

NEVADA LEGISLATURE LEGISLATIVE COMMITTEE ON ENERGY

(Nevada Revised Statutes [NRS] 218E.805)

SUMMARY MINUTES AND ACTION REPORT

The second meeting of the Nevada Legislature's Legislative Committee on Energy was held on Monday, April 7, 2014, at 9:30 a.m. in Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. The meeting was videoconferenced to Room 2135 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. A copy of this set of "Summary Minutes and Action Report," including the "Meeting Notice and Agenda" (Exhibit A) and other substantive exhibits, is available on the Nevada Legislature's website at http://www.leg.state.nv.us/interim/77th2013/committee/. In addition, copies of the audio or video record are available through the Legislative Counsel Bureau's Publications Office (e-mail: publications@lcb.state.nv.us; telephone: 775/684-6835).

COMMITTEE MEMBERS PRESENT IN LAS VEGAS:

Senator Kelvin Atkinson, Chair Assemblywoman Marilyn Kirkpatrick, Vice Chair Senator Michael Roberson

COMMITTEE MEMBERS ABSENT:

Senator Aaron D. Ford Assemblyman David P. Bobzien Assemblyman Cresent Hardy

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

Marji Paslov Thomas, Principal Research Analyst Matt Mundy, Senior Deputy Legislative Counsel Dan Yu, Principal Deputy Legislative Counsel Gayle Nadeau, Committee Secretary

OPENING REMARKS

• Senator Kelvin Atkinson, Chair, began the meeting with procedural comments and explained the reason for the revision to and reposting of the agenda. Additionally, he noted that several members of the Committee were not able to attend and shared that one member present would need to leave the meeting early.

PUBLIC COMMENT

- Janette N. Dean, resident, Washoe Valley, supports Nevada becoming the nation's leader in renewable energy through a combination of solar, geothermal, wind, and hydropower resources. She also advocates continuing the State's progress on reducing its reliance on fossil fuels. (Please see Exhibit B.)
- Graham Hollister Jr., Nevada resident, said he is a former rancher who used conservation programs and was involved in construction, earthmoving, et cetera. Mr. Hollister stated he shares the commitment toward the environment as expressed by the previous public testifier.
- Melvin G. Brewster, Ph.D., member of the Walker River Paiute Tribe, Nevada, testified that the Tribe's sacred covenant with the Creator is to protect Mother Earth. Dr. Brewster noted there are of a number of sacred archeological sites in the State that need to be protected, and therefore, he requested the State of Nevada consult the Tribe on any proposed projects that could have environmental impacts on water or the earth.
- Marcia Litsinger, owner and farmer, Churchill Butte Organics, Silver Springs, shared she has utilized solar power for 30 years. Ms. Litsinger said she discovered that the solar panels on the Nevada Legislature's parking garage rooftop had not been working since February of 2013. Upon inquiring with the Legislative Counsel Bureau (LCB) as to why, she learned a part was needed. Ms. Litsinger expressed concern that while the solar panels are not working, the benefit to taxpayers is compromised.
- David von Seggern, Ph.D., resident, Reno, Nevada, testified he retired from a career in geophysics. He said his expertise is in the area of nuclear explosions and earthquakes, and he spent 10 years in the oil and gas industry developing seismic methods of exploration. Dr. Seggern opined a transition to clean, renewable energy must take priority to avoid grave consequences of mankind's current energy habits.
 - Additionally, Dr. Seggern urged the State of Nevada to build a geothermal visitors' center near a geothermal field on Interstate 80 to enable visitors to learn about the State's vast geothermal resources. (Please see Exhibit C.)
- Vernon Lee, member, Moapa Band of Paiutes, southern Nevada, shared he is a
 member of the Tribal Council as well as the Tribe's environmental committee.
 He discussed changes that have occurred worldwide over the years since the transition

from the industrial revolution to the technologies of today. Mr. Lee supports moving away from fossil fuels to renewable energy sources.

- Levon Budding, Nevada resident and volunteer/organizer with the southern Nevada chapter of the Sierra Club, spoke on behalf of 1,500 Nevadans who signed petitions supporting increased energy efficiency performance and opposing fracking in Nevada. Mr. Budding said Nevada's national energy efficiency ranking fell from 15th place to 33rd within the past 5 years. (Please see Exhibit D-1, Exhibit D-2, and Exhibit D-3.)
- Melanie Meehan Crossley, resident of Genoa, called attention to the State's renewable energy resources. She expressed support for Nevada to be a leader in this area.
- Dennis Gunn, resident, Crescent Valley, supports using Nevada's renewable resources to power the needs of the State now and in the future. Mr. Gunn also voiced concern for the health of Nevada's water if fracking begins in Nevada.

APPROVAL OF MINUTES OF THE MEETING HELD ON JANUARY 13, 2014, IN LAS VEGAS, NEVADA

• Due to lack of a quorum, Chair Atkinson announced this agenda item would be heard at the Committee's next meeting.

PRESENTATION ON NET METERING STUDIES IN SELECTED STATES

• Jason B. Keyes, Attorney, Interstate Renewable Energy Council (IREC), Inc., said IREC is a nonprofit organization that has been involved with net metering for 20 years. For the past 7 years, Mr. Keyes noted he has worked with utility commissions in 30 states on their net metering rules.

Beginning discussion of his slide presentation (Exhibit E), Mr. Keyes remarked he would address valuation of net metering and called attention to his handout (Exhibit F) regarding calculating the benefits and costs of distributed solar generation. Slide presentation categories discussed by Mr. Keyes:

- o Photovoltaic installations and pricing;
- Net metering program caps (percent of utility peak demand);
- Net metering grades (www.freeingthegrid.org);
- Valuation highlights;
- o Avoided capacity costs; and
- o The "Duck Curve" and TOU (time-of-use) rates, demand response, and storage.

Other areas of discussion by Mr. Keyes:

- Residential and commercial rooftop solar panel systems, generation of power, and rates paid relative to each;
- o The growth of solar power;
- Commercial solar typically generates more power in terms of megawatt hours than residential; when evaluating costs and benefits of net metering, examine the commercial side;
- o Price projections for solar power and systems;
- o Preservation of fossil and carbon-based fuels by using solar power; and
- o Impact of rates from the perspective of customers using net metering versus those who do not, and how net metering programs are organized in other states.

Further highlights from Mr. Keyes discussion of valuation of distributed solar generation (Exhibit E):

- An increase in solar energy generation systems by commercial and residential customers would result in significant financial savings to consumers because fewer natural gas plants would need to be built. Therefore, less natural gas would be consumed.
- Rooftop solar power generation avoids the need to transport power on lines from plants hundreds of miles from customers;
- O Societal benefits: (1) creating jobs from solar energy unit installations; (2) reducing the impact to the environment and health by not burning as much carbon-based fuels; and (3) savings per kilowatt-hour is realized through solar energy generation;
- Integration costs, or costs to interconnect systems, and administration costs; and lost kilowatt-hour revenues to the utility companies as a result of customers using rooftop solar systems;
- o Capacity benefits as storage of energy is becoming less expensive; and
- o Numerous state valuation program studies are occurring across the country, and almost all of these studies look at a 20-year life for photovoltaic panels.

Discussion ensued between Vice Chair Kirkpatrick and Mr. Keyes regarding additional costs on constituents' power bills as a result of the net metering program. Additionally, they discussed savings that will be realized by not needing to build as many natural gas

plants if net metering is increased. However, it was noted by Vice Chair Kirkpatrick that backup systems need to be available should solar power fail to meet all energy needs at various times throughout the year.

Further discussion between Vice Chair Kirkpatrick and Mr. Keyes ensued concerning the net metering studies in various states across the nation and whether the net metering programs were implemented because cost savings were expected as a result of findings in the studies. Furthermore, Vice Chair Kirkpatrick queried Mr. Keyes regarding whether consistent standards are used by entities conducting net metering studies to ensure conclusions are reliable and to avoid biased opinions.

- Due to lack of a quorum, Chair Atkinson announced the following agenda items would be heard at a future meeting of the Committee:
 - o Presentation on Nevada's Green Building Tax Abatement Program;
 - o Presentation on Clean Energy Project White Paper, Renewable Energy Powers Silver State As a Clean Energy Industry Hub; and
 - o Presentation on Economic Benefits of Rooftop Solar.

STATUS REPORT ON THE NET METERING STUDY (PURSUANT TO ASSEMBLY BILL 428, SECTION 26.5, 2013 SESSION

• David Noble, Commissioner, Public Utilities Commission of Nevada (PUCN), commented on a remark by Levon Budding (previously identified) supporting increased energy efficiency in the State. He said the PUCN would address voltage efficiencies at its April stakeholder meeting.

He reported on the status of the net metering study as mandated in Section 26.5 of Assembly Bill 428 (Chapter 510, *Statutes of Nevada 2013*), which is being conducted by the California Company E3 (Energy and Environmental Economics, Inc.). Commissioner Noble noted the costs and benefits of net metering can be extrapolated from other states, but each state has unique circumstances, which is why E3 is conducting a study for Nevada.

Commissioner Noble offered a chronology of events that included forming a stakeholder committee for the net metering study; the request for proposals process that resulted in the selection of E3 to conduct the study in Nevada; the fine-tuning of assumptions and parameters for the study by the stakeholder committee to coincide with the data collection from NV Energy and E3; proposed deadlines for the stakeholder committee to review and refine the different stages of the draft study that will result in the final net metering study for submission to the Nevada Legislature by October 1, 2014.

- Snuller K. Price, Partner, E3, testifying via teleconference, provided a brief background on himself and the Company and addressed the following matters in his slide presentation (Exhibit G):
 - The priority of the study is to ensure the accuracy of results and information that will be provided to the Nevada Legislature through the PUCN.
 - The importance of the PUCN's stakeholder committee input during the course of the net metering study.
 - o Four key methodology elements for the study:
 - 1. Collect data primarily from NV Energy's resource plan filings with the PUCN, which include projected purchase costs of energy; retirement of power plants such as the Reid Gardner Generating Station; and plans for purchasing new resources to serve Nevada customers.
 - 2. Develop methodologies in conjunction with the stakeholders to determine exactly how each cost and benefit element of the net metering program will be evaluated.
 - 3. Analyze distributive energy resources, including behind-the-meter solar generation and energy efficiency, using the "standard practice manual" to conduct an analysis.
 - 4. Document and compile the final net metering study, which must be submitted to the Nevada Legislature by October 1, 2014.

Mr. Price pointed out the cost-benefit analysis would be evaluated over two time scales: (1) net metering systems installed in Nevada through 2013; and (2) comparing existing systems to systems that will be installed through 2016. He stressed 2016 is significant to the solar industry because the federal energy investment tax credit applies only through 2016.

Continuing his testimony, Mr. Price said there are five methods to evaluate the costs and benefits of net metering: (1) assess the costs and benefits to those installing net metering systems; (2) gauge the impact on those who are not installing solar systems and the impact on their utility bills; (3) evaluate the utility bills for all customers in Nevada to see whether bills are collectively increasing or decreasing as a result of net metering programs; (4) examine the broader social perspective of Nevadan's paying more or less for energy regardless of who pays the bills and who receives the benefits; and (5) analyze the societal nonmonetary benefits such as reduced carbon dioxide emissions.

Mr. Price reiterated that the goal of E3's net metering study is to provide accurate information to the Nevada Legislature so informed decisions can be made regarding legislation for net metering policy in the State. He noted that E3 will provide a spreadsheet tool to the PUCN that will allow the Commission and the public to examine E3's accounting of the costs and benefits, and from which perspective.

At the direction of the PUCN, Mr. Price reported E3 will apply different scenarios to retail rates and the retail rate design of customers, both residential and commercial. The results of this information will assist the PUCN when making rate changes from the net metering customers' perspective to the nonparticipants of net metering.

Concluding his testimony, Mr. Price said E3 will also conduct a jobs and demographic analysis.

Mr. Price clarified a question from Vice Chair Kirkpatrick regarding some data needed to complete E3's net metering study with Mr. Price reassuring Vice Chair Kirkpatrick that E3 has the majority of information to complete the study.

Discussion ensued between Vice Chair Kirkpatrick and Mr. Price regarding the structure of the State's energy generation pilot rebate program and ensuring that it will be applied to the results of E3s net metering study.

Discussion ensued between Vice Chair Kirkpatrick and Commissioner Noble regarding Vice Chair Kirkpatrick's query about marketing the net metering program to the general public, because she noted, there are many Nevadans who are passionate about net metering but not every member of the public understands the process or the costs and benefits of this energy option.

PRESENTATION BY SOLARCITY ON THE ROLE OF RENEWABLE DISTRIBUTED GENERATION IN NEVADA'S CLEAN ENERGY ECONOMY

- Jo Ferriter, Vice President, Customer Account Management, SolarCity, began her testimony by presenting a video of SolarCity's Las Vegas facilities, which has been in operation since June 2013, and she noted, the Company hired more than 300 people in southern Nevada in the past 8 months. Addressing her Microsoft PowerPoint presentation (Exhibit H), Ms. Ferriter discussed the following matters:
 - o SolarCity's vision, which is to produce clean energy for less than a monthly utility bill.
 - o SolarCity's experience as a full-service company offering initial consultation, design, financing, installation, energy efficiency, ongoing support, and a relationship with the customer for a minimum of 20 years.

- O An overview of the Company, which is headquartered in San Mateo, California, and employs more than 5,000 employees. The Las Vegas location is SolarCity's global command center, and the Company anticipates a workforce of more than 1,000 people in Nevada by the end of 2015.
- Dan Chia, Director, Policy and Electricity Markets, and Deputy Director, Government Affairs, SolarCity, continued the slide presentation (<u>Exhibit H</u>) discussing the following items:
 - o SolarCity is one of the largest solar companies in the nation;
 - o Solar system average prices drop as installations increase;
 - O Solar system statistics in terms of growth: (1) in 2013, more than 140,000 individual systems were installed nationwide with a market value of approximately \$14 billion; and (2) GTM Research predicts a 40 percent growth in the residential and nonresidential market in 2014;
 - The United States solar industry, as a whole, employs more people than the steel, coal mining, and U.S. auto manufacturing industries;
 - Solar job creation potential is enormous as solar power becomes the "new normal" in such states as Arizona and Colorado;
 - The PUCN's net metering study being conducted by E3, which was mandated in A.B. 428, is the first study in the nation to comprehensively examine some, if not most, of the costs and benefits, including societal benefits, of solar power generation; and
 - The water saving benefits of solar, since water is not needed to generate solar power. Electricity, as a factor of water, uses more water than all other household activities combined, including landscaping.

There was discussion among Vice Chair Kirkpatrick, Mr. Chia, and Ms. Ferriter regarding simplifying the discussion from megawatts of solar-generated power to an equivalent of how many rooftops or square footage would be represented in a certain number of megawatts and how marketing of solar power would be addressed in educating the public about solar power.

PRESENTATION ON THE ENERGY IMBALANCE MARKET

• Tony F. Sanchez III, Senior Vice President, Government and Community Strategy, NV Energy, addressed the following topics during his Microsoft PowerPoint slide presentation (Exhibit I):

- o Description of an Energy Imbalance Market (EIM);
- What an EIM does not address; and
- o Timeline for implementation of an EIM.

Highlights of the presentation by Mr. Sanchez:

- The western states have 38 interconnected balancing authorities; one consolidated authority is in Nevada because of the advent of the "One Nevada Transmission Line";
- Balancing authorities rely on excess generation as well as the need for power purchases from other participants, and the authorities maintain a balance as energy loads and resources change on a regular basis;
- o Balancing authorities work together on an hourly basis to ensure that supply and demand are stable;
- The California Independent System Operator (CAISO) corporation created an EIM to assist in the integration of renewable resources, share balancing resources, and increase the reliability of the overall electric system in California. The CAISO EIM automatically adjusts participating resources every 5 minutes in order to economically preserve the balance, and it always uses the lowest cost resource to balance supply and demand;
- CAISO will "go live" in October 2014 with PacifiCorp (a Portland, Oregon, utility) being the first entity to join that EIM;
- o The CAISO EIM is a voluntary market that offers NV Energy an opportunity to further optimize the dispatch of its existing resources in Nevada;
- An EIM participant maintains ownership and control of its generation, transmission, and distribution of assets. The EIM does not reduce existing supply obligations of participants; participants must plan for their respective hourly capacity; and
- In August of 2012, NV Energy announced joint studies with CAISO for the development of transmission facilities as well as the sharing of energy resources. The studies have not been completed.
- Shawn Elicegui, Vice President, Regulatory Affairs, NV Energy, provided an overview of the following matters (Exhibit I):
 - o The NV Energy-CAISO EIM study;
 - o Potential benefits for Nevada:
 - o Costs to implement an EIM for Nevada; and
 - o CAISO EIM governance.

Highlights of Mr. Elicegui testimony:

- The NV Energy-CAISO study focused on the benefits of NV Energy joining CAISO and the PacifCorp EIM market.
- The study addressed issues such as factoring information for 2017 and 2022 because those are the years for which the model had the most refined information for generation loads in variable resources throughout the west.
- Three assumptions from the study that would benefit Nevada: (1) Nevada would not make its generation available from June through September, which reduces the benefits that flow to all participants in the CAISO EIM; (2) the calculation of flexibility reserves, which is the diverse nature of broader markets; and (3) the amount of renewable energy that would otherwise be curtailed that will flow throughout the western market.
- O The study did not quantify reliability benefits, which means California, Nevada, and PacifiCorp are not able to know what is happening in the EIM member market to then make changes automatically on a short-term basis. However, CAISO supports reliability benefits for all participants in the EIM market.
- Stacey Crowley, Director, Regional Affairs, CAISO, reiterated the importance of developing a governance model that takes into account the regional voices that will be participating in the CAISO EIM market.

Discussion ensued among Vice Chair Kirkpatrick, Mr. Elicegui, Ms. Crowley, and Mr. Sanchez regarding potential benefits for Nevada by joining CAISO, the slide presentation (Exhibit I) statement "share of identified renewable energy curtailment value avoided in California," and ensuring with checks and balances that Nevada utility customers will benefit by NV Energy joining the CAISO EIM.

PRESENTATION ON NEVADA'S GREEN BUILDING TAX ABATEMENT PROGRAM

• Chair Atkinson announced earlier in the meeting that this agenda item would be heard at a later meeting.

PRESENTATION ON CLEAN ENERGY PROJECT WHITE PAPER, RENEWABLE ENERGY POWERS SILVER STATE AS A CLEAN ENERGY INDUSTRY HUB

• Chair Atkinson announced earlier in the meeting that this agenda item would be heard at a later meeting.

PRESENTATION ON SOUTHWEST ENERGY EFFICIENCY PROJECT REPORT, THE \$20 BILLION BONANZA: BEST PRACTICE ELECTRIC UTILITY ENERGY EFFICIENCY PROGRAMS AND THEIR BENEFITS FOR THE SOUTHWEST

- Tom Polikalas, Nevada representative, Southwest Energy Efficiency Project (SWEEP), offered brief introductory remarks.
- Howard Geller, Ph.D., Executive Director, SWEEP, began his Microsoft PowerPoint slide presentation with a brief background about SWEEP and noted his testimony would address the November 2012 SWEEP study known as The \$20 Billion Bonanza: Best Practice Electric Utility Energy Efficiency Programs and Their Benefits for the Southwest. (Please see Exhibit J, Exhibit K, and Exhibit L.)

Highlights of Dr. Geller's testimony regarding the energy efficiency project report:

- State-of-the-art best practice utility energy programs (BPUEPs) around the country;
- Costs and benefits of implementing the BPUEPs;
- The possibility of achieving about 20 percent electricity savings from BPUEPs implemented in 2010 through 2020;
- Evaluation of the current BPUEP policies in other states to better realize the benefits offered by BPUEPs;
- Analysis of the overall impacts on jobs and personal income state-by-state in the study;
- Examination of the potential avoided pollutant emissions, such as from carbon dioxide, and estimated water savings;
- o Nevada as a leader in energy efficiency, and not just renewable energy;
- o Trends on energy efficiency policy and programs in Nevada;
- Energy policy recommendations for Nevada to advance cost-effective energy efficiency measures: (1) adopt energy efficiency standards (as 24 states including Arizona and New Mexico have done); (2) ditch "lost revenue" recovery (decouple utility fixed cost recovery and energy sales); and (3) maximize customer participation and utility bill savings (fully fund cost-effective utility efficiency programs); and
- o "Win-win" scenario for the State through economic savings when consumers implement energy efficiency measures.

Discussion ensued between Vice Chair Kirkpatrick and Dr. Geller regarding low-income demographics and respective homes that need energy-efficient upgrades as well as assistance with utility bills. Also discussed was acquiring a list for the Committee of retail outlets in Nevada that accept items, such as used light bulbs, for recycling. Commenting further, Vice Chair Kirkpatrick opined Nevada has won awards for having energy-efficient homes, a subject that offers opportunity for positive conversation.

• Vice Chair Kirkpatrick addressed a remark from Ms. Litsinger, previously identified, made during the meeting's first public comment period about the solar panel not working on the Nevada Legislature's parking garage. She confirmed the matter is being addressed by the LCB. Vice Chair Kirkpatrick explained there are two solar projects, one run by the LCB, which is working well, and one run by the Nevada Supreme Court, which is missing a screen. She said the Nevada Supreme Court is working on fixing its solar panel.

PRESENTATION ON ECONOMIC BENEFITS OF ROOFTOP SOLAR

• Chair Atkinson announced earlier in the meeting that this agenda item would be heard at a later meeting.

PUBLIC COMMENT

- Les Lazareck, owner, Home Energy Connection, Nevada, commented he originally started "EnergyFit Nevada" with the help of Nevada utilities and municipalities, and has trained hundreds of energy auditors and contractors to participate in this program. Mr. Lazareck noted he supports promoting energy efficiency work for such things as complete home retrofits and improving the environment overall.
- Tom Clark, consultant, Sempra U.S. Gas and Power, requested that Sempra appear at a future meeting of the Legislative Committee on Energy to discuss some of the Company's projects such as the Copper Mountain project in Boulder City, Nevada.
- Christian Gerlach, representing Nevadans Against Fracking, expressed concern that the drafted regulations by Nevada's Division of Minerals relative to Senate Bill 390 (Chapter 466, *Statutes of Nevada 2013*) did not sufficiently protect the State's groundwater. He also spoke briefly against hydraulic fracturing in Nevada and submitted 9,000 signatures opposing hydraulic fracturing in the State. (Please see Exhibit M, Exhibit M-1, Exhibit M-2, Exhibit M-3, and Exhibit M-4.)
- Janette N. Dean, previously identified, expressed her opposition to hydraulic fracturing in Nevada. She expressed concern about global warming and told the Committee she supports its work to promote renewable energy and energy efficiency in Nevada.

Ray Bacon, Executive Director, Nevada Manufacturers Association, did not speak under public comment, rather he submitted written comments. (Please see Exhibit N.)

ADJOURNMENT

Senator Kelvin Atkinson, Chair

at 12:29 p.m.	s to come before the Committee, the meeting was adjourned
	Respectfully submitted,
	Gayle Nadeau
	Senior Research Secretary
	Marji Paslov Thomas
	Principal Research Analyst
APPROVED BY:	

LIST OF EXHIBITS

Exhibit A is the "Meeting Notice and Agenda," provided by Marji Paslov Thomas, Principal Research Analyst, Research Division, Legislative Counsel Bureau (LCB).

Exhibit B is the remarks of Janette N. Dean, resident, Washoe Valley, provided by Ms. Dean.

Exhibit C is comments of Reno resident David von Seggern, Ph.D., provided by Dr. Seggern.

<u>Exhibit D</u> consists of 54 pages of signatures supporting making energy efficiency a priority in the State of Nevada, provided by Levon Budding, Nevada resident and volunteer/organizer with the southern Nevada chapter of the Sierra Club.

<u>Exhibit D-1</u> consists of 56 handwritten letters to the Legislative Committee on Energy (LCE) supporting energy efficiency in the State of Nevada, provided by Levon Budding, Nevada resident and volunteer/organizer with the southern Nevada chapter of the Sierra Club.

Exhibit D-2 consists of 77 pages of signatures directed to the LCE supporting making energy efficiency in the State of Nevada a priority, provided by Levon Budding, Nevada resident and volunteer/organizer with the southern Nevada chapter of the Sierra Club.

<u>Exhibit D-3</u> consists of 53 pages of signatures supporting making energy efficiency in Nevada a priority, provided by Levon Budding, Nevada resident and volunteer/organizer with the southern Nevada chapter of the Sierra Club.

<u>Exhibit E</u> is a Microsoft PowerPoint presentation titled "Valuing Net Metering Programs," provided by Jason B. Keyes, Attorney, Interstate Renewable Energy Council (IREC), Inc.

<u>Exhibit F</u> is a document titled "Regulator's Mini-Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation," provided by Jason B. Keyes, Attorney, Interstate Renewable Energy Council (IREC), Inc.

Exhibit G is a slide presentation titled "Nevada NEM Analyis," provided by Snuller K. Price, Partner, E3 (Energy and Environmental Economics, Inc.).

Exhibit H is a slide presentation titled "The Role of DG in Nevada's Clean Energy Economy," provided by Jo Ferriter, Vice President, Customer Account Management, SolarCity.

<u>Exhibit I</u> is a slide presentation titled "NV Energy and the Energy Imbalance Market" (on the second slide), provided by Tony F. Sanchez III, Senior Vice President, Government and Community Strategy, NV Energy.

Exhibit J is Microsoft PowerPoint presentation titled "Energy Efficiency and Job Creation Potential in Nevada," provided by Howard Geller, Ph.D., Executive Director, Southwest Energy Efficiency Project (SWEEP).

<u>Exhibit K</u> is a document titled "Nevada Energy Fact Sheet: Energy Efficiency and Energy Consumption," provided by Howard Geller, Ph.D., Executive Director, SWEEP.

Exhibit L is a document titled "The \$20 Billion Bonanza: Best Practice Electric Utility Energy Efficiency Programs and Their Benefits for the Southwest," provided by Howard Geller, Ph.D., Executive Director, SWEEP.

<u>Exhibit M</u> consists of a cover letter from Janice Keiserman of Henderson, Nevada, noting opposition to Noble Mining's intention to begin fracking in Nevada. The exhibit also consists of 179 petition pages listing individuals opposed to fracking in the State. Some of those individuals listed provided additional comments regarding their opposition to fracking. These documents were provided by Christian Gerlach, representing Nevadans Against Fracking.

Exhibit M-1 consists of an introductory statement on the first page supporting the ban on hydraulic fracturing the State of Nevada and 63 additional pages listing individuals opposed to fracturing in the State. These documents were provided by Christian Gerlach, representing Nevadans Against Fracking.

Exhibit M-2 consists of 28 pages listing individuals who oppose fracking in Nevada, as noted by Christian Gerlach during his public comments when he submitted the documents identified in Exhibits M through M-4. These documents were provided by Christian Gerlach, representing Nevadans Against Fracking.

Exhibit M-3 consists of a petition cover letter from Dawn Harris of Las Vegas, Nevada, noting opposition to hydraulic fracturing (fracking) in the State of Nevada. The exhibit also consists of 134 pages listing individuals who are opposed to fracking in the State. Some of those individuals listed provided additional comments regarding their opposition to fracking. These documents were provided by Christian Gerlach, representing Nevadans Against Fracking.

Exhibit M-4 consists of a petition cover letter from Dawn Harris of Las Vegas, Nevada, noting a hydraulic fracturing program in the State of Nevada should have oversight from an unbiased party. The exhibit also consists of 110 pages listing individuals who support the statement on the cover letter. Some of those individuals listed provided additional comments regarding the subject matter of the petition. These documents were provided by Christian Gerlach, representing Nevadans Against Fracking.

<u>Exhibit N</u> is the written public comments of Ray Bacon, Executive Director, Nevada Manufacturers Association, provided by Mr. Bacon prior to the meeting via electronic mail.

This set of "Summary Minutes and Action Report" is supplied as an informational service. Exhibits in electronic format may not be complete. Copies of the complete exhibits and other materials distributed at the meeting are on file in the Research Library of the Legislative Counsel Bureau, Carson City, Nevada. You may contact the Library online at www.leg.state.nv.us/lcb/research/library/feedbackmail.cfm or telephone: 775/684-6827.