



NEVADA LEGISLATURE
LEGISLATIVE COMMITTEE ON ENERGY
(*Nevada Revised Statutes* 218E.805)

SUMMARY MINUTES AND ACTION REPORT

The third meeting of the Nevada Legislature's Legislative Committee on Energy was held on Monday, February 8, 2016, at 9 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 3137 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/78th2015/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) and may be available online at <http://www.leg.state.nv.us/Granicus/>.

COMMITTEE MEMBERS PRESENT IN LAS VEGAS:

Assemblyman Erven T. Nelson, Chair (Resigned)
Senator Kelvin D. Atkinson
Senator Michael Roberson
Assemblywoman Olivia Diaz
Assemblyman Randy Kirner

COMMITTEE MEMBER PRESENT IN CARSON CITY:

Senator James A. Settelmeyer, Vice Chair

OTHER LEGISLATOR PRESENT:

Senator Patricia (Pat) Spearman, Senate District No. 1

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

Marjorie Paslov Thomas, Principal Research Analyst, Research Division

Bryan Fernley, Senior Principal Deputy Legislative Counsel, Legal Division

Matthew S. Nichols, Senior Principal Deputy Legislative Counsel, Legal Division

Roman Edwards, Deputy Legislative Counsel, Legal Division

Janet Coons, Principal Administrative Assistant, Research Division

Items taken out of sequence during the meeting have been placed in agenda order.

AGENDA ITEM I—OPENING REMARKS

Chair Nelson called the meeting to order.

AGENDA ITEM II—PUBLIC COMMENT

Chair Nelson called for public comment.

Denise R. Duarte, resident, Las Vegas, Nevada, submitted written testimony regarding solar net metering and the Public Utilities Commission of Nevada (PUCN) ([Exhibit B](#)). She requested the Legislature: (1) redefine the rules of the PUCN to make it accountable to the people of Nevada; (2) rectify the grandfathering of net metering customers without a time limitation; and (3) restore the solar energy industry by resolving the rate structure.

Chair Nelson and Ms. Duarte discussed what the salespeople told her at the time she invested in solar energy. She said there was no discussion about grandfathering; the only issue discussed was the 3 percent cap.

Senator Atkinson explained the Legislature does not implement policy; he stressed that is the responsibility of the PUCN.

Fuילala Riley, Chief Operations Officer, HELP of Southern Nevada, Las Vegas, requested an extension or reinstatement of the Lower Income Solar Energy Pilot Program created by Assembly Bill 428 (Chapter 510, *Statutes of Nevada 2013*).

Dennys Sian, representing SolarCity, requested support for solar energy employees to get their jobs back.

Kevin McGehee, Vice President, Evaporative Control Systems, Inc., discussed the importance of electric vehicles ([Exhibit C](#)) and applauded the Legislature for bringing Faraday & Future and Tesla Motors to Nevada.

AGENDA ITEM III—APPROVAL OF MINUTES OF THE MEETING HELD ON DECEMBER 8, 2015, IN LAS VEGAS, NEVADA

MOTION: Senator Atkinson moved to approve the minutes of the December 8, 2015, meeting held in Las Vegas, Nevada. The motion was seconded by Assemblywoman Diaz and passed unanimously.

AGENDA ITEM IV—PRESENTATION ON TESLA ENERGY

Mateo Jaramillo, Vice President, Products and Programs, Tesla Energy, Tesla Motors, shared a presentation explaining Tesla's mission to accelerate the world's transition to sustainable energy ([Exhibit D](#)). He provided an update on the gigafactory in Nevada, noting that upon completion, it will produce 50 gigawatt hours per year of annual battery production, which is more than what the rest of the world currently produces annually. Mr. Jaramillo discussed the benefits of energy storage.

Addressing questions from Committee members, Mr. Jaramillo said Tesla is working closely with utilities in Nevada, and it is not economically competitive to be entirely disconnected from the grid.

Daniel Witt, Manager, Business Development and Policy, Tesla Motors, discussed the cost and production of Tesla vehicles. He said Tesla plans to produce the Model III at the end of 2017 with a starting price of \$35,000 and a minimum driving range of 200 miles.

AGENDA ITEM V—PRESENTATION ON THE ECONOMIC AND AIR QUALITY BENEFITS OF ELECTRIC VEHICLES IN NEVADA

Mike Salisbury, Program Associate, Transportation Program, Southwest Energy Efficiency Project (SWEEP), provided an overview of the economic and environmental benefits of electric vehicles (EVs) ([Exhibit E](#)). He noted there are approximately 2,000 EVs on the road in Nevada. Mr. Salisbury shared policy recommendations of other states that provide incentives for purchasing EVs. He added a greater number of car manufacturers are offering more EV models to the public.

Assemblyman Kirner and Mr. Salisbury discussed gasoline road taxes and whether EV owners should pay a similar tax. Mr. Salisbury said an extra registration fee is being proposed rather than trying to collect taxes on electricity.

AGENDA ITEM VI—OVERVIEW OF THE NEVADA ELECTRIC HIGHWAY AND STATUS UPDATE ON THE GOVERNOR'S OFFICE OF ENERGY AND NV ENERGY JOINT INITIATIVE TO EXPAND THE STATE'S ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Marie Steele, Manager, Electric Vehicles and Renewable Energy, NV Energy, provided a presentation on the economic and air quality benefits of EVs in Nevada, the NV Energy EV program, and NV Energy's involvement with the Nevada Electric Highway (NEH) ([Exhibit F](#)).

Continuing the presentation, John Fairman, Management Analyst III, Office of Energy, Office of the Governor, discussed the funding of the charging stations along the NEH, the demand charge offset program, the Valley Electric Association, and the expansion of the NEH ([Exhibit F](#)).

A conversation took place among Committee members and Ms. Steele regarding: (1) the number of charging stations in the State; (2) the timeline of Phase 2 of the NEH; (3) the average cost of charging an EV; (4) websites that identify the locations of charging stations in Nevada; and (5) the types of plugs and adapters for EVs.

AGENDA ITEM VII—BUSINESS PERSPECTIVES ON ENERGY EFFICIENCY

Chair Nelson explained that energy efficiency (EE) encompasses all aspects of energy conservation, and it means doing the most with a limited amount of energy and wasting the least amount in the process.

Ellen Zuckerman, Senior Consultant, Schlegel & Associates, presented four different business perspectives regarding the benefits of EE on behalf of Honeywell International Inc., Schneider Electric, United Technologies, and Whirlpool Corporation as: (1) major manufacturers; (2) major employers; (3) major energy users; and (4) providers of products and services in the energy industry ([Exhibit G](#)).

David Fagotti, Senior Sales Representative, Schneider Electric, shared Schneider Electric's involvement in EE projects in southern Nevada ([Exhibit G](#)).

Ms. Zuckerman discussed three policy recommendations: (1) offer effective customer programs supported with adequate budgets; (2) offer effective programs that provide value to large, industrial customers; and (3) consider an Energy Efficiency Resource Standard (EERS) as a means to ensure effective programs over time and provide market/regulatory certainty.

Assemblyman Kirner questioned the status of Nevada's EERS.

Ms. Zuckerman explained that Nevada's EERS is in the process of being phased out, and she offered to provide information regarding the rationale for this decision.

AGENDA ITEM VIII—PRESENTATION ON ELECTRIC GRID SECURITY

Shahzad Lateef, Director, Transmission and Distribution Systems Operations, NV Energy, presented an overview of risks, attack threats, mitigation, and response to electric grid security ([Exhibit H](#)).

Kevin Judice, Vice President and Chief Information Officer, NV Energy, discussed attack and mitigation techniques related to cyber security ([Exhibit H](#)). He noted NV Energy coordinates with federal and State authorities, some of which are regularly scheduled events around the country.

AGENDA ITEM IX—PRESENTATION AND DISCUSSION ON THE SCIENCE OF CLIMATE CHANGE

Terry K. Graves, Graves Communications, introduced Oliver Hemmers, Ph.D., Vice President of Operations, Infinity Capital Management.

Dr. Hemmers shared a presentation titled “The Science of Climate Change” ([Exhibit I](#)). He discussed the types of climates created by various weather patterns, stating there is no global climate. Dr. Hemmers also discussed the relationship between the increases in carbon dioxide levels and global temperature changes as well as solar activity and its relationship to temperatures. He reported a substantial warming trend began about 200 years ago, long before there was much carbon dioxide produced from fossil fuels. Dr. Hemmers pointed out possible flaws and errors regarding the perception of climate change and global warming. He discussed sea levels, tornadoes, hurricanes, drought cycles, and the agricultural benefits of carbon dioxide. Dr. Hemmers summarized there is no global warming crisis; the orbital changes of the sun and earth mostly drive climate change—not mankind. He opined that fighting climate change is a waste of money.

Assemblywoman Diaz questioned whether Dr. Hemmers scientifically believes that humanity is leaving a carbon footprint.

Dr. Hemmers replied that humanity is leaving a footprint, but he questions whether the footprint is destroying the climate to the point we cannot live in it anymore. He agreed a cleaner environment is better, but suggested fighting carbon dioxide emissions is the wrong approach by environmentalists. Dr. Hemmers explained that carbon dioxide is an atmospheric trace gas, and it cannot trap more energy; therefore, it cannot cause any more warming. He noted that Nevada’s climate changes are related to water not carbon dioxide.

Senator Atkinson questioned the timing and sources of Dr. Hemmers’ research. Dr. Hemmers said his presentation is an overview of a report published by the Intergovernmental Panel on Climate Change (IPCC). He stressed his research covers the last nine years, and his most recent data points are from 2015. Dr. Hemmers said his data regarding hurricanes came from the National Weather Service.

Mr. Graves added the data is scientifically determined and has been accumulated historically, as recently as 2013.

Dr. Hemmers said he could provide links to all his data sources.

Per Assemblyman Nelson's request, Dr. Hemmers discussed satellite data.

AGENDA ITEM X—PUBLIC COMMENT

Regarding Dr. Hemmers' presentation, Senator Spearman, previously identified, asked for a reference list that would: (1) show where the data points were gathered; and (2) how many other scientists have acknowledged that this work is true. She stressed that businesses around the world are moving towards EE and a more renewable energy portfolio because it saves them money. Senator Spearman disagreed with Dr. Hemmers' presentation. She added there is an economic perspective she does not want to lose in the climate change conversation.

Senator Atkinson and Senator Spearman discussed comparative studies of satellite imagery.

Kyle Davis, representing the Nevada Conservation League, questioned Dr. Hemmers' data from the IPCC, stating the scientists involved in that process reached dramatically different conclusions. He offered to organize presentations that are more in line with the vast majority of scientists on the issue of climate change.

Jason Thompson, resident, Las Vegas, Nevada, commented on climate change from 1851 to the present, which he studied at the University of Nevada, Las Vegas.

Ray Bacon, representing the Nevada Manufacturers Association, stated that one-third of the energy used in Nevada is related to water. He added that Nevada produces only 10 percent of the energy it consumes, which means the State is more dependent on outside energy sources than any other state except for Delaware and Rhode Island. Mr. Bacon discussed how o-zone is made.

Anne Macquarie, resident, Carson City, Nevada, and member of the Executive Committee of the Toiyabe Chapter of the Sierra Club, opined Dr. Hemmers' presentation was incorrect. She urged the committee to visit <http://skepticalscience.com> for rebuttals of all his points.

David von Seggern, Ph.D., retired geophysicist, University of Nevada, Reno, asked the members of the Committee to dismiss Dr. Hemmers' views. He provided statements of scientific organizations closest to the research on global warming ([Exhibit J](#)).

Tom Clark, representing Sempra U.S. Gas and Power, LLC, requested to provide an update on Copper Mountain at the Committee's next meeting.

Tom Polikalis, Nevada representative, SWEEP, explained EE is on a declining schedule and will be completely phased out from contributing to the State's renewable portfolio standards by 2025.

Charles Macquarie, resident, Carson City, Nevada, disputed the facts in Dr. Hemmers' presentation. He said the vast majority of scientists who have studied climate change recognize that it is caused by humans. Mr. Macquarie encouraged members to visit the website of the [National Aeronautics and Space Administration](#) for a summary of the effects of global warming.

Suzanne Johnson, resident, Gardnerville, Nevada, shared her personal experience with battery storage in her solar home, which is grid-tied and all electric. She said her payback for the entire system was five years.

Donald Williams, resident, Las Vegas, Nevada, displaced solar worker and volunteer for the Bring Back Solar Alliance, stated he might have to leave Nevada because of what has happened to the solar industry. He stated that even if the PUCN grandfathered all solar system owners, it will not bring jobs back to Nevada. Mr. Williams requested the Committee support a special session to find ways to deal with this solar problem.

AGENDA ITEM XI—ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 12:25 p.m.

Respectfully submitted,

Janet Coons
Principal Administrative Assistant

Marjorie Paslov Thomas
Principal Research Analyst

APPROVED BY:

Assemblyman Stephen H. Silberkraus, Chair

Date: _____

EXHIBITS

EXHIBIT	WITNESS/ENTITY	DESCRIPTION
Exhibit A	Marjorie Paslov Thomas, Principal Research Analyst, Research Division, Legislative Counsel Bureau	Agenda
Exhibit B	Denise R. Duarte and Marlene J. Adrian, residents, Las Vegas, Nevada	Written testimony
Exhibit C	Kevin McGehee, Vice President, Evaporative Control Systems, Inc.	Information on electric vehicles
Exhibit D	Mateo Jaramillo, Vice President, Products and Programs, Tesla Energy, Tesla Motors	Microsoft PowerPoint presentation
Exhibit E	Mike Salisbury, Program Associate, Transportation Program, Southwest Energy Efficiency Project	Microsoft PowerPoint presentation
Exhibit F	John Fairman, Management Analyst III, Office of Energy, Office of the Governor, and Marie Steele, Manager, Electric Vehicles and Renewable Energy, NV Energy	Microsoft PowerPoint presentation
Exhibit G	David Fagotti, Senior Sales Representative, Schneider Electric, and Ellen Zuckerman, Senior Consultant, Schlegel & Associates	Microsoft PowerPoint presentation
Exhibit H	Kevin Judice, Vice President and Chief Information Officer, NV Energy, and Shahzad Lateef, Director, Transmission and Distribution Systems Operations, NV Energy	Microsoft PowerPoint presentation
Exhibit I	Oliver Hemmers, Ph.D., Vice President of Operations, Infinity Capital Management	Microsoft PowerPoint presentation
Exhibit J	David von Seggern, Ph.D., retired geophysicist, University of Nevada, Reno	Written testimony

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.