WORK SESSION DOCUMENT GOVERNOR'S COMMITTEE ON ENERGY CHOICE Technical Working Group on Innovation, Technology and Renewable Energy Policy Recommendations to be Presented for Consideration by the Full Committee on Energy Choice

The Technical Working Group on Innovation, Technology, and Renewable Energy has been charged with examining the following specific topics related to the Energy Choice Initiative (E.C.I.):

Energy Efficiency Programs Demand-side Management Programs Renewable Portfolio Standards Electric Vehicles Aggregation Programs, including Community Solar Programs Incentive Programs for other Technologies of Interest Net Metering Blockchain Technology

Pursuant to Executive Order 2017-03 and Executive Order 2017-10, and in accordance with the directive given at the November 7, 2017 meeting of the Governor's Committee on Energy Choice, during which Chairman Mark Hutchison instructed Committee Technical Working Groups to prepare summaries and policy recommendations for consideration by the full Committee, the Technical Working Group (TWG) on Innovation, Technology and Renewable Energy hereby reports the following presentations and recommendations.

This TWG has met six times since formation and received ten presentations. While this TWG spent a significant amount of time on the topics assigned in its workflow, the issue of opening Nevada's retail energy market is time consuming and complicated, and more details and issues need to be analyzed. An Appendix following this report provides additional details on those presentations, including each presenters' proffered recommendations relating to innovations and technology in renewable energy development, should the E.C.I. pass into effect.

1. <u>Potential Impacts of a Restructured Energy Market on Currently-</u> <u>Existing Renewable Energy Programs</u>

STATEMENT OF THE ISSUE: Nevada's current energy goals and policies recognize the need for and benefits of indigenous renewable energy development, conservation of energy, environmental protection, economic development and improved technology. NRS 701.010. Under existing state law and regulations, certain renewable energy programs are mandated and being pursued by stakeholders across Nevada, including low-income energy efficiency and conservation programs, incentives for the installation of distributed renewable generation, economic development under the renewable portfolio standard, net metering and incentives for the development of other burgeoning technologies like storage and electric vehicles. Should the E.C.I. pass a second time at the General Election in November of

2018, there will likely be some effect on these existing programs under a restructured market. However, the language of the E.C.I. states: "Nothing herein shall be construed to invalidate Nevada's public policies on renewable energy, energy efficiency and environmental protection or limit the Legislature's ability to impose such policies on participants in a competitive electricity market." The following findings relate to the potential effects of a restructured market on current programs in Nevada relating to renewable energy.

SUMMARY OF PRESENTATIONS:. The following presentations relating to existing renewable energy programs and potential opportunities to continue those types of programs, should the E.C.I. pass into effect, have been offered to the TWG.

- I. Pat Egan, Senior Vice President of Renewable Energy and Smart Infrastructure, NV Energy – Mr. Egan presented before the working group on Oct. 10, 2017, and reviewed current NV Energy programs related to energy efficiency, demandside management, energy storage, and recently approved legislative measures from the 2017 Legislative Session.
- II. Jason Burwen, Policy and Advocacy Director, Energy Storage Association. Mr. Burwen presented before the working group on December 5, 2017, and reviewed current advances in storage technology and policies that support its further development and implementation.
- III. Anthony Star, Director, Illinois Power Agency. Mr. Star presented before the working group on October 10, 2017, and reviewed his agency's role in supporting the development of renewable energy, energy efficiency and other clean energy incentive programs. Mr. Star's presentation also informs other issues discussed in this document.
- IV. Hank James, Executive Director, Nevada Rural Electric Association (NREA) and Jesse Wadhams, Fennemore Craig. Mr. James and Mr. Wadhams presented before the working group on January 23, 2018, and reviewed the structure of its members, Nevada's rural electric cooperatives, power districts and municipal utilities. This presentation also broadly described how NREA members provide options for renewable energy programs within their services territories.
- V. Chris Neme, Energy Futures Group Consulting. Mr. Neme presented before the working group on February 6, 2018. Mr. Neme described how energy efficiency can be a resource for energy, capacity, transmission and distribution, and provided options for how these programs can be offered in a retail choice market.

2. <u>Restructured Energy Markets and Renewable Portfolio</u> <u>Standards (RPS)</u>

STATEMENT OF THE ISSUE: Executive Order 2017-10 directed the Committee on Energy Choice to examine "whether or how to implement the ideas in Assembly Bill 206," which would have raised Nevada's Renewable Portfolio Standards. EO 2017 -10 stated that the bills were vetoed because, "among other things, there was significant uncertainty as to how the policies in the bills would be affected by the proposed amendment to the Nevada Constitution contained in the upcoming 2018 ballot question." Further, EO2017-10 stated that "the members of the CEC

are uniquely qualified to examine whether or how to implement the ideas in AB 206 and SB 392 should Nevada's voters pass the Energy Choice Initiative for the second time. Finally, EO 2017-10 stated that it is "necessary and prudent that the CEC study, review and discuss Nevada's renewable portfolio standards... and make recommendations." Nevada's RPS currently calls for 25% of energy to be derived from renewable sources by 2025.

<u>SUMMARY OF PRESENTATIONS</u>: The following presentations relating to RPS and restructured energy markets have been offered to the TWG.

- I. Maria Robinson, Associate Director of Energy Policy and Analysis, Advanced Energy Economy – Ms. Robinson presented before the working group on Aug. 9, 2017 and reviewed market structures and whether RPS encourages continued development of Nevada's renewable resources
- II. Amanda Levin, Climate and Energy Advocate, Natural Resources Defense Council. Ms. Levin presented before the working group on Aug. 9, 2017 and discussed the relationship between RPS and Nevada's role as a regional leader in the development of cost-effective energy generation. Ms. Levin also provided historical information for other states that have both an open retail market and RPS. Ms. Levin's presentation provided information indicating that an RPS and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's RPS, passage of ECI would neither inhibit nor enable that legislative review.
- III. Sue Tierney, Analysis Group, presented to the Committee on Energy Choice on November 7, 2017 and provided information pertinent to this TWG on how other states with customer choice have implemented renewable portfolio standards.

3. <u>Implications of a Restructured Energy Market regarding</u> <u>Community Solar Programs and Net Metering</u>

STATEMENT OF THE ISSUE: Executive Order 2017-10, amending Executive Order 2017-03, directed the Committee on Energy Choice to examine "whether or how to implement the ideas in Senate Bill 392, which would have allowed community solar gardens to begin operating in Nevada." Specifically, EO 2017-03 was amended to add the following topics for the CEC to address to include "allowing community solar gardens to begin operating in Nevada." Additionally, in 2017, AB 405 established new parameters for rooftop solar technologies. There will likely be impacts resulting from a restructured energy market on opportunities for developing community solar programs as well as impacts for rooftop solar development.

SUMMARY OF PRESENTATIONS: The following presentations relating to rooftop solar and community solar gardens have been offered to the TWG.

- I. Justin Barnes, EQ Research, LLC. Mr. Burwen presented before the working group on January 23, 2018 and discussed retail choice and net metering considerations.
- II. Marta Tomick, Program Director, Vote Solar. Ms. Tomick presented before the working group on Dec. 5, 2017 and provided an overview of community solar

programs in restructured markets and reviewed issues to consider in integrating community solar programs under a restructured energy market. Ms. Tomick's presentation. Ms. Tomick's presentation also provided information indicating that community solar programs and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's enabling of community solar opportunities, passage of ECI would not inhibit nor enable that legislative review.

4. <u>Implications of a Restructured Energy Market for Nevada's</u> <u>Ability to be a Net Energy Exporter</u>

STATEMENT OF THE ISSUE: Executive Order 2017-03 directed the Committee on Energy Choice to assess Nevada's goal of becoming a net exporter of energy. A restructured energy market in Nevada may pose significant implications for this strategic goal.

SUMMARY OF PRESENTATIONS:

I. Phil Pettingill, Director, Regional Integration, California ISO. Mr. Pettingill presented on October 10, 2017 and provided an overview of CAISO's increasing integration of distributed energy resources into the ISO market.

5. Recommendations of the Innovation and Technology in Renewable Energy Development Working Group

Based upon the information provided to the working group, the following recommendations are proposed for consideration by the Committee on Energy Choice:

- A. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor, Legislature, and regulatory agencies and organizations to implement the E.C.I., should it be approved by the voters again in 2018, in a manner that conditions market participation on retail offerings that align with Nevada's existing goals for renewable energy, energy efficiency and technology, and that do not harm Nevada's current programs, statutes, and regulations including, but not limited to, renewable energy requirements, energy efficiency, subsidized services for low-income customers, net metering as set out in AB 405 (2017), and storage.
- B. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to adopt, should the E.C.I. ballot question pass, competitive retail market policies that do not impede progress and innovation in current and future technologies, and to develop and promote innovative policies and programs that advance the use of renewable energy and clean technology.
- C. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to consider, should the E.C.I. pass, the

creation or funding of incubators or pilot projects for innovative technologies that may provide meaningful choice for Nevadans.

- D. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to consider policies, should the E.C.I. be approved, that promote regulatory flexibility for incentives to renewable energy programs that offer pilot programs to integrate "smart" energy technologies that support distributed generation, storage, and other clean energy advances, including policies that could promote transportation innovation such as green fleets and the use of electric vehicles for storage and distributed generation, and to revisit the topic of community solar gardens during the 2019 Legislative Session
- E. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to evaluate, should the E.C.I. ballot question pass, all proposed policies and programs with a consideration of positioning Nevada as a net exporter of energy.