



**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 third meeting of the Legislative Commission's Committee to Conduct an Interim Study on the Production and Use of Energy was held on Tuesday, January 19, 2010, 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 J. Lee
Senator Randolph Townsend

COMMITTEE MEMBER PRESENT IN CARSON CITY:

Assemblywoman Heidi S. Gansert

COMMITTEE MEMBERS ABSENT:

Assemblywoman Marilyn Kirkpatrick, Vice Chair
Assemblyman Marcus L. Conklin

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

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

WELCOME AND OPENING REMARKS

Senator Michael A. Schneider, Chair, welcomed the members, presenters, and public to the third meeting of the Legislative Commission's Committee to Conduct an Interim Study on the Production and Use of Energy. Chair Schneider stated that at this meeting the Committee would discuss energy efficiency, solar financing, and renewable energy as an economic development strategy.

APPROVAL OF MINUTES OF THE DECEMBER 15, 2009, MEETING IN LAS VEGAS, NEVADA

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

SENATOR TOWNSEND MOVED TO APPROVE THE MINUTES OF THE DECEMBER 15, 2009, MEETING HELD IN LAS VEGAS, NEVADA. THE MOTION WAS SECONDED BY SENATOR LEE AND PASSED UNANIMOUSLY.

PRESENTATION BY ADVANCED REFINING CONCEPTS, LLC

- Peter Gunnerman, Partner and Director, Advanced Refining Concepts, LLC (ARC), stated that he has been involved with the alternative energy business for 23 years and his family has been in the business for more than 50 years. He reported that ARC's technology, ClearRefining, and its product, GDiesel, were developed, financed and researched in Nevada. Additionally, the company's equipment is manufactured in this State. Mr. Gunnerman further reported that ARC is based in Reno and has a development facility and an equipment assembly plant in Sparks. The company's first commercial fuel production facility is currently being constructed in the Tahoe-Reno Industrial Center in Storey County.

Mr. Gunnerman continued his testimony with a Microsoft PowerPoint presentation on ARC ([Exhibit B](#)). His presentation included information on the company's:

1. Mission to convert natural gas and other biogases into the world's cleanest liquid hydrocarbon fuel, reduce dependency on foreign oil imports, and provide clean fuels that do not need government incentives or subsidies;
2. Technology of ClearRefining, a pollution-free, closed-loop refining system that produces no effluents or air emissions;

3. Products, including GDiesel which surpasses United States standards for high-quality No. 1 diesel, does not require modifications to vehicles or power generating equipment, and can be sold at a price that is competitive to No. 2 diesel fuel;
4. Positive impact on the environment;
5. General structure, financing, and development and equipment manufacturing facilities;
6. Latest project, the Peru Heights facility in Storey County, that will have a production capacity of 100,000 gallons of GDiesel fuel per day; and
7. Future plans to expand the benefits of ClearRefining to the crude oil market, and its work on GJet for military applications and bio oils such as canola oil that can be upgraded with a mixture of natural gas to make future fuels or fuel additives.

Mr. Gunnerman invited the Committee members to visit ARC's facility.

- In response to questions by Senator Townsend, Mr. Gunnerman stated that ARC is too small to handle retail sales and is working with local fuel distributors who will distribute the GDiesel either as blend stock into their existing diesel or for direct sales into fleet markets. Mr. Gunnerman further responded that: (1) 100,000 gallons of GDiesel per day does not significantly impact the market; (2) the Tuscarora Pipeline is ARC's source for natural gas; and (3) enough natural gas is available on the site to produce up to 200,000 gallons of GDiesel a day in a second phase.
- Senator Townsend asked if ARC plans to develop a facility in southern Nevada after completing its second phase. Mr. Gunnerman responded that ARC's next step would be to convert its facility from using 100 percent natural gas. It is currently working with a company in Sparks that flares about 20,000 gallons of liquefied natural gas per week. According to Mr. Gunnerman, ARC would like to capture and deliver that gas to its facility because its ultimate goal is to use waste gas. Mr. Gunnerman continued that his company has been contacted by a fairly large company that has expressed interest in building a similar plant in the Midwest. He said ARC would probably proceed with that project before it considers a second facility in Nevada.
- Responding to questions from Senator Townsend about how the Committee could incentivize ARC to bring its technology to southern Nevada and the availability of industrial waste gases in Clark County that could be used, Mr. Gunnerman said the biggest hurdle his company faces is to find natural gas at a price that allows for the production and sale of the product at a cost similar to diesel. He further noted that since ARC has only 25 employees, it has not conducted research in southern Nevada. He added that Nevada probably does not have as many flared or vented gas applications as some other states such as Alaska, California, Louisiana, and Texas. Mr. Gunnerman explained that ARC's ultimate goal is to find places that have waste

vented and flared methane where the company can implement its technology and not be dependent on the natural gas companies.

- Chair Schneider asked if any State or local agencies have contacted ARC about purchasing the company's fuel. Mr. Gunnerman responded that ARC is too small to make direct sales; however, feedback from its users has been positive.

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

- Senator Townsend stated that if the State of Nevada is trying to stabilize its revenue and minimize the impacts of the fluctuating economy, it needs to compete on a regional level to attract desirable companies to the State. Such companies focus on the research and development of biomass, geothermal, solar, wind, and other technologies; pay high wages; provide health care benefits to their employees; do not pollute; use very little water; and contribute to the community.

Continuing, Senator Townsend suggested that, to assist the economic development community with finding the best companies and encouraging them to establish their business in Nevada, the Committee consider that the State guarantee the purchase of an additional energy load from the electric and gas companies that could be used to provide free energy to the companies for a number of years based on the wages and jobs the companies provide. He noted this approach would separate Nevada from other states in competing for these companies. Senator Townsend further suggested that when the companies are interviewed to attempt to convince them to commit to Nevada based on these new incentives, that the discussion also include the relationship between the companies and the State's community colleges and higher education facilities.

Senator Townsend asked the Committee to consider the concept of how much energy the State should buy, the guidelines that should be established for the economic development entities with regard to how the purchased energy would be used, if it should be green energy, and how it should be accomplished relative to the Public Utilities Commission of Nevada (PUCN). He noted this type of idea is needed to separate Nevada from other states, because if they get into a bidding war with the same tools, the State will lose tax base and get companies the State does not necessarily want. Senator Townsend stated that this suggestion is intended to develop dialog on new ideas concerning economic development and the State's role in the green economy. He asked that this item be added to the Committee's agenda for debate at the appropriate time.

- Senator Lee suggested that the concept presented by Senator Townsend include a competition component for counties and cities to offer abatements, as long as the voters in the area support it.

- Assemblywoman Gansert said she appreciated that Senator Townsend tied his proposal to the university system because that is key to the State's economic development.
- Chair Schneider stated that this item would be included on the Committee's agenda at the appropriate time for discussion.

PROGRESS REPORT ON THE ESTABLISHMENT OF THE RENEWABLE ENERGY AND ENERGY EFFICIENCY AUTHORITY AND IMPLEMENTATION OF SENATE BILL 358 AND ASSEMBLY BILL 522

- Hatice Gecol, Ph.D., Nevada Energy Commissioner, provided an update on the progress of the establishment of the Renewable Energy and Energy Efficiency Authority and the implementation of Senate Bill 358 (Chapter 321, *Statutes of Nevada 2009*) and Assembly Bill 522 (Chapter 377, *Statutes of Nevada 2009*). The update contained information on the mission of the Authority, the State and Local Government Panel on Renewable and Efficient Energy, the New Energy Industry Task Force, and the progress of the implementation of S.B. 358 and A.B. 522 (See [Exhibit C](#)).

In response to a question regarding why it was necessary to have a representative from Nevada's Department of Wildlife on the Panel, Dr. Gecol said that the membership of the Panel is established in S.B. 358.

PRESENTATION ON SOLAR FINANCING OPTIONS

(As directed by Chair Schneider, this agenda item was taken out of order.)

- Jim Baak, Director of Policy for Utility-Scale Solar, Vote Solar, noted that Vote Solar supports both distributed solar and water scale solar. Mr. Baak gave a Microsoft PowerPoint presentation on third-party solar models ([Exhibit D](#)), including information on: (1) consumer-perceived barriers to rooftop solar; (2) a description of third-party owner solar models; (3) advantages of third-party owner models; (4) elements of a robust distributed generation solar market; (5) factors keeping third-party providers away from Nevada; (6) suggested improvements to solar generations; and (7) solar cost improvements.

Assemblywoman Gansert noted that Mr. Baak had indicated the cost of solar has decreased by about one-half, and asked if technology has improved. Mr. Baak responded that there are continuing improvements to solar technology and efficiency. He noted that thin film is much cheaper to manufacture but it is less efficient and requires more roof space.

Senator Townsend asked NV Energy to comment on Vote Solar's recommendation for a step-down declining rebate program as opposed to an annual capacity allocation for the Solar Generations Program. Judy Stokey, Director, Government Affairs, NV Energy,

stated that the PUCN has scheduled this proposal for discussion and she could provide an update at the Committee's next meeting.

- Senator Townsend discussed the opportunities for third-party investment in the commercial-industrial sector. Mr. Baak noted that such investment has the potential to be more profitable because solar can be obtained with fewer resources in the large-scale commercial-industrial sector; however there are no incentives. Senator Townsend suggested that Mr. Baak ask third-party investors about the challenges they face with homeowners' associations in residential communities. Senator Townsend also asked Mr. Baak to consider how third-party investors could be encouraged to work with commercial and industrial customers. Mr. Baak responded he would provide the Committee with information from third-party providers regarding homeowners' associations, as well as examples of solar access laws that have been passed in other states and communities.

Assemblywoman Gansert asked if there are federal incentives for commercial and industrial businesses and if they are the same for residential customers. Mr. Baak responded that there is a 33 percent federal tax incentive for residential and commercial. Chair Schneider noted that the federal incentive for commercial is limited to small businesses with fewer than 500 employees.

- Mr. Baak continued his Microsoft PowerPoint presentation with information on: (1) solar power and water consumption; (2) options for reducing water consumption in solar generation; (3) possible solutions for encouraging water conservation; and (4) the California Desert Protection Act and how it pertains to Nevada.

PRESENTATION ON ENERGY EFFICIENCY

- Robert Tretiak, Ph.D., Business Development and Government Relations Officer, International Energy Conservation, responded to a question raised at the Committee's meeting of November 3, 2009, about the effects of weatherization on a building's air flow. Dr. Tretiak stated that a technical standard states that whenever changes in a building shall require a blower door test, a building air flow standard must be calculated for the home according to the air exchange requirements provided by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
- Dr. Tretiak gave a Microsoft PowerPoint presentation on energy efficiency as a resource ([Exhibit E](#)). Dr. Tretiak's presentation concluded with the statement that in the long run, a free-enterprise, free-market pricing of portfolio energy credits is one of the most efficient means of delivering the desired reduction of fossil fuel consumption and introducing demand side management innovation into the marketplace, and that the portfolio energy credits should be owned by customers and purchased by the utility in the same manner in which they purchase renewable energy credits.

PRESENTATION OF SOUTHWEST ENERGY EFFICIENCY PROGRAM (SWEEP) LEGISLATIVE PROPOSALS

- Stephen Wiel, Ph.D., SWEEP Nevada Representative, provided a Microsoft PowerPoint presentation on energy efficiency ([Exhibit F-1](#)) and a document containing additional information on the items covered in the slides ([Exhibit F-2](#)). Highlights of Dr. Wiel's presentation included the following:
 1. Energy efficiency is a long-term investment;
 2. A significant amount of money is wasted on energy in all sectors of the economy; and
 3. Nevada wastes more energy than its neighbors.
- Dr. Wiel continued with a discussion of the following measures that are available to the State, some of which it has implemented: (1) building energy codes; (2) residential energy conservation ordinances; (3) appliance and lighting standards; (4) utility demand-side management; (5) energy pricing policies; (6) financial incentives; (7) low income weatherization; (8) government sector efficiency; and (9) industry sector efficiency.
- Monica Brett, SWEEP Nevada Program Associate, discussed the following transportation and education and training initiatives contained in [Exhibit F-1](#) and [Exhibit F-2](#): (1) the establishment of a low-interest loan program for truck owners, giving them an incentive to purchase energy efficient equipment; and (2) the adoption of a revenue-neutral policy that assigns fees or rebates on a sliding scale to new vehicles based on their fuel efficiency, to provide a financial incentive for the purchase of fuel-efficient vehicles.
- Dr. Wiel pointed out that a summary of SWEEP's top five legislative initiatives for Nevada's 2011 Legislative Session is included on page 11 of [Exhibit F-2](#).

There was a discussion regarding the proposal for a "feebate" policy and the use of efficient tires.

PRESENTATION ON NEW NORTH-SOUTH TRANSMISSION JOINT VENTURE PROJECT BETWEEN NV ENERGY AND LS POWER

- Judy Stokey, Director, Government Affairs, NV Energy, stated that transmission is a vital part of delivering renewable energy to the market. She noted that the new north-south transmission joint venture project between NV Energy and LS Power will improve NV Energy's operational efficiencies and reliability and will benefit everyone. Ms. Stokey said that NV Energy has a Memorandum of Understanding with Great Basin Transmission and the company is working with Great Basin Transmission and

Western Area Power Administration on low interest financing being offered through the American Recovery and Reinvestment Act.

Ms. Stokey continued that when NV Energy files its Integrated Resource Plan with the PUCN on February 1, 2010, the joint venture will be the preferred project in the plan, and NV Energy will also proceed with planning and permitting for the current ON Line project as the alternative in the plan until the joint project is approved.

Ms. Stokey stated that NV Energy will own 25 percent of Phase 1 of the project. Great Basin Transmission will have the other 75 percent and NV Energy will purchase the 75 percent of power from Great Basin Transmission. She noted that the transmission line will extend from Ely to NV Energy's Harry Allen plant in Apex in southern Nevada and the in-service date is December 2012. The construction will provide approximately 400 jobs. Ms. Stokey stated that at the next meeting of the Committee she would be able to provide a more detailed explanation of the project and NV Energy's entire Integrated Resource Plan.

PRESENTATION ON ENERGY CONSERVATION MEASURES IN NEVADA LEGISLATIVE FACILITIES

- Chair Schneider announced that the presentation on energy conservation measures in Nevada's legislative facilities by Lorne J. Malkiewich, Director, Legislative Counsel Bureau, would be postponed to the Committee's next meeting.

PUBLIC COMMENT

- Randell S. Hynes, President, Solar Forces, Las Vegas, stated he has identified three groups that are interested in proceeding with commercial retrofit projects and solar installations, one of which is interested in making a proposal to the Clark County School District to conduct a complete "sweep" of all of the school rooftops to offset the School District's electric bill. Mr. Hynes stated that the limit on net metering connections should be raised or eliminated.
- Ray Bacon, Nevada Manufacturers Association, Carson City, stated that at the January 25, 2010, meeting of the Legislative Commission's Subcommittee to Study the Development and Promotion of Logistics and Distribution Centers and Issues Concerning Infrastructure and Transportation (Assembly Concurrent Resolution No. 30 [File No. 96, *Statutes of Nevada 2009*]) he and Paul Enos, CEO, Nevada Motor Transport Association, would be making a presentation on incentives for people who are building large warehouses to include energy efficiency and renewable energy as part of the construction. Mr. Bacon noted that the issue is not the building energy codes but the implementation and understanding of the new materials, both in the residential as well as commercial and industrial sectors. Mr. Bacon suggested that the Committee also consider the federal lands issue with regard to Nevada's efforts to become the renewable energy center of the west.

- Chair Schneider announced that the Committee has been invited to hold its next meeting at Channel 10 Public Television Station's new building in Las Vegas.

ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 12:21 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.

Exhibit B is a Microsoft PowerPoint presentation titled “America needs domestic energy solutions,” presented by Peter Gunnerman, Partner and Director, Advanced Refining Concepts, LLC, Reno.

Exhibit C is a handout titled “Nevada Renewable Energy and Energy Efficiency Authority, Update on the Establishment of Renewable Energy and Energy Efficiency Authority and Implementation of SB 358 and AB 522,” provided by Hatice Gecol, Ph.D., Nevada Energy Commissioner, dated January 19, 2010.

Exhibit D is a Microsoft PowerPoint presentation titled “Third-Party Solar Model,” presented by Jim Baak, Director of Policy for Utility-Scale Solar, San Francisco, California, dated January 19, 2010.

Exhibit E is a Microsoft PowerPoint presentation titled “Energy Efficiency as a Resource, The Economic and Environmental Importance of Energy Efficiency as a Resource; DSM in the Marketplace,” provided by Robert Tretiak, Ph.D., Business Development and Government Relations Officer, International Energy Conservation, Las Vegas, dated January 19, 2010.

Exhibit F-1 is a Microsoft PowerPoint presentation titled “Why Energy Efficiency First?” provided by Stephen Wiel, Ph.D., Nevada Representative, and Monica Brett, Nevada Program Associate, Southwest Energy Efficiency Program (SWEEP), Boulder, Colorado, dated January 19, 2010.

Exhibit F-2 is a document titled “The Nevada Energy Efficiency Story, A Commentary by SWEEP for Legislators,” submitted by Stephen Wiel, Ph.D., Nevada Representative, and Monica Brett, Nevada Program Associate, SWEEP, Boulder, Colorado, dated January 2010.

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, other materials distributed at the meeting, and the audio record 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.