity supply portfolios, reduce customer exposure to the price volatility of fossil fuels and potential costs of carbon.]*

Vote: 7 in favor; 1 opposed; 3 abstained

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources and has been adopted into BDR 58-167 by the Governor's Office of Energy.

3. **Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to amend the IRP process, as set out in NRS 704.746, to provide for a broader pre-filing process and greater inclusion of all stakeholders.

Background: Current regulations in NAC 704.952 require that at least four months before the anticipated date for filing the resource plan, the utility shall meet with staff and the personnel of the Bureau of Consumer Protection (BCP) to provide an overview of the anticipated filing.

Conclusion: The Task Force agreed that in order to allow for a more open and transparent planning process, the pre-filing process should be expanded to include greater participation by all interested persons. In order to accomplish this expansion, language from NAC 704.952(5) and (6) could be integrated into NRS 704.746(1), and include language that the utility shall meet with “staff, the personnel of the Bureau of Consumer Protection and all other ‘interested persons’ to provide an overview of the anticipated filing”. PUCN staff would also be required to provide requisite notice to the public of the planning meetings to ensure all interested persons shall have timely notice.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources. It has been combined with recommendation #2 above into BDR 58-167 by the Governor’s Office of Energy.

4. **Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to promote energy efficiency policies which would specifically support legislation expressly giving the Public Utilities Commission of Nevada (PUCN) the authority, but not the mandate, to institute decoupling if found to be in the public interest.

Background: During a previous investigatory docket held by the PUCN on decoupling, there was support for some form of this regulatory tool, including support from PUCN Staff, the Bureau of Consumer Protection, Sierra Club, and NCARE. The TAC on Clean Energy Sources brought this recommendation to the Task Force after discussion at one of its meetings that the stated barrier to implementation was simply that the PUCN lacked legislative authority to implement this ratemaking mechanism. This recommendation merely clears this hurdle and allows the PUCN to look at decoupling as a ratemaking mechanism.

Conclusion: The Task Force agreed to recommend providing this clear legislative authority to allow the PUCN to consider decoupling without making any recommendations on the merits of decoupling.

Vote: 6 in favor; 1 opposed; 4 abstained

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

5. **Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to support legislation enabling Property Assessed Clean Energy (PACE) as outlined in Senate Bill 150 of the 2015 legislative session.

Background: PACE is a clean energy financing program that uses an existing special improvement district statute, NRS 271, et seq., to leverage private sector financing for renewable energy and energy efficiency improvements on private property, facilitating an increase in property values and saving consumers money by reducing energy costs. This private sector financing is secured by a lien on the improved private property that will be superior to any mortgage held against the property.

Conclusion: The Task Force agreed that this financing program would provide additional opportunities for clean energy development. This enabling legislation will support municipal energy development plans, private property improvements and allow another avenue for Nevadans at all income levels to take advantage of renewable energy and energy efficiency opportunities.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources and has been adopted into BDR 22-233 by the Governor's Office of Energy.

6. **Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to delete the following energy statutes:
- Eliminate NRS 704.701 through NRS 704.731, which deals with converting oil power plants to coal.
 - Eliminate NRS 704.7823, which deals with reverse polymerization of tires.

Background: This recommendation simply eliminates a number of obsolete statutes governing energy. The first set of statutes, NRS 704.701 through 704.731, enacted in 1983, include provisions that would permit converting oil power plants to coal plants. This series of statutes describe the transfer of rates from and credits for these gas and oil plants when converted to coal plants. However, this rate and credit program has become obsolete for a number of reasons, including the fact that such plants do not currently exist for conversion purposes, and coal plants themselves are currently being phased out pursuant to SB 123.

The second statute, NRS 704.7823, was enacted to permit a technology for 'reverse polymerization' of tires used to create energy to partially count toward Nevada's Renewable Portfolio Standard with a .7 kWh multiplier for energy generated through this process. However, the entities seeking to obtain RPS credit for this technology were never actually developed in Nevada. Since this technology has never been used in Nevada, the CES TAC recommended deleting this industry specific RPS credit. Additionally, in order for Nevada to position itself on an equal footing with other western states regarding RPS tracking/trading, it is important to remove compliance exceptions

from Nevada statutes. The Nevada Legislature has already removed the multipliers for solar and this statutory deletion would serve as additional clean-up of the RPS statutes.

Conclusion: The Task Force agreed that these statutes are no longer relevant and should be deleted.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

Recommendations for Legislation from July 27th Task Force Meeting:

- 7. Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature establish a bill which shall constrain the amount of energy produced from fossil fuel sources (including, but not limited to, coal and natural gas) that is used to produce electricity that is consumed by electricity customers of electric utilities in Nevada that, in the most recently completed calendar year or in any other calendar year within the 7 calendar years immediately preceding the most recently completed calendar year, had a gross operating revenue of \$250,000,000, or more, in this State, and NRS 704B providers of new electric service in the State of Nevada to 60% of the total energy purchased or produced (total system energy) by 2026, with extended goals of 55% by 2033 and 50% by 2040. Furthermore, a specific preference shall be established for new clean electricity sources (i.e. renewable energy sources such as geothermal and solar) within the State of Nevada that provide the greatest economic benefits, environmental benefits, and opportunity for the creation of new jobs in this State.

If, for any calendar year, a provider is unable to comply with the percentage limit for the calendar year through the generation of electricity from its own in-state renewable energy systems and if the Commission determines that, for the calendar year, there is not or will not be a sufficient supply of electricity or a reliable supply of electricity made available to the provider pursuant to renewable energy contracts with just and reasonable terms and conditions, the Commission shall exempt the provider, for that calendar year, from its percentage limit or from any appropriate portion thereof, as determined by the Commission.

Background: The Governors' Accord for a New Energy Future, Nevada's Strategic Planning Framework, and Executive Order 2016-04 clearly define the need to diversify Nevada's energy portfolio and expand renewable energy for the benefit of Nevadans. Current planning (per approved Integrated Resource Plans filed by public utilities in the State) for Nevada's electric resource supply will lead to a substantial dependency on natural gas by 2035 with limited expansion of Nevada's renewable energy resources. Renewable energy resources have become viable and cost-effective and provide economic, health, and environmental benefits to Nevadans.

Conclusion: The Task Force agreed on this recommendation as a strategic plan to satisfy these goals for the State and provide a foundation for further advancement, while accounting for impacts to the ratepayer, reliability of the electrical grid system, and maximizing the benefits to Nevadans.

Vote: 6 in favor; 2 opposed; 1 abstained

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

Recommendations for Legislation from September 27th Task Force Meeting:

- 8. Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a funding bill to incentivize one or more demonstration project(s) that integrate distributed energy resources (DER) into Nevada's electric grid using DER resources compatible with a Nevada energy provider's data platform, security, operations and control, communication systems, and interconnection requirements. Distributed energy resources in this context include but would not be limited to energy storage, electric vehicles, renewable generation and other clean energy resources as well as the integration of such resources into microgrids and/or larger systems.

Background: Distributed energy technology continues to evolve and become more competitive in price. As these technologies shift and change, the ability to integrate them seamlessly into the existing Nevada grid becomes more challenging. Pilot projects will assist Nevada's energy providers to better understand these challenges and help them plan and enhance their systems to more appropriately accommodate these resources going forward.

Conclusion: The Task Force agreed this recommendation would be a good use of Renewable Generations funds or another source which could be identified by the Legislature to support the integration of distributed generation and storage technologies into Nevada's energy sector.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Grid Modernization.

- 9. Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill that would, for any entities currently providing power to Nevadans, or that may provide such services in the future:
- Provide for no less than 5% of utility DSM spending, over a three-year horizon, be directed to help low-income Nevadans become more energy efficient;

- Direct the PUCN to utilize the Utility Cost Test in lieu of the Total Resource Cost Test, their current practice;
- Evaluate the utility's DSM programs' cost-effectiveness as a whole, so that the entire portfolio passes the Utility Cost Test without individual programs having to meet that standard;
- Recover the costs of these programs in a non-bypassable charge that must be assessed by all utility providers.

Background: There is currently a program in Nevada that helps a limited number of low-income Nevadans pay their energy bills when they are unable to do so on their own; however, there are very few resources made available to helping low-income customers become more energy efficient in order to lower their energy bills outright. Thus, low income customers pay a much higher percentage of their available income on energy bills, limiting their ability to buy other goods and services.

Furthermore, the current test used by the PUCN to evaluate efficiency programs has not appeared conducive to implementing utility energy efficiency programs targeted toward lower-income Nevadans for the following two reasons:

- 1) The PUCN currently uses the "Total Resource Cost Test" (TRC) to evaluate the cost effectiveness of energy efficiency programs. This test is deemed by some utility analysts to not fairly compare a utility's cost of supplying energy with the cost of its saving energy. By not providing a "level playing field" to compare the costs of supply-side resources to the cost of Demand-Side Management (DSM) programs, the PUCN's current policy encourages more energy production than would likely be the case under a different, and more leveled method of analysis.

This recommendation directs the PUCN to use the Utility Cost Test (UTC), a policy already in place in Utah, New Mexico, and other states, that compares only the utility's cost of saving energy against its cost of supplying energy. This comparison of supply-side versus DSM expenditures could help offset the need for more costly supply-side resources and future power plant construction, benefiting all ratepayers.

- 2) Under Nevada's policy currently, each individual energy efficiency program must meet the TRC cost test. In an example presented to the TAC on Clean Energy Sources of New Mexico's legislation, utility energy efficiency programs can be aggregated together to analyze their costs and benefits, so that an entire portfolio of energy efficiency programs are being evaluated for their cost-effectiveness. This opportunity to aggregate program costs and benefits together for evaluation as a portfolio enables more programs for low income utility customers.

The Clean Energy Sources TAC noted, in recommending to dedicate no less than 5% of a utility's total energy efficiency program expenditures to low-income customer programs (evaluated on a 3-year basis), that low-income customers have

been paying the surcharge on utility bills for energy efficiency programs without having energy efficiency programs available to them.

By enabling low-income Nevadans to access energy efficiency programs, and save on their utility bills, advocates expect additional positive economic effects from this policy as these low-income customers will have additional income to spend outside of their utility bills.

To facilitate a level playing field in the contingency of retail competition being implemented in Nevada, the recovery of the costs of these energy efficiency programs would be accomplished through a non-bypassable surcharge that must be assessed by all utility providers, both those currently in the Nevada energy market and those which may become providers under a restructured energy market scenario.

Conclusion: The majority of the Task Force agreed this recommendation would help to promote energy efficiency programs for low-income Nevadans without raising current rates, as it does not represent an increase in the total DSM budget but is simply a carve-out directed at supporting low-income Nevadans to become more energy efficient.

Vote: 7 in favor; 2 opposed; 1 abstained

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

10. Recommendation: The New Energy Industry Task Force recommends that the recommendation on PACE programs be expanded to include battery storage systems.

Background: As the Task Force recommended the Legislature revisit PACE-enabling legislation, broadening definitions to include battery storage technologies will expand the impact of programs while supporting storage technologies.

Conclusion: The Task Force agreed that including battery storage technologies into the definition of PACE would expand the impact and support storage.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

11. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to require all energy codes (IECC) adopted after June 1, 2017 to have three performance paths: (1) Prescriptive; (2) Performance; (3) Alternative Compliance.

- After July 1, 2018 all jurisdictions in Nevada must have adopted the three performance paths if they have not adopted a new IECC since the effective date of the bill;
- Both performance and Alternative Compliance-based paths must use a “net score” that takes into account energy producing features that have been installed on a home via the Dynamic Scoring matrix.

Background: Currently, Nevada mandates adoption of the International Energy Conservation Code (IECC) and there have been challenges with prescriptive green building programs. The IECC has become more prescriptive and energy savings returns on each dollar spent on code compliance is diminishing. The one-size-fits all approach of prescriptive requirements for new residential construction does not fit with many of the performance drivers for Nevada’s climate. Aligning regulations with performance will allow for market driven compliance and the use of installed energy producing and storing features would be accounted for in the rating of the home. Adding an Alternative Compliance path for new construction will allow builders to meet the same bottom line efficiency scores through utilization of distributed generation and storage.

Conclusion: The Task Force agreed that allowing for an alternative IECC compliance method would help to support distributed generation and storage.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

12. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill that would define "energy storage" technologies in NRS, and require that energy storage be considered in utilities’ generation, transmission, and distribution planning processes.

Background: There remains uncertainty in what exactly constitutes energy storage technologies, and how energy storage technologies should be included in utility planning processes. This proposal would establish a definition and allow energy storage to be more fully considered as an option to traditional grid investments in generation, transmission, and distribution. Examples of storage definitions in legislation from other states were provided by the TAC on Distributed Generation and Storage for reference.

Conclusion: The Task force concluded that defining “energy storage” in NRS and including it during planning processes would assist in utilizing the benefits of storage projects.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

13. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to direct the PUCN to study and where appropriate, implement cost-effective energy storage procurement targets to serve all electric customers so that Nevada may unlock opportunities to utilize cost-effective energy storage on the electric grid. The bill would include targets for storage interconnected to each point of the grid – customer-connected, distribution-connected, and transmission-connected. Further, storage procurement targets should increase over time to ensure that lessons learned from earlier procurement inform subsequent procurement.

Background: The TACs on Distributed Generation and Storage and Grid Modernization, and the Task Force, heard multiple presentations on how energy storage on the electric grid can increase grid efficiency, integrate renewable energy, reduce greenhouse gas emissions, offset the need for costly grid investments, improve grid resiliency, and increase energy independence. However, significant barriers to deploying energy storage were identified in the many legacy grid procedures and tariffs that do not contemplate the use of energy storage on the electric grid. Specifically, utility planning, valuation, operations, procurement, interconnection, and rate design do not systematically incorporate energy storage. By demonstrating a commitment to utilize energy storage, storage procurement targets will shape grid processes that fully incorporate energy storage and thus will allow the state to uncover opportunities where storage is a more cost-effective investment than traditional grid infrastructure.

This recommendation would require storage procurement targets for utilities be set for each point of the grid – transmission, distribution, and customer-located – to ensure that utility processes impacting each point of the grid are updated to include storage. Procurement targets would increase over time to allow for lessons learned to inform future procurement. In the recommendation provided by the TAC on Distributed Generation and Storage, a small amount of storage procurement would occur by 2019, a larger amount by 2021, and a substantial amount by 2023. The PUCN would oversee the utilities’ storage procurement activities, including reviewing biannual compliance reports to be filed by utilities on their progress towards achieving their storage procurement targets.

To ensure that no additional costs would be incurred by Nevadans as a result of the state adopting storage procurement targets, this recommendation proposes the procurement of *cost-effective* energy storage so that there is only upside for Nevadans. If, after thorough investigation including a request for offers, utilities cannot find cost-effective opportunities for energy storage on the grid, then utilities could defer their storage procurement.

Conclusion: The original recommendation brought to the Task Force by the TAC on Distributed Generation and Storage was to update NRS Chapter 704 to include energy

storage procurement targets starting no later than 2020; however, the Task Force did not think that mandated storage targets were appropriate unless the PUCN could study and show the cost-effectiveness of interconnecting these technologies, and that any targets established by the PUCN be reviewed at future Legislative sessions. Thus, the Task Force agreed that the recommendation should be for the PUCN to study and implement procurement targets only where appropriate and cost-effective, and that there should not be a deadline for targets to start by 2020.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation & Storage.

- 14. Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to give one agency or joint agencies specific authority to adopt regulations to oversee the development of distributed resources. The authority to address consumer complaints regarding business practices in the delivery of distributed generation would be consolidated within one agency and regulations would be developed with input from stakeholders.

Background: Distributed generation is and likely will continue to be a growing source of electricity for the State. The authority to regulate this growing industry has been piecemeal and focused on encouraging the initial development of distributed resources. The use of Net Metering was initially only offered to 100 customers in northern and southern Nevada, and has grown substantially since that initial legislation.

Nevada consumers currently do not have a centralized agency to file complaints regarding the distributed generation industry. Complaints are often received by the PUCN, BCP, Contractors Board, NV Energy, and others. This lack of clarity on oversight has created confusion for customers seeking to make complaints. The Solar Energy Industry Association (SEIA) has established an advisory Business Code to promote transparency, good faith, and understanding in the solar energy industry.

Conclusion: The Task Force agreed that authority to regulate this emerging industry should be added to a single agency without characterizing distributed generation providers as public utilities. Any new regulations should be developed through a stakeholder process to avoid duplication, inform consumers, and coordinate education outreach campaigns. Any expertise currently utilized in regulating aspects of the distributed generation industry should continue with one agency serving as the clearinghouse for initial complaints and consumer education.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

15. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to direct the PUCN to create a Value of Distributed Solar structured around quantifying the known and measurable impacts both positive and negative internal, and external if appropriate, to the utility of the following benefits and costs:

- i. Avoided Energy
- ii. Line Losses
- iii. Avoided Generation Capacity
- iv. Ancillary Services
- v. Transmission/Distribution Capacity
- vi. Avoided CO₂ Emission costs
- vii. Voltage Support
- viii. Avoided Criteria Pollutants costs
- ix. Fuel Hedging/Diversity
- x. Environmental costs
- xi. Utility Administration costs
- xii. Utility Integration costs
- xiii. Participant Bill Savings

Background: Net Metering has been based on the exchange of energy at the retail rate with a focus on increasing the number of customers participating in the program. As distributed generation has grown to a larger share of energy generation in the State, this recommendation calls for a more specific and permanent method of quantifying the net benefits and costs of distributed energy resources to be established. While the PUCN has begun evaluating these costs and benefits when evaluating all resources (including distributed generation) in Sierra Pacific's current General Rate Case, this recommendation would make such evaluation a requirement for both Sierra Pacific and Nevada Power.

Conclusion: The Task Force concluded that this specific direction would help the PUCN determine the full value of solar. The original recommendation brought to the Task Force by the TAC on Distributed Generation and Storage included language to quantify the known and measurable impacts both positive and negative internal to the utility; however, the majority of the Task Force agreed that the recommendation should also include external impacts beyond those only internal to the utility.

Vote: 4 in favor; 2 opposed; 1 abstention

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

16. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to direct the PUCN to ensure that customers investing in

distributed energy resources be reasonably certain that future changes in policy and rate design will not significantly lessen the economics of their distributed energy resource investments.

Background: The potential for sharp changes in policy and rate design makes customers and developers that offer distributed energy resources to customers hesitant to invest in distributed energy resources. Many distributed energy resource investments are long-term investments, for which customers will not breakeven for 10 to 20 years. If there is a risk that partway through the investment payback period policy changes will make their investments uneconomical, then customers will be less likely to invest in distributed resources. For example, uncertainty of excess energy compensation rates for solar has, in part, resulted in a drastic drop-off of new distributed generation customers. Power purchase agreements (PPAs) establish compensation rates (often for periods of 20 or 25 years) and facilitate financing for capital investment. Similar long-term agreements could be put in place for distributed generation customers. One way to accomplish this could be to create annual tranches of distributed energy resources for which residential and small commercial customers are guaranteed the rate structure or compensation rate set by the PUCN.

Conclusion: Although the Task Force discussion included reference to the fact that even utility-scale developers with fixed-rate PPAs are subject to risk since market prices still fluctuate and they are also subject to performance guarantees and delivery requirements, the recommendation was approved by the majority of members.

Vote: 5 in favor; 2 opposed; 1 abstention

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

17. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to authorize a reasonable minimum bill structure as a compromise interim measure (until the PUCN has a final decision in the Value of Solar Dockets for both Sierra Pacific and Nevada Power) to resurrect the residential and small commercial solar market in Nevada. The bill would reinstate retail rate net metering and restore solar distributed generation customers to their prior rate classes. In return, solar customers would pay a minimum bill not to exceed \$25 per month to ensure a minimum customer contribution from all ratepayers and to reduce the potential impacts of customer cross-subsidization.

Background: Minimum bills are charges that set a billing threshold under which a customer's monthly bill cannot be further reduced through the application of net metering credits or consumption reductions. Minimum bills differ from other bill mechanisms such as customer charges and demand charges in that they are designed to only impact a limited segment of utility customers, leaving rates and charges for customers who regularly exceed the minimum bill unaltered. Minimum bills are common practice in a

range of industries including water, sewage, and telecom. A number of other investor-owned utilities, municipal utilities, and states have either implemented or are actively exploring implementing minimum bill mechanisms. Policies that have been implemented range from \$10 per month for California's largest investor-owned utilities (PG&E, SCE, and SDG&E) up to \$25 per month in Hawaii. These states have some of the most robust solar markets in the United States, suggesting that minimum bills, as implemented, are not fundamentally incompatible with solar market development.

Conclusion: The Task Force concluded that this proposal could provide a good interim solution until the PUCN determines a full value of solar through the IRPs and Rate Cases for Sierra Pacific and Nevada Power. There were some concerns raised that this would continue a cost shift on other ratepayers.

Vote: 6 in favor; 1 opposed; 1 abstention

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation & Storage.

- 18. Recommendation:** The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to authorize the PUCN to adopt appropriate guidelines to implement community solar (also called Shared Solar, Community Solar Gardens, Solar Gardens) with a focus on expanding solar access to communities of color and low income neighborhoods.

Background: A majority of Americans face physical barriers that keep them from installing solar on their own rooftop. A report from the National Renewable Energy Lab and Navigant Consulting found that 73-78 percent of homes cannot host solar due to tree shading, orientation or other factors. Moreover, 52 percent of residents nationwide live in multi-unit buildings or homes with shared roofs. Renters have difficulty participating in rooftop solar even if their home is suitable. The sheer diversity of ways in which tenants receive and pay for their electricity makes solar participation complex. Some pay their own utility bills, some share a meter and split payments with other renters, and in other cases the landlord pays for utilities and passes a portion of those costs on to the tenant. In all of these cases, there is a fundamental disconnect between the entity that would benefit most from the utility bill savings of solar (the tenant) and the entity who would need to make or approve the solar investment (the property owner).

These issues are particularly pronounced for low-income households, which are more likely to live in multifamily housing, have unsuitable roofs or rent their homes. Community solar addresses these barriers by allowing consumers to subscribe to a local clean energy project and receive credit on their utility bills for their portion of the clean power produced. Fourteen states and the District of Columbia have community solar policies in place, and many more are considering programs to expand consumer access to clean energy

Conclusion: The Task Force concluded that there have been relatively few community solar projects developed and more flexibility should be given to communities to develop these projects.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

19. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to authorize the use of uncommitted Renewable Generations funding to promote the implementation of new technologies, battery storage projects, low income residential solar, and community solar gardens as determined in a stakeholder process.

Background: The Renewable Generations program was created in 2003 and modified in subsequent legislative sessions. The program provides incentives to offset installation costs for solar, wind, and hydro distributed generation systems. The program's target is to incentivize the connection of distributed generation systems which total 250 MW. Funding for the program is derived from a volumetric charge on all NV Energy ratepayers. If the volumetric rate does not change, current projections show a surplus of \$38.2 million in the Renewable Generations program which could be reprogramed after the 250 MW goal is met.

Conclusion: The Task Force agreed that since this would not be an additional charge to ratepayers but simply a reallocation of an existing charge already on customer bills, these funds should be used to help the deployment of new and emerging technologies

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

20. Recommendation: The New Energy Industry Task Force recommends that the 2017 Legislature consider a bill to incentivize Next Generation Communities (NextGen). The bill would create NextGen communities that are comprised of solely new solar-home and complimented with either large-scale and/or small-scale residential battery storage or a combination of both. The bill would require an investor-owned utility to offer new net metering to customer-generators within a NextGen community in a manner consistent with systems under NRS Chapter 704 as it existed before the enactment of Senate Bill 374 by the 78th Session of the Nevada Legislature and notwithstanding any statute, rule, or determination of any kind by the PUCN to the contrary for a period of five (5) consecutive years. These customers would be grandfathered for 20 years and the rate would run with the home.

Background: NextGen communities are defined to be an all-solar community and comprised of 20 solar-homes or more with the solar technology that is incorporated into the building envelope shortly after the construction of the home and uses large and/or small-scale battery technology.

The NextGen community would automatically qualify for rebates used to offset a certain percentage of the batteries' cost as determined by a stakeholder process. Funding for the battery rebate program shall come from the RenewableGenerations Program, and funding shall be determined by a stakeholder process for each solar community. The NEM applicant will certify that it is part of a NextGen community in the application process with the utility.

The utility shall petition the PUCN for cost recovery of utility-scale batteries. The PUCN shall have 120 days to examine, approve, deny or modify the utility's petition. Prior to the conclusion of five consecutive years, the PUCN shall review the relevant data to determine the cost savings, if any. The PUCN's analysis shall continue to promote net metering customer-generators in a NextGen community and shall take into account the value of solar and include, but not be limited to: Avoided Energy, Line Losses, Avoided Generation Capacity, Ancillary Services, Transmission/Distribution Capacity, Avoided CO2 Emission costs, Voltage Support, Avoided Criteria Pollutants costs, Fuel Hedging/Diversity, Environmental costs, Utility Administration costs, Utility Integration costs, and Participant Bill Savings.

Benefits of the proposal, as identified by the TAC on Distributed Generation and Storage, include the following:

- Transitions an already-evolving grid into a more reliable, resilient and innovative grid;
- Enables new solar home communities to serve a dual function, and provide redispatching function to neighboring communities during outages and/or peak hours;
- Add fuel and generation diversity to a state that is largely relying a single fuel, natural gas, for future generation;
- Continues to facilitate new platforms for new technologies and innovation;
- Reignites an industry that has largely been killed off (e.g., 15 applications for NEM); and
- Increases consumer choice and gets people back to work.

Conclusion: The Task Force agreed that an incentive would be appropriate because it would not be a large pool of customers and would help to support distributed generation and storage.

Vote: 6 in favor; 1 opposed; 1 abstention

Notes: This recommendation was brought to the Task Force by the TAC on Distributed Generation and Storage.

Policy Recommendations from September 27th Task Force meeting:

1. **Recommendation:** The New Energy Industry Task Force recommends that the Nevada Division of Environmental Protection (NDEP) reconvene the Clean Power Plan Technical Advisory Group, including all stakeholders (municipalities and electric cooperatives as appropriate¹), to assist NDEP in the development of a state plan for compliance with the Clean Power Plan that is in the best interests of Nevada citizens and businesses, including exploring Nevada's voluntary participation in the Clean Energy Incentive Program (CEIP).

Background: In February, NDEP convened a group of stakeholder experts to comprise, on a volunteer basis, the Nevada Clean Power Plan Technical Advisory Group (NVCPP-TAG) to assist NDEP in developing a state plan, assist with public meetings and provide input on planning from a number of segments of the community. The NVCPP-TAG met once prior to the US Supreme Court's stay of the CPP, and started important planning work, including discussions of the CEIP, which could provide additional economic opportunities. Nevada was in a very good position to meet interim and final CPP goals prior to the stay, and the continued work of the NVCPP-TAG will not only allow the State to be proactive in its planning for CPP compliance, but continue to move the state toward the clean energy goals set out by the Governors' Accord for a New Energy Future and Nevada's Strategic Framework.

Conclusion: The Task Force agreed that the NDEP should reconvene the NVCPP-TAG to continue planning work while the courts address the legal challenges so that if the rule is overturned, Nevada will be ready. While the requirements for Nevada to meet the Clean Power Plan are straightforward and attainable, there could be some development opportunities for Nevada to work with neighboring states on meeting their requirements.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

2. **Recommendation:** The New Energy Industry Task Force recommends that NDEP develop a state implementation plan that enables Nevada to trade compliance instruments with other states for the benefit of Nevada customers.

Background: Despite the stay of the CPP, many states continue to work on their plans because they feel it is a prudent step in preparation for final court determinations upholding the rule. The majority of Western states, for example, are still planning, in part, because they want to continue to work on a model for carbon trading.

¹ Municipal utilities and cooperatives in Nevada do not own fossil generation and thus have no Clean Power Plan obligation.

Conclusion: The Task Force agreed that Nevada should continue work on its state plan under the CPP to stay in step with its Western neighbors and be proactive in its energy policy and carbon reduction goals, and that a state implementation plan should enable Nevada to be in a position to trade with neighboring states, whether it be a rate- or mass-based plan.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

3. **Recommendation:** The New Energy Industry Task Force recommends that the Governor's Office of Energy continues working collaboratively with western states on regional energy issues that maximize opportunities to advance the development of Nevada's renewable resources, reduce air pollution, and lower costs for consumers.

Background: This recommendation came from the Clean Energy Sources TAC following both a policy proposal work session and a presentation by California Independent System Operator's ("CAISO") Stacey Crowley, Vice President Regional and Federal Affairs and Phillip Pettingill, Regional Integration CAISO. As Nevada's neighboring states increase their demand for clean and renewable energy as a result of state and federal policies and regulations, there is an opportunity for Nevada to be part of an increasingly regional market which would enable Nevada to export more of its clean and renewable energy resources.

Conclusion: The Task Force agreed that Nevada utility customers could benefit from interstate cooperation and participation in regional energy and carbon markets that result in the lowest cost of compliance. This recommendation mirrors the broad energy goals set out by the Governors' Accord for a New Energy Future and Nevada's Strategic Framework to become the nation's leading producer of clean and renewable energy.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

4. **Recommendation:** The New Energy Industry Task Force recognizes that electric vehicles pose issues associated with gas tax revenue and recommends that the PUCN work with the Governor's Office of Energy, the Nevada Department of Transportation and the regulated utilities to develop a state plan and programs to accelerate the adoption of electric vehicles, including recommending any legislative changes needed.

Background: This recommendation recognizes that there is a public interest in expanded use of EV's, and that it supports the goals of the Governors' Accord for a New Energy Future and Nevada's Strategic Framework. This would establish transportation electrification as a state goal and encourage greater utility involvement in expanding the deployment of electric vehicles. Additionally, discussions in the Clean Energy Sources TAC recognized that tailpipe exhaust from Internal Combustion Engines now comprises a significant portion of Nevada's carbon emissions, which can be reduced by using electricity as a fuel. The Clean Energy Sources TAC heard studies specifically addressing pollution from vehicles in Clark and Washoe counties that indicated electric vehicles substantially reduce emissions of carcinogenic Volatile Organic Compounds and Nitrous Oxide, both of which are ozone precursors, a topic of increasing importance to both counties. The Clean Energy Sources TAC also heard economic analysis that indicated that by reducing the importation of gasoline into Nevada, EVs offer an avenue to create jobs and boost Nevada's economic output. As such, this recommendation directs the PUCN and the Office of Energy to work with the regulated utilities to develop plans and programs that will accelerate the adoption of electric vehicles in Nevada by the end of 2017.

An electric vehicle plan may include investments in or customer rebates for charging infrastructure, in a manner that stimulates competition and customer choice in charging infrastructure; appropriate tariffs for both consumer electric vehicles and heavy duty electric vehicles; consumer or midstream vehicle incentives; and a plan to market the benefits of electric vehicles. The PUCN would review any submitted plan to determine if it is reasonable and will benefit all of its customers and review how costs of the implementation of the plan shall be recovered. Similar legislation passed earlier in 2016 in Utah and Oregon.

Conclusion: The Task Force agreed that the State should work towards the establishment of statewide goals to accelerate the adoption of EVs, but that these goals need to be combined with evaluation of how to replace gas tax revenues supporting road construction.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

5. **Recommendation:** The New Energy Industry Task Force recommends that the Governor's Office of Energy work with the Nevada Department of Transportation (NDOT) to propose financial incentives to stimulate the purchase of electric vehicles, if appropriate.

Background: Experience from other states shows that a modest financial incentive, either as a tax credit or point of sale rebate, has a significant impact on increasing EV sales. Nevada could create a state sales tax rebate, with a cap, for example at a maximum

of \$2,500 per vehicle. Based on 2015 Nevada EV sales, and assuming this would increase sales an additional 50% on average, the cost to the state could be approximately \$2.25 million per year. In order to limit this ongoing cost impact, the tax credit or point of sale rebate program could have a sunset provision, for example be in effect for four years between 2017-2020, and/or be capped at a certain number of EV's entering the market. Increasing the adoption of EV's falls squarely within the Governors' Accord for a New Energy Future and Strategic Framework, and in particular works in synergy with the completion of an "electric highway" system to serve the entire state. It aligns with the goals of the Accord's call to encourage clean transportation options by supporting automakers' and fueling companies' market expansion for these new vehicles to lessen dependence on petroleum and reduce pollution. By supporting needed incentives Nevada will encourage expanded use of these new technologies. It also supports the Strategic Framework goals, specifically, 7.2.3 which seeks to reduce carbon emissions to a level at or below accepted federal standards, and, currently, one of Nevada's most significant sources of carbon emissions is tailpipe emissions.

Conclusion: The Task Force concluded that the Governor's Office of Energy and NDOT should continue to collaborate to propose appropriate incentives for electric vehicles.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Clean Energy Sources.

6. **Recommendation:** The New Energy Industry Task Force recommends that the State of Nevada, through the Governor's Office of Energy and other state agencies, commit to work with the Administration, Department of Defense and various Federal Agencies in partnership on the Section 368 corridor designation process to address renewable energy development and transmission corridor land use requirements, growth priorities, and long-term energy planning needs.

Background: The State of Nevada is aware that the Bureau of Land Management (BLM) and the U.S. Forest Service (FS), with technical input from the Department of Energy (DOE), will be responsible for potential (re)designation and revision of Section 368 energy corridors and for the incorporation of those designated energy corridors into land use plans. As Nevada seeks to expand the development and use of clean renewable energy resources, the construction and maintenance of a robust and well connected electricity transmission infrastructure has become critically important and represents a key energy policy priority for the State. The high percentage of federal land under various agency jurisdictions in Nevada also requires close state and federal cooperation on all matters which can impact large-scale clean energy project development and implementation.

Conclusion: The Task Force agreed that the State of Nevada should continue to work collaboratively with state and federal agencies on energy corridors.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This recommendation was brought to the Task Force by the TAC on Grid Modernization.

7. **Recommendation:** The New Energy Industry Task Force recommends that the Governor's Office of Energy, the Nevada Division of Minerals and the Nevada Mining Association explore the possibility of utilizing existing closed or closing mining sites to expand domestic renewable resources such as geothermal.

Background: A proposal was brought to the Task Force for consideration at the final meeting on September 27, 2016 to highlight the wealth of geothermal in Nevada and the importance of developing domestic resources and utilizing existing mining sites that are closed or closing, to ensure national security. The Task Force discussed how resources like geothermal are sited based on resource location, and that often there is a similarity to the geologic features found in mining sites.

Conclusion: The original proposal was to expand geothermal energy projects using existing mining resources and to develop a plan of action to bring closed or closing mines into renewable resource development; however, because the details of such a plan were not presented, the Task Force recommended that the idea be explored in more detail.

Vote: Task Force approved unanimously (with 1 abstention)

Notes: This proposal was brought to the Task Force for consideration by Senator Spearman.

TASK FORCE MEMBERS

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Beth	O'Brien	Pattern
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Dennis	Laybourn	Newmont Mining Corporation
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TAC – DISTRIBUTED GENERATION & STORAGE

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Matt	Tuma	Governor's Office of Economic Development
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Sarah	Van Cleve	Tesla
Marco	Velotta	City of Las Vegas
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Dale	Stransky	Bureau of Consumer Protection
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Adam	Kramer	Switch
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Jack	McGinley	NV Energy