

**NEVADA LEGISLATURE
LEGISLATIVE COMMISSION'S COMMITTEE TO
CONDUCT AN INTERIM STUDY ON THE PRODUCTION
AND USE OF ENERGY**

(Senate Concurrent Resolution No. 19, File No. 99, *Statutes of Nevada 2009*)

SUMMARY MINUTES AND ACTION REPORT

The second meeting of the Nevada Legislature's Legislative Commission's Committee to Conduct an Interim Study on the Production and Use of Energy was held on Tuesday, December 15, 2009, 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 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/75th2009/committee/>. In addition, copies of the audio record may be purchased 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 Michael A. Schneider, Chair
Senator John Lee
Senator Randolph Townsend
Assemblyman Marcus L. Conklin

COMMITTEE MEMBER PRESENT IN CARSON CITY:

Assemblywoman Heidi S. Gansert

COMMITTEE MEMBER ABSENT:

Assemblywoman Marilyn Kirkpatrick, Vice Chair

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

Scott Young, Committee Policy Analyst, Research Division
Wayne Thorley, Research Analyst, Research Division
Matthew S. Nichols, Principal Deputy Legislative Counsel, Legal Division
Daniel Yu, Senior Deputy Legislative Counsel, Legal Division
Anne Vorderbruggen, Senior Research Secretary, Research Division

WELCOME AND OPENING REMARKS

Chair Schneider welcomed members, presenters, and the public to the second meeting of the Legislative Commission's Committee to Conduct an Interim Study on the Production and Use of Energy. Chair Schneider announced that the Committee is continuing to look at broad energy issues and soliciting recommendations for possible legislative action. He noted the focus of the meeting would be on transportation-related energy issues.

APPROVAL OF MINUTES OF THE NOVEMBER 3, 2009, MEETING IN LAS VEGAS, NEVADA

- The Committee **APPROVED THE FOLLOWING ACTION:**

ASSEMBLYMAN CONKLIN MOVED TO APPROVE THE MINUTES OF THE NOVEMBER 3, 2009, MEETING HELD IN LAS VEGAS, NEVADA. THE MOTION WAS SECONDED BY SENATOR TOWNSEND AND PASSED UNANIMOUSLY.

PRESENTATION BY BENTLY BIOFUELS

- Carlo Luri, General Manager, Bently Biofuels Company, utilized a Microsoft PowerPoint presentation (see [Exhibit B](#)) and provided a brief history of Bently Biofuels Company, which was founded in 2005 by long-time Nevada businessman and resident Donald E. Bently, P.E. Mr. Luri stated that one of the motivations for starting the biofuels company, which collects used cooking oil feedstock and converts it into biodiesel, was to replace the one-quarter million gallons of diesel being used in the business each year. He noted that Bently Biofuels Company has evolved into a regional producer of biodiesel, and they retail biodiesel and ethanol blends. He stated that the company has 14 employees.

Highlights from Mr. Luri's presentation included the following subjects: (1) what the company does; (2) biodiesel benefits; (3) how biodiesel is used; (4) current limitations; (5) what is needed; and (6) what does Nevada get.

In response to a question from Senator Lee about how many gallons of fuel could be produced from an acre of soybeans, Mr. Luri said soybeans are currently the largest seed oil crop in the United States. Mr. Luri stated that soybeans produce about 50 gallons of oil

per acre. He noted that Nevada does not have the right agricultural climate to grow soybeans and said there are other crops in the mustard family that could potentially be grown in Nevada which produce about 150 gallons of oil per acre. Mr. Luri stated that algae has been shown to produce upwards of 5,000 gallons of oil per acre but the industry is not yet ready to start producing bio oils from algae at a reasonable cost.

Responding to Assemblywoman Gansert's question about the cost of biodiesel, Mr. Luri said there is a small cost premium of about 2 to 3 cents per gallon associated with a low blend of biodiesel. Mr. Luri noted that 100 percent biodiesel is currently priced about 10 percent higher than petroleum diesel, with the benefit of a dollar per gallon federal tax credit which is set to expire at the end of the year. Mr. Luri concluded that if the federal tax credit is added in, 100 percent biodiesel is about 30 to 40 percent higher in cost than petroleum diesel.

- Chair Schneider asked which states have renewable fuel standards and if renewable fuel standards would help in Nevada. Mr. Luri replied that the first state to have renewable fuel standards was Minnesota, which mandated that all diesel fuel contain 2 percent biofuels; that standard has now moved to 5 percent. Mr. Luri reported that Oregon has recently implemented a statewide mandate. He noted this is a small step but it does create the demand that is necessary to support these infant industries.

In response to a question from Chair Schneider about whether Nevada or any local governments purchase fuel from Bently Biofuels Company, Mr. Luri stated the company works with local petroleum jobbers and supplies fuel to the Regional Transportation Commission in Reno. He further noted that State agencies have the option to purchase biodiesel blends on the State contract, but there is not a statewide mandate for them to do so.

PRESENTATION BY FULCRUM BIOENERGY, INC.

- Jeanne Benedetti, Senior Director of Project Development, Fulcrum BioEnergy, Inc., Pleasanton, California, gave a Microsoft PowerPoint presentation on Fulcrum BioEnergy, Inc. ([Exhibit C](#)). Ms. Benedetti stated that Fulcrum BioEnergy, Inc. is a new company that focuses on transforming presorted municipal solid waste to ethanol.

Ms. Benedetti discussed the strategy of Fulcrum BioEnergy, Inc., their technologies and process, the proposed Sierra Biofuels Plant in the Tahoe Reno Industrial Center in Storey County, and the benefits the project will bring to Nevada and the environment.

Responding to questions from Senator Lee, Ms. Benedetti said that road base is an option for the vitrate material. She also stated that plants could be sited at landfills, but infrastructure such as water and electricity is needed and often there are no utilities at landfills because landfills are located away from developed areas.

- Senator Lee asked Ms. Benedetti if she was familiar with the landfill proposed for Winnemucca and if her company could be involved in it. Ms. Benedetti replied she did know about the proposal and stated that waste could be taken off a train anywhere along the route, the material processed, and transported to an ethanol plant.

Responding to a question from Chair Schneider about whether the material for the Sierra Biofuels Plant in the Tahoe Reno Industrial Center would come from Reno, Ms. Benedetti stated the feedstock must first go through a material recovery facility (MRF). She noted that there is currently not a MRF in that watershed but once a MRF is built it provides a huge opportunity for the company to take local municipal solid waste and create ethanol. Ms. Benedetti reported that representatives of her company have spoken to both Washoe County and the City of Reno and it is her understanding they are in the process of siting a material recovery facility.

- Chair Schneider asked whether a renewable fuel standard would help in Nevada and if they have looked at renewable fuel standards in other states. Ms. Benedetti stated that oil companies are voluntarily blending year round, especially when oil prices are up. She noted that ethanol is cheaper to blend and the oil companies can blend up to 10 percent year round, to offset the cost of oil.

In response to questions from Senator Townsend regarding feedstock for the Storey County facility, Ms. Benedetti stated the company has contracts for municipal solid waste coming from California but not with the City of San Francisco. Ms. Benedetti further responded that the facility is sized to convert 90 tons of feedstock a year into ethanol and 40 tons a year into renewable power; there may be 10 percent of other metal and aluminum waste that would go to a recycler. Ms. Benedetti noted they plan to start construction on the project in the summer of 2010 and be operating in 2012.

- Senator Townsend asked if the project is designed for expansion, and Ms. Benedetti replied that if the plant were to be expanded, the company would build a second phase.

Senator Townsend inquired if anyone from Fulcrum BioEnergy was working with Clark County to secure a location for a facility in southern Nevada. Ms. Benedetti stated that their company has looked at this market and considers it a prime location to site an ethanol facility.

In response to questions from Chair Schneider regarding pollution and water usage, Ms. Benedetti replied that if the gas turbine is not considered, the facility would produce less than 25 tons of pollution a year and the project would be considered a minor source of pollution. However, if the gas turbine is included, the facility would still be a minor source of pollution at under 100 tons a year. With regard to water usage, Ms. Benedetti said that nonpotable water can be used and noted they would not go over 100 gallons a minute.

PROGRESS REPORT ON IMPLEMENTATION OF SENATE BILL 332 AND BRIEF OVERVIEW OF RECENT UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ACTION REGARDING CO2 EMISSIONS

- Leo Drozdoff, P.E., Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources (SDCNR), introduced Sig Jaunarajs, Environmental Scientist IV, Division of Environmental Protection, SDCNR, who manages the Division's alternative fuels program. Mr. Drozdoff reported on the status of the Division's implementation of the changes to the State's alternative fuels program for fleet vehicles required by Senate Bill 332 (Chapter 464, *Statutes of Nevada 2009*).

Mr. Drozdoff also reported on the feasibility of requiring mandatory tire inflation checks for motorists to be performed at smog check stations. Mr. Drozdoff stated that the concerns expressed by the smog check industry over the proposal for mandatory tire inflation checks are related to the time required to perform the checks, the associated loss of profit which may result, and the potential liability posed by adjusting inflation pressures.

In conclusion, Mr. Drozdoff discussed the recent United States Environmental Protection Agency action related to greenhouse gas emissions and how the new regulations may affect the State and its regulated facilities. (A complete copy of Mr. Drozdoff's testimony is available as [Exhibit D](#).)

PRESENTATION ON ELECTRIC VEHICLES AND TRUCK STOP ELECTRIFICATION

- Bob Tregilus, Co-Chair, Electric Auto Association of Northern Nevada, provided a Microsoft PowerPoint presentation on Electric Drive Transportation in Nevada ([Exhibit E](#)). Highlights of his presentation included truck stop electrification; idle reduction partnerships and opportunities; fossil fuels; electric cars; the smart-garage; new policies for new technologies (revenues to fund road building); types of electric vehicle charging infrastructure; charging business models; signage, protocols, and public safety; building codes and permit fast-tracking; electric vehicle deployment; and "Project Get Ready" (a Rocky Mountain Institute Smart Garage Initiative).

In response to Assemblywoman Gansert's question regarding the cost of truck stop electrification, Mr. Tregilus said he assumed it is similar to electric vehicle charging equipment which costs approximately \$3,000 to \$5,000. He noted that Shorepower Technologies (shorepower.com) is financing the installation of these facilities under a revenue sharing program with the truck stops.

- Senator Townsend suggested that Mr. Tregilus meet with James Groth, Director of the Office of Energy, Office of the Governor, regarding electric vehicles and truck stop electrification. Senator Townsend further suggested that Mr. Tregilus'

presentation be taken to other platforms, such as service clubs, so the public can better understand the need for electric vehicles and truck stop electrification.

- Mr. Tregilus stated that, with regard to the availability of electric vehicles, state and local government vehicle purchases could be put off for a year or two until electric vehicles are available. He noted this would also provide additional money during that period for public education and infrastructure.
- Chair Schneider stated it would be important to remind the public that the gas tax in Nevada has not been increased for 20 years and the highway fund for road construction is very low. He noted that as the public moves ahead with electric vehicles, the gas tax revenue will decrease further and the public needs to be educated about the need for alternative ways to raise money for road construction.

PRESENTATION ON IMPLEMENTATION OF SENATE BILL 358, SECTIONS 18.1 THROUGH 18.9, ADDRESSING LOCAL GOVERNMENT ENERGY EFFICIENCY IMPROVEMENT AND RENEWABLE ENERGY PROJECTS

- Chair Schneider stated that, at the request of the City of Henderson, provisions were included in Senate Bill 358 (Chapter 321, *Statutes of Nevada 2009*) to allow local governments to create funding mechanisms to provide low-cost financing for renewable energy projects to be repaid by small, long-term increases in property taxes. He noted that the City of Henderson has indicated additional provisions may be necessary to implement the property assessed clean energy (PACE) provisions. He stated that representatives of the City of Henderson were present to explain the need for additional provisions.
- Javier Trujillo, Intergovernmental Relations Specialist, City of Henderson, introduced Ned P. Thomas, Principal Planner and Coordinator of the Sustainability Program for the City of Henderson.
- Mr. Thomas reported on the City of Henderson's role in implementing sustainability programs to promote environmental awareness in their community and the proposed use of energy improvement districts, or PACE districts, which would allow property owners to make energy efficiency improvements and pay for the cost over 20 years through an annual special assessment on their property tax bills. A complete copy of Mr. Thomas' testimony is included as [Exhibit F-1](#). A document titled "Sample Implementation Program for Energy Improvement Districts Containing Renewable Energy Projects or Energy Efficiency Improvement Projects" was provided by the City of Henderson ([Exhibit F-2](#)).

Discussion ensued between Senator Lee and Mr. Thomas regarding special improvement districts and how the projects would be identified and designed.

Responding to a question by Senator Townsend, Mr. Thomas described what the City of Henderson has done with regard to transportation issues.

PROGRESS REPORT ON IMPLEMENTATION OF SENATE BILL 358 AND ASSEMBLY BILL 522, AND ON THE APPLICATION FOR AND DISTRIBUTION OF AMERICAN RECOVERY AND REINVESTMENT ACT FUNDS FROM THE OFFICE OF ENERGY, OFFICE OF THE GOVERNOR

- James Groth, Director, Office of Energy, Office of the Governor, stated that a document titled “Milestone Minder” has been provided to the Committee ([Exhibit G-1](#)). He noted that the “Milestone Minder” will be updated weekly on the progress of the projects funded by grants received by the Office of Energy and stated the document can be accessed on the website of the Office of Energy ([Nevada State Office of Energy](#)). Mr. Groth introduced Sean Sever, Energy Outreach Coordinator, and Catherine Gowen, Grants and Projects Analyst for the Office of Energy. Mr. Groth discussed his work with the Nevada Army National Guard, the public/private energy partnerships developed by the Army National Guard, and his vision for the Office of Energy.
- Assemblyman Conklin stated that the SDCNR said they do not have the resources to conduct the study to determine the feasibility of constructing a hydroelectric generation unit and wind turbines at the South Fork Reservoir near Elko, as required by Senate Bill 152 (Chapter 490, *Statutes of Nevada 2009*). He asked if the Department had contacted the Office of Energy regarding the possibility of obtaining this funding. Mr. Groth responded he was not aware of such a request.

In response to a question from Assemblyman Conklin regarding tracking energy use in State buildings, Mr. Groth said that he had discussed the contract for monitoring energy use in State buildings with Cindy Edwards, Administrator, Buildings and Grounds Division, Department of Administration. Mr. Groth noted that Ms. Edwards based the expenditure for that contract on a 1 percent utility error rate to be split between the contractor and the State agencies and said the national average is 5.25 percent. Therefore, it is his opinion the expenditure for the contract is money well spent.

- Catherine Gowen, previously identified, gave a Microsoft PowerPoint presentation ([Exhibit G-2](#)), which included information on the: (1) Energy Office staff; (2) State Energy Program (SEP) formula grant (\$192,000); (3) mandatory SEP activities; (4) SEP American Recovery and Reinvestment Act (ARRA) funds (\$34,714,000); (5) Energy Efficiency and Conservation Block Grant (\$9,593,500); (6) additional grants; and (7) financial sources.
- Assemblyman Conklin requested that the Committee receive an update on the \$3 million allocated under ARRA for an environmental impact study for transmission lines, noting that transmission is a cornerstone for all of the renewable development initiatives.

- Senator Lee requested that bus turnouts on heavily traveled roads be added to the list for mandatory SEP activities, which would increase mileage efficiency for vehicles on those roads.

PRESENTATIONS FROM NV ENERGY ON:

Smart Grid Technology

New Landfill Gas Electric Power Contract

Solar Thermal Hybrid Power Plant Demonstration

- Chair Schneider stated that NV Energy received a United States Department of Energy grant from ARRA in the amount of \$138 million to develop a smart grid infrastructure in Nevada, and noted that NV Energy will contribute another \$160 million to the program. He said that representatives of NV Energy would explain the program and how Nevada can benefit from smart grid technology. He noted that NV Energy will also provide a brief update on two new projects at NV Energy.
- Gary Smith, Director of Smart Technology, NV Energy, provided a Microsoft PowerPoint presentation regarding smart grid technology ([Exhibit H](#)).

Mr. Smith discussed (1) the Smart Grid Investment Grant Program; (2) Advanced Service Delivery (ASD) (state-wide project, 2010-2012); (3) foundational vision for the customer and the utility; (4) ASD Phase 1—design and build (2009-2010); (5) ASD SMART opportunity example; (6) ASD Phase 2—testing and validation (2011); and (7) ASD Phase 3—deployment (2012).

Responding to a question from Senator Townsend regarding how the public will be educated about managing their power usage as NV Energy moves to a smart grid and dynamic pricing, Mr. Smith explained the process and NV Energy's pilot program.

Senator Townsend asked if software is available that would allow customers to make choices based not only on price, but on the component such as wind or solar. Mr. Smith responded that the technology is available today. Mr. Smith further stated the technology also compares one rate to another.

- Sam Thompson, Chairman, Public Utilities Commission of Nevada (PUCN), stated he will be the presiding officer over the triennial filing of the Integrated Resource Plan by NV Energy. Mr. Thompson stated that with regard to Senator Townsend's question about tariffs, there will be an impact to rates as they will be going from a blended rate to real time pricing and since it is a rate issue, it will come up during a general rate case.

Discussion ensued regarding informing and educating the public about NV Energy's Integrated Resource Plan and why it is important.

There was a brief discussion regarding in-home displays for energy usage.

- Judy Stokey, Director, Government Affairs, NV Energy, reported that with regard to the 11 megawatt landfill gas contract with CC Landfill Energy, LLC, at Republic Services' Apex Regional Landfill, the contract will be voted on by the PUCN at their December 16, 2009, meeting. She stated that NV Energy has entered into a purchase power agreement with another company to run the project and noted it is a great opportunity to use landfill gas to meet the renewable energy portfolio standard and to help with the landfill.

Ms. Stokey further reported that NV Energy is working with the Electric Power Research Institute in Palo Alto, California, on a demonstration project at NV Energy's Chuck Lenzie plant to put a solar thermal plant next to or on property where a gas plant is located. She stated that if the project is successful, NV Energy will put solar thermal plants at all of their gas plants.

DISCUSSION OF UTILIZING A PORTION OF THE STATE ELECTRICAL LOAD FOR ECONOMIC DEVELOPMENT

- Chair Schneider announced that Senator Townsend has requested this agenda item be moved to the next meeting of the Committee.

PUBLIC COMMENT

- Randell S. Hynes, President, Solar Forces, Inc., Las Vegas, said his nonprofit trade association has been training contractors and installers on solar energy projects and noted their interest in the numerous retrofit projects for 2010. Mr. Hynes stated for the record that the issues with S.B. 358 need to be addressed as soon as possible, and he hopes the issues can be resolved at the special session of the Legislature.
- Susan Fisher, representing Valley Electric Association, Pahrump, stated that the Valley Electric Association is a company based in Pahrump, Nevada, with over 6,800 miles of service territory and 22,000 members. She said the Valley Electric Association has completed the installation of smart meters for all of their members throughout the company's service territory. She also noted they have completed the back office systems conversion to implement the program, are working with Google, Inc., on the technology, and expect the program to be operating shortly after the first of the year. Ms. Fisher further reported that the company has been working on a public education program with their customers since they began installing the smart meters.
- Monica Brett, Nevada Program Associate, Southwest Energy Efficiency Project, Las Vegas, stated she is with the DSM (demand-side management) collaborative in NV Energy and has been asked to chair a public awareness, consumer education subcommittee. Ms. Brett asked what the Committee does with the information when a company talks about their issues and the support they would like. She further inquired

if the Committee is working with other business associations such as the Nevada Development Authority on what would make the State more attractive to these businesses, and if there is a subcommittee looking at how to move this information forward with industry.

ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 1:45 p.m.

Respectfully submitted,

Anne Vorderbruggen
Senior Research Secretary

Scott Young
Committee Policy Analyst

APPROVED BY:

Michael A. Schneider, Chair

Date: _____

LIST OF EXHIBITS

[Exhibit A](#) is the revised “Meeting Notice and Agenda” provided by Scott Young, Committee Policy Analyst, Research Division, Legislative Counsel Bureau (LCB).

[Exhibit B](#) is a Microsoft PowerPoint presentation titled “Biodiesel, Green Energy for Nevada,” presented by Carlo Luri, General Manager, Bently Biofuels Company, Minden, Nevada, dated December 15, 2009.

[Exhibit C](#) is a Microsoft PowerPoint presentation about Fulcrum BioEnergy, Inc., presented by Jeanne Benedetti, Senior Director of Project Development, Fulcrum BioEnergy, Inc., Pleasanton, California, dated December 15, 2009.

[Exhibit D](#) is the written testimony of Leo Drozdoff, Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources, dated December 15, 2009.

[Exhibit E](#) is a Microsoft PowerPoint presentation titled “Plug-in and Charge Up, Electric Drive Transportation in Nevada,” provided by Bob Tregilus, Co-Chair, Electric Auto Association of Northern Nevada, Reno.

[Exhibit F-1](#) is the written testimony of Ned P. Thomas, AICP, Principal Planner and Coordinator of the Sustainability Program for the City of Henderson, dated December 15, 2009.

[Exhibit F-2](#) is a document titled “Sample Implementation Program for Energy Improvement Districts Containing Renewable Energy Projects or Energy Efficiency Improvement Projects,” prepared by Gomez Consulting Group, Inc., dated November 5, 2009.

[Exhibit G-1](#) is a document titled “Milestone Minder, American Reinvestment & Recovery Act (ARRA) and Grants,” provided by James Groth, Director, Office of Energy, Office of the Governor, dated December 14, 2009.

[Exhibit G-2](#) is a Microsoft PowerPoint presentation titled “Energy Office Programs,” presented by Catherine Gowen, Grants and Projects Analyst, Office of Energy, Office of the Governor, dated December 15, 2009.

[Exhibit H](#) is a Microsoft PowerPoint presentation titled “Advanced Service Delivery,” given by Gary Smith, Director of Smart Technology, NV Energy, dated December 15, 2009.