# 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*)

# WORK SESSION DOCUMENT

## (Includes Exhibits)

## June 29, 2010

Prepared by the Research Division
Legislative Counsel Bureau

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**Work Session**
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The following "Work Session Document" has been prepared by the Chair and staff of the Nevada 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*). It is designed to assist the Committee members in developing statements and determining recommendations to be forwarded to the 2011 Session of the Nevada Legislature. Each item in this document may be the subject of further discussion, refinement, or action. Each adopted item will become part of the Committee's final report to the 76th Session of the Nevada Legislature.

The Committee may request up to five legislative measures and must submit its requests to the Legislative Counsel on or before September 1, 2010, in accordance with subsection 3(b) of *Nevada Revised Statutes* (NRS) 218D.160.

Committee members and members of the public made numerous recommendations in correspondence and at the Committee's five hearings on November 3, 2009; December 15, 2009; January 19, 2010; April 20, 2010; and June 1, 2010. The source of each recommendation appears in parentheses. However, if several persons contributed or made similar statements, only the main source is noted. Also, the Chair and the staff have combined similar items and adjusted terminology for clarity and consistency.

The document lists the recommendations under selected topics, but not in order of importance or priority. At this time, they do not necessarily have the support of the Chair or members.

Each recommendation is conceptual in nature and will be subject to further discussion. The Committee may accept, reject, modify, or take no action on each one. Additionally, although possible actions may be identified within each recommendation, the Committee may choose to recommend any of the following actions: (1) draft legislation; (2) draft a legislative resolution; (3) draft a Committee letter; (4) draft a Committee resolution; or (5) include a statement in the final report.

During the process of drafting legislation, the Legislative Counsel may consult with the Chair, the staff, or other persons to obtain clarification or additional details. If a recommendation mentions a specific NRS chapter or section, its completion may also require amendments to other related chapters or sections. Please note that specific details of approved requests for legislation or Committee statements may need to be clarified by staff prior to drafting. Supporting documents for some recommendations may be obtained by contacting Scott Young, Principal Policy and Special Projects Analyst, Research Division, Legislative Counsel Bureau, at 775/684-6825. All place names referred to in this document are in Nevada unless otherwise noted.

Finally, the eventual implementation of a recommendation may have a fiscal impact. The staff will work, as necessary, with the appropriate parties to include fiscal estimates in the Committee's final report.

## RECOMMENDATIONS FOR LEGISLATIVE MEASURES

1. **Request the drafting of a bill** to provide that the Chief of the Buildings and Grounds Division of the Department of Administration shall consider the energy efficiency characteristics and energy costs of prospective leased office rooms outside of State buildings for the use of State officers and employees before entering into or renewing a lease. To the extent practicable, the Chief shall only enter into leases for space that meets or exceeds the minimum standards for the conservation of energy and energy efficiency in buildings established by the Nevada Energy Commissioner as provided in NRS 701.220. This proposal would amend NRS 331.110. Copies of these two statutes are attached hereto as Exhibit A.

   *(Recommended by Senator Townsend, November 3, 2009)*

2. **Request the drafting of a bill** requiring the Chief of the Buildings and Grounds Division of the Department of Administration, in consultation with the State Public Works Board, to consider the feasibility, practicability and fiscal impact of constructing office space for State officers and employees instead of leasing such space, prior to entering into or renewing a lease.

   *(Recommended by Senator Schneider, November 3, 2009)*

3. **Request the drafting of a bill** to amend Chapters 244A (Counties: Financing of Public Improvements) and 266 (General Law for Incorporation of Cities and Towns) of NRS to allow Property Assessed Clean Energy (PACE) programs to be funded through local government bonds. During the 2009 Session, Section 18.9 of Senate Bill 358 (Chapter 321, *Statutes of Nevada*) amended NRS 271.265 to include an energy efficiency improvement project, a public safety project, and a renewable energy project among the kinds of projects the governing body of a county, city, or town can acquire, improve, equip, operate, and maintain. However, the corresponding sections in Chapters 244A and 266 of NRS, which would allow bond funding for these additional kinds of projects, were not amended. In order to give effect to S.B. 358, the appropriate corresponding amendments must also be made in Chapters 244A and 266 of NRS.

*(Recommended by the City of Henderson, December 15, 2009; Vote Solar, June 1, 2010)*

4. **Request the drafting of a bill** to authorize the Division of Environmental Protection, State Department of Conservation and Natural Resources, to adopt regulations implementing a program to require engine repair, oil change, and brake service companies to perform tire pressure checks as part of any service they perform.

*(Recommended by Senator Schneider, December 15, 2009)*

5. **Request the drafting of a bill** to authorize State and local government fleets to delay purchase of new fuel efficient vehicles for up to two years, until all-electric vehicles are available.

*(Recommended by Bob Tregilus, December 15, 2009)*

6. **Request the drafting of a bill** to authorize the Public Utilities Commission of Nevada (PUCN) to provide incentives for investments in advanced travel center electrification systems and systems for recharging plug-in electric or plug-in electric hybrid vehicles. Also, establishing the Electric Vehicle Demonstration Program; requiring electric utilities in this State to administer the Demonstration Program in their service areas; and providing other matters properly relating thereto. The proposal will be for three categories of allotments: (1) public schools and other public entities, (2) private persons, and (3) businesses. Each category will be allotted 500 vehicles, and the Demonstration Program will last until 2012 or when the allotments are sooner exhausted. Rebates will be limited to $1,500 per vehicle. In other major respects, the proposal will follow the provisions of Senate Bill 327, First Reprint, from 2009, except the provisions will be administered by the PUCN and the utility instead of the now-defunct Task Force. See Exhibit B, attached hereto, for more detail.

*(Recommended by Senator Schneider, December 15, 2009)*

7. **Request the drafting of a bill** requiring certain contractors to offer upgrades for renewable energy and energy efficiency; requiring certain contractors assisting buyers in obtaining financing to offer, or work with lenders that offer, energy efficient mortgages; requiring licensees of the Real Estate Division of the Department of Business and Industry to make certain information about energy efficiency in residential property available to each party to a real estate transaction; revising continuing education requirements relating to energy efficiency for real estate brokers, real estate broker-salesmen, real estate salesmen, mortgage brokers, and certified or licensed real estate appraisers; and providing other matters properly relating thereto. This proposal is the same as Senate Bill 242, Second Reprint, from 2009. See Exhibit C, attached hereto, for more detail.

*(Recommended by Senator Schneider, April 20, 2010)*

8. **Request the drafting of a bill** authorizing the PUCN to adopt regulations establishing a feed-in tariff program for renewable energy sources of all types listed in NRS 704.7811. The program must not conflict with existing statutory programs such as net metering and the renewable portfolio standard. The program should focus on providing incentives for projects and participants that do not presently qualify for existing statutory renewable energy programs and, in particular, for projects in the 100 kilowatt to 3 megawatt range. The program should adopt best practices from existing feed-in tariff programs in other jurisdictions, including foreign programs, and should be constructed in a manner to balance potential impacts on ratepayers with advancement of the legislative findings on State energy policy enunciated in NRS 701.010. The program should also be consistent with existing federal requirements. The PUCN should be given the authority to design the pricing mechanism and to administratively set rates.

   *(Recommended in varying forms by numerous interested parties; proposal as outlined is based on PUCN report recommendations submitted June 1, 2010; see Exhibit D, attached hereto, for more detail).*

9. **Request the drafting of a bill** requiring that all diesel fuel sold or offered in the state of Nevada must contain at least 5 percent biodiesel by volume, one year after in-state production volume of 30 million gallons of biodiesel has been reached and sustained for three months on an annualized basis. All diesel fuel sold or offered in the state of Nevada must contain at least 10 percent biodiesel by volume, one year after in-state production volume of 60 million gallons of biodiesel has been reached and sustained for three months on an annualized basis, provided vehicle manufacturers recognize engine warranties associated with the use of biodiesel blends of 10 percent or more.

*(Recommended by Josh Griffin, June 1, 2010))*

10. **Request the drafting of a bill** amending NRS 366.022 to more accurately comply with national standards by specifying that biodiesel is defined as mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats which conform to ASTM D6751 specifications for use in diesel engines. Biodiesel refers to the pure fuel

before blending with diesel fuel. Biodiesel blends are denoted as, "BXX" with "XX" representing the percentage of biodiesel contained in the blend (i.e.: B20 is 20 percent biodiesel, 80 percent petroleum diesel). Additionally, amend NRS 366.190 to include a distinct taxation definition for biodiesel. Currently, biodiesel is taxed the same as petroleum diesel. Copies of these statutes are attached hereto as Exhibit E.

*(Recommended by Josh Griffin, June 1, 2010)*

11. **Request the drafting of a bill** amending NRS 701B.100 of the Solar Energy Systems Incentive Program to replace the current program year segment to allow for a market-based step-down program. Also, amending NRS 701B.240 to eliminate the current three categories of participation and instead substitute two categories, denominated residential and nonresidential. Additionally, clarifying that the amounts specified in NRS 701B.260(4) [$78,260,000 for the period beginning July 1, 2010, and ending June 30, 2013, inclusive, and $255,270,000 for the period beginning July 1, 2010, and ending June 30, 2021] represent budget amounts and not ceilings. Copies of these statutes are attached hereto as Exhibit F.

*(Recommended by Vote Solar and the Solar Alliance, June 1, 2010)*

12. **Request the drafting of a bill** amending NRS 704.773 to increase the maximum cumulative net metering capacity from 1 percent of peak capacity to 2 percent and removing the maximum capacity of a net metering system in NRS 704.771, which currently stands at 1 megawatt. Copies of these statutes are attached as Exhibit G.

*(Recommended by Vote Solar and the Solar Alliance, June 1, 2010)*

## RECOMMENDATIONS FOR ADDITIONAL STUDY

13. **Request the Public Utilities Commission of Nevada to open an investigatory docket to examine the feasibility of** authorizing State and/or local governments to enter into purchase power agreements or other suitable arrangements pursuant to which the governmental entities, separately or jointly, could contract with electric power producers for a portion of the governmental entities' electric load to be supplied from renewable energy sources constructed within Nevada. The governmental entities, in turn, would be authorized to allow qualifying businesses to access portions of the power produced under such arrangements at a fixed rate for a specified number of years as an economic development tool to attract new enterprises to locate in Nevada or to incentivize existing businesses in Nevada to expand their operations and as a specific program to implement the Legislative declaration of State energy policy embodied in NRS 701.010. The PUCN would report its findings, conclusions, and recommendations to the 76th Session of the Nevada Legislature no later than February 11, 2011, if possible.

*(Recommended by Senator Townsend, January 19, 2010)*

## POSSIBLE COMMITTEE LETTERS, RESOLUTIONS, AND STATEMENTS

14. **Request a letter** to the Database of State Incentives for Renewables and Efficiency website requesting that it update its information on Nevada renewable energy incentives to include accurate information on portfolio energy credits.

*(Recommended by Suzanne Johnson, June 1, 2010)*

**NOTE:**

- **The Chair may choose to raise other issues for discussion or Committee action during the work session.**
- **Committee staff may need to seek additional details or clarification on approved recommendations from Committee members and others prior to drafting bill draft requests or Committee letters/statements.**

# EXHIBIT A

**NRS 701.220 Adoption of regulations for energy conservation in buildings; exemptions; applicability and enforcement; procedures for adoption.**

1. The Commissioner shall adopt regulations for the conservation of energy in buildings, including manufactured homes. Such regulations must include the adoption of the most recent version of the *International Energy Conservation Code*, issued by the International Code Council, and any amendments to the *Code* that will not materially lessen the effective energy savings requirements of the *Code* and are deemed necessary to support effective compliance and enforcement of the *Code*, and must establish the minimum standards for:

(a) The construction of floors, walls, ceilings and roofs;

(b) The equipment and systems for heating, ventilation and air-conditioning;

(c) Electrical equipment and systems;

(d) Insulation; and

(e) Other factors which affect the use of energy in a building.

➥ The regulations must provide for the adoption of the most recent version of the *International Energy Conservation Code*, and any amendments thereto, every third year.

2. The Commissioner may exempt a building from a standard if the Commissioner determines that application of the standard to the building would not accomplish the purpose of the regulations.

3. The regulations must authorize allowances in design and construction for sources of renewable energy used to supply all or a part of the energy required in a building.

4. The standards adopted by the Commissioner are the minimum standards for the conservation of energy and energy efficiency in buildings in this State. The governing body of a local government that is authorized by law to adopt and enforce a building code:

(a) Except as otherwise provided in paragraph (b), shall incorporate the standards adopted by the Commissioner in its building code;

(b) May adopt higher or more stringent standards and must report any such higher or more stringent standards, along with supporting documents, to the Commissioner; and

(c) Shall enforce the standards adopted.

5. The Commissioner shall solicit comments regarding the adoption of regulations pursuant to this section from:

(a) Persons in the business of constructing and selling homes;

(b) Contractors;

(c) Public utilities;

(d) Local building officials; and

(e) The general public,

➥ before adopting any regulations. The Commissioner must conduct at least three hearings in different locations in the State, after giving 30 days' notice of each hearing, before the Commissioner may adopt any regulations pursuant to this section.

(Added to NRS by 1985, 1794; A 2001, 1251, 3266; 2003, 32; 2005, 22nd Special Session, 76; 2009, 986, 1375)

**NRS 331.110 Lease of offices outside state buildings.**

1. Except as otherwise provided in subsection 2, the Chief may lease and equip office rooms outside of state buildings for the use of state officers and employees, whenever sufficient space for the officers and employees cannot be provided within state buildings, but no such lease may extend beyond the term of 1 year unless it is reviewed and approved by a majority of the members of the State Board of Examiners. The Attorney General shall approve each lease entered into pursuant to this subsection as to form and compliance with law.

2. The provisions of subsection 1 do not apply to state officers and employees of boards that are exempt from the provisions of chapter 353 of NRS pursuant to NRS 353.005.

[8:320:1949; 1943 NCL § 6976.28]—(NRS A 1971, 172; 1993, 1561; 2001, 809; 2005, 5)

# EXHIBIT B

SENATE BILL NO. 327–SENATOR SCHNEIDER

MARCH 16, 2009

Referred to Committee on Energy, Infrastructure and Transportation

SUMMARY—Provides incentives for certain electrification projects. (BDR S-377)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State: No.

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EXPLANATION – Matter in *bolded italics* is new; matter between brackets [~~omitted material~~] is material to be omitted.

AN ACT relating to energy; authorizing the Public Utilities Commission of Nevada to provide certain incentives for investments in advanced travel center electrification systems and systems for recharging plug-in electric or plug-in hybrid electric vehicles; establishing the Electric Vehicle Demonstration Program; requiring the Commission to adopt regulations to carry out the Demonstration Program; requiring electric utilities in this State to administer the Demonstration Program in their service areas; and providing other matters properly relating thereto.

**Legislative Counsel's Digest:**

**Section 1** of this bill authorizes the Public Utilities Commission of Nevada to adopt regulations providing certain incentives and portfolio energy credits to an electric utility that operates or invests in an advanced travel center electrification system or a system for recharging plug-in electric or plug-in hybrid electric vehicles. An electric utility is authorized to enter into a joint venture with one or more persons or governmental entities to develop or invest in such an electrification project. To be eligible for any incentives or portfolio energy credits authorized by this bill, an electrification project must be located within the service area of the electric utility.

**Sections 2-21** of this bill establish the Electric Vehicle Demonstration Program. **Section 16** creates the Demonstration Program. **Section 17** requires the Commission to adopt regulations to carry out the Demonstration Program, including regulations concerning the qualifications of and the incentives available to participants in the Demonstration Program. **Section 18** requires each electric utility in this State to carry out the Demonstration Program in the utility's service area and authorizes the utility to recover its reasonable and prudent costs for carrying out and administering the Demonstration Program. **Section 20** authorizes

the Task Force for Renewable Energy and Energy Conservation to select qualified applicants to participate in the Demonstration Program. **Section 21** authorizes the Task Force to withdraw a participant from the Demonstration Program if the participant does not comply with the requirements of the Demonstration Program. **Section 22** of this bill provides that the Demonstration Program will expire in 2013.

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WHEREAS, Energy and clean air are essential to the health, welfare and security of Nevada residents and businesses; and

WHEREAS, New electrical vehicle propulsion technologies are emerging and their adoption should be encouraged; and

WHEREAS, Nevada public utilities should be encouraged to prepare for large-scale use of electric powered motor vehicles; and

WHEREAS, The efficiency and cost effectiveness of electric generation facilities can be enhanced by spreading the fixed cost of operation over a greater number of hours per day and by introducing a new customer base, namely vehicles; and

WHEREAS, Nevada has been a leader in energy efficiency and should continue to adopt public policies that foster energy innovation; and

WHEREAS, Transportation fuel costs have risen dramatically, and such costs impact the price of goods and services in Nevada as well as the strength of Nevada's tourism industry; and

WHEREAS, Fossil fuel use in vehicles has a detrimental impact on air quality and the health of Nevada's residents and the reduction in use of such fuels will benefit Nevada's environment; now, therefore,

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

**Section 1.** 1. The Public Utilities Commission of Nevada may adopt regulations which:

(a) Establish a program for the approval of an increased rate of return on equity for investments made by an electric utility in:

(1) An advanced travel center electrification system; or

(2) A system for recharging plug-in electric or plug-in hybrid electric vehicles.

(b) For the purpose of complying with a portfolio standard established pursuant to NRS 704.7821:

(1) Provide more than one portfolio energy credit for each kilowatt-hour of electricity generated by a wind energy system on the premises of an electrification project if, on an annual basis, 50 percent or more of the energy generated by the wind energy system is used by the electrification project; and

(2) Provide more than the number of kilowatt-hours deemed to have been generated from a solar photovoltaic energy system pursuant to NRS 704.7822 on the premises of an electrification project if, on an annual basis, 50 percent or more of the energy generated by the solar photovoltaic system is used by the electrification project.

2. In applying for any program or portfolio energy credit authorized pursuant to subsection 1, an electric utility may:

(a) Enter into a joint venture with one or more persons or governmental entities; and

(b) Invest in an electrification project owned by a person other than an electric utility.

3. To be eligible for any program or portfolio energy credit authorized pursuant to subsection 1, an electrification project must be located within the service area of the electric utility.

4. As used in this section:

(a) "Advanced travel center electrification system" means a system designed to allow a commercial truck to shut down its engine and still obtain power for heating, cooling, lighting and communication.

(b) "Electric utility" has the meaning ascribed to it in NRS 704B.050.

(c) "Electrification project" means:

(1) An advanced travel center electrification system; or

(2) A system for recharging plug-in electric or plug-in hybrid electric vehicles.

**Sec. 2.** Sections 2 to 21, inclusive, of this act may be cited as the Electric Vehicle Demonstration Program.

**Sec. 3.** As used in sections 2 to 21, inclusive, of this act, unless the context otherwise requires, the words and terms defined in sections 4 to 15, inclusive, of this act have the meaning ascribed to them in those sections.

**Sec. 4.** "Applicant" means a person who is applying to participate in the Demonstration Program.

**Sec. 5.** "Category" means one of the categories of participation in the Demonstration Program as set forth in section 16 of this act.

**Sec. 6.** "Commission" means the Public Utilities Commission of Nevada.

**Sec. 7.** "Demonstration Program" means the Electric Vehicle Demonstration Program created by section 16 of this act.

**Sec. 8.** "Electric personal assistive mobility device" means a self-balancing, nontandem two-wheeled device, designed to transport only one person, with an electric propulsion system that limits the maximum speed of the device to 15 miles per hour or less.

**Sec. 9.** "Electric vehicle" means any vehicle that is powered in whole or in part by electrical power.

**Sec. 10.** "Participant" means a person who has been selected by the Task Force pursuant to section 20 of this act to participate in the Demonstration Program.

**Sec. 11.** "Person" includes, without limitation, a governmental entity.

**Sec. 12.** "Program year" means the period of July 1 to June 30 of the following year.

**Sec. 13.** "Task Force" means the Task Force for Renewable Energy and Energy Conservation created by NRS 701.350.

**Sec. 14.** "Utility" means a public utility that supplies electricity in this State.

**Sec. 15.** "Vehicle" means every device in, upon or by which any person or property is or may be transported. The term does not include:

1. Devices moved by human power or used exclusively upon stationary rails or tracks;
2. Mobile homes or commercial coaches as defined in chapter 489 of NRS; or
3. Electric personal assistive mobility devices.

**Sec. 16.** 1. The Electric Vehicle Demonstration Program is hereby created.

2. The Demonstration Program must have four categories as follows:

(a) Schools;
(b) Other public entities;
(c) Private persons; and
(d) Businesses.

3. To be eligible to participate in the Demonstration Program, a person must:

(a) Meet the qualifications established by the Commission pursuant to section 17 of this act;

(b) Submit an application to a utility and be selected by the Task Force for inclusion in the Demonstration Program pursuant to sections 19 and 20 of this act; and

(c) If the person will be participating in the Demonstration Program in the category of schools or other public entities, provide for the public display of the electric vehicle and any electric vehicle charging station installed or operated by the participant, including, without limitation, providing for public demonstrations of the electric vehicle and the electric vehicle charging station.

**Sec. 17.** The Commission shall adopt regulations necessary to carry out the provisions of the Demonstration Program, including, without limitation, regulations that establish:

1. The qualifications and requirements an applicant must meet to be eligible to participate in the Demonstration Program in each category.

2. The type of incentives available to participants in the Demonstration Program and the level or amount of those incentives.

3. The requirements for a utility's annual plan for carrying out and administering the Demonstration Program. A utility's annual plan must include, without limitation:

(a) A detailed plan for advertising the Demonstration Program;

(b) A detailed budget and schedule for carrying out and administering the Demonstration Program;

(c) A detailed account of administrative processes and forms that will be used to carry out and administer the Demonstration Program, including, without limitation, a description of the application process and copies of all applications and any other forms that are necessary to apply for and participate in the Demonstration Program;

(d) A detailed account of the procedures that will be used for inspection and verification of a participant's electric vehicle and any system for recharging plug-in electric vehicles installed or operated by the participant;

(e) A detailed account of training and educational activities that will be used to carry out and administer the Demonstration Program; and

(f) Any other information required by the Commission.

**Sec. 18.** 1. Each utility shall carry out and administer the Demonstration Program within its service area in accordance with its annual plan as approved by the Commission pursuant to section 19 of this act.

2. A utility may recover its reasonable and prudent costs, including, without limitation, customer incentives, that are associated with carrying out and administering the Demonstration Program within its service area by seeking recovery of those costs in an appropriate proceeding before the Commission pursuant to NRS 704.110.

**Sec. 19.** 1. On or before February 1, 2010, and on or before February 1 of each year thereafter, each utility shall file with the Commission its annual plan for carrying out and administering the Demonstration Program within its service area for the following program year.

2. On or before July 1, 2010, and on or before July 1 of each year thereafter, the Commission shall:

(a) Review the annual plan filed by each utility for compliance with the requirements established by regulation pursuant to section 17 of this act; and

(b) Approve the annual plan with such modifications and upon such terms and conditions as the Commission finds necessary or appropriate to facilitate the Demonstration Program.

3. On or before November 1, 2010, and on or before November 1 of each year thereafter, each utility shall submit to the Task Force the utility's recommendations as to which applications received by the utility should be approved for participation in the Demonstration Program. The Task Force shall review the applications to ensure that each applicant meets the qualifications and requirements to be eligible to participate in the Demonstration Program.

4. Except as otherwise provided in section 20 of this act, the Task Force may approve, from among the applications recommended by each utility, electric vehicles totaling:

(a) For the program year beginning July 1, 2010:

(1) One hundred electric vehicles for schools;

(2) One hundred electric vehicles for other public entities;

(3) One hundred electric vehicles for private persons; and

(4) One hundred electric vehicles for businesses.

(b) For the program year beginning July 1, 2011:

(1) An additional 125 electric vehicles for schools;

(2) An additional 125 electric vehicles for other public entities;

(3) An additional 125 electric vehicles for private persons; and

(4) An additional 125 electric vehicles for businesses.

(c) For the program year beginning July 1, 2012:

(1) An additional 150 electric vehicles for schools;

(2) An additional 150 electric vehicles for other public entities;

(3) An additional 150 electric vehicles for private persons; and

(4) An additional 150 electric vehicles for businesses.

**Sec. 20.** 1. Based on the applications submitted by each utility for a program year, the Task Force shall:

(a) Within the limits allocated to each category, select applicants to be participants in the Demonstration Program and place those applicants on a list of participants; and

(b) Select applicants to be placed on a prioritized waiting list to become participants in the Demonstration Program if any allocation within a category becomes available.

2. Not later than 30 days after the date on which the Task Force selects an applicant to be on the list of participants or the prioritized waiting list, the utility which submitted the application to the Task

Force on behalf of the applicant shall provide written notice of the selection to the applicant.

3. If the electric vehicles allocated to any category for a program year are not fully subscribed by participants in that category, the Task Force may, in any combination it deems appropriate:

(a) Allow a utility to submit additional applications from applicants who wish to participate in that category;

(b) Reallocate any of the unallocated electric vehicles in that category to any of the other categories; or

(c) Reallocate any of the unallocated electric vehicles for a program year to the next program year.

**Sec. 21.** 1. Except as otherwise provided in this section, if the Task Force determines that a participant has not complied with the requirements for participation in the Demonstration Program, the Task Force shall, after notice and an opportunity for a hearing, withdraw the participant from the Demonstration Program.

2. The Task Force may, without notice or an opportunity for a hearing, withdraw a participant from the Demonstration Program if the participant does not purchase an electric vehicle within 90 days after the date the participant receives written notice of his selection to participate in the Demonstration Program.

3. A participant who is withdrawn from the Demonstration Program pursuant to subsection 2 forfeits any incentives.

**Sec. 22.** 1. This section and section 1 of this act become effective upon passage and approval.

2. Sections 2 to 21, inclusive, of this act become effective on July 1, 2009, and expire by limitation on September 30, 2013.

(30)

# EXHIBIT C

EXEMPT

**(Reprinted with amendments adopted on May 20, 2009)**

**SECOND REPRINT** **S.B. 242**

SENATE BILL NO. 242–SENATOR SCHNEIDER

MARCH 13, 2009

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Referred to Committee on Energy, Infrastructure and Transportation

SUMMARY—Enacts provisions relating to energy efficiency, renewable energy and building construction. (BDR 58-378)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State: Yes.

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EXPLANATION – Matter in *bolded italics* is new; matter between brackets [~~omitted material~~] is material to be omitted.

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AN ACT relating to energy; requiring certain contractors to offer upgrades for renewable energy and energy efficiency; requiring certain contractors assisting buyers in obtaining financing to offer, or work with lenders that offer, energy efficient mortgages; requiring licensees of the Real Estate Division of the Department of Business and Industry to make certain information about energy efficiency in residential property available to each party to a real estate transaction; revising continuing education requirements relating to energy efficiency for real estate brokers, real estate broker-salesmen, real estate salesmen, mortgage brokers and certified or licensed real estate appraisers; and providing other matters properly relating thereto.

**Legislative Counsel's Digest:**

**Section 4** of this bill: (1) requires a contractor to offer certain upgrades for renewable energy and energy efficiency to a person who negotiates to purchase a single-family residence which will be built by the contractor as part of a development of 25 or more single-family residences; and (2) requires a contractor to offer information about retrofitting certain upgrades for renewable energy and energy efficiency to a person who negotiates to purchase a single-family residence which has already been built by the contractor as part of a development of 25 or more single-family residences. **Section 5** of this bill requires a contractor who arranges financing for the purchase of a single-family residence which is built by the contractor as part of a development of 25 or more single-family residences to offer, or work with a lender that offers, the option for the buyer to apply for an energy efficient mortgage. If the contractor does not arrange financing for buyers,

**section 5** requires the contractor to provide information to buyers concerning energy efficient mortgages.

**Section 8** of this bill requires licensees of the Real Estate Division of the Department of Business and Industry to distribute free of charge to each party to a real estate transaction written information which is available publicly and which is designed to assist in the identification, evaluation and selection of energy efficiency and conservation features in residential property. **Sections 11, 12 and 13** of this bill amend the continuing education requirements for real estate brokers, real estate broker-salesmen, real estate salesmen, mortgage brokers and certified or licensed real estate appraisers to include a requirement for training in energy efficiency and conservation features in residential property. (NRS 645.575, 645B.051, 645C.440)

**Sections 11.5 and 13.5** of this bill allow a new component of not more than 1 hour of instruction concerning energy efficiency in residential property to be added to an existing course of continuing education without the Division charging accreditation or approval fees for the addition of the new component to the course. (NRS 645.830, 645C.450)

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THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

**Section 1.** (Deleted by amendment.)

**Sec. 2.** (Deleted by amendment.)

**Sec. 3.** Chapter 624 of NRS is hereby amended by adding thereto the provisions set forth as sections 4 and 5 of this act.

**Sec. 4.** *1. A contractor shall offer a choice of upgrades for renewable energy and energy efficiency to a person who negotiates to purchase a single-family residence which will be built by the contractor as part of a development of 25 or more single-family residences. The upgrades may be offered in a package, but the contractor shall allow the person to select individual upgrades and shall not require the selection of an entire package. Qualifying upgrades include, without limitation:*

*(a) Awnings and shutters;*

*(b) Cool roof coating;*

*(c) Energy efficient appliances;*

*(d) A ground source heat pump;*

*(e) Low-emissivity windows;*

*(f) A programmable thermostat;*

*(g) Ridge vents;*

*(h) A system for solar energy that:*

*(1) Consists of a photovoltaic solar collector, or other device for photovoltaic solar energy, that has a primary purpose of providing for the collection, storage and distribution of solar energy for the generation of electricity; and*

*(2) Produces an average of at least 2 kilowatts of alternating current of electricity;*

*(i) A system for solar thermal energy that has a primary purpose of providing for the collection, storage and distribution of solar energy for the production of hot water or air for space heating or water heating; and*

*(j) A charging station for an electric vehicle.*

*2. A contractor shall provide information on retrofitting qualifying upgrades for renewable energy and energy efficiency set forth in subsection 1 to a person who negotiates to purchase a single-family residence which the contractor has already built as part of a development of 25 or more single-family residences.*

**Sec. 5.** *1. A contractor who:*

*(a) Directly or through an affiliate, subsidiary or other related entity arranges financing for the purchase of a single-family residence which is built by the contractor as part of a development of 25 or more single-family residences shall offer, or work with a lender that offers, the option for the buyer to apply for an energy efficient mortgage.*

*(b) Does not arrange financing for the purchase of a single-family residence specified in paragraph (a) shall provide to the purchaser, free of charge, written information concerning energy efficient mortgages which must include, without limitation, the information concerning energy efficient mortgages available publicly from the United States Department of Energy, the Environmental Protection Agency, the Federal Housing Administration and the Department of Housing and Urban Development.*

*2. As used in this section, "energy efficient mortgage" means a mortgage which credits the energy efficiency of a home in the mortgage by providing borrowers with the opportunity to finance cost-effective and energy-saving measures as part of a single mortgage and by increasing debt-to-income qualifying ratios on loans.*

**Sec. 6.** Chapter 645 of NRS is hereby amended by adding thereto the provisions set forth as sections 7 and 8 of this act.

**Sec. 7.** *"Residential property" has the meaning ascribed to it in NRS 113.100.*

**Sec. 8.** *A licensee shall provide, free of charge, to each party to a real estate transaction written information which is available publicly and which is designed to assist a person in the identification, evaluation and selection of energy efficiency and conservation features in residential property. The written information must include, without limitation, information relating to:*

*1. Appliances;*

*2. Building materials used in homes;*

*3. Cool roofs;*
*4. Energy efficient mortgages and financing;*
*5. "Green" home certification programs;*
*6. Heating and cooling systems, including water heating systems;*
*7. Home energy audits and ratings;*
*8. Insulation;*
*9. Landscaping;*
*10. Lighting and day lighting;*
*11. Passive solar heating;*
*12. Solar electricity;*
*13. Water-conserving devices; and*
*14. Windows.*

**Sec. 9.** NRS 645.0005 is hereby amended to read as follows:

645.0005 As used in this chapter, unless the context otherwise requires, the words and terms defined in NRS 645.001 to 645.042, inclusive, *and section 7 of this act* have the meanings ascribed to them in those sections.

**Sec. 10.** NRS 645.194 is hereby amended to read as follows:

645.194 1. The Division shall prepare a booklet that provides relevant information concerning the disclosures that are required by federal, state and local laws and regulations by a buyer and a seller in a transaction involving the sale of residential property.

2. The Division shall make copies of the booklet prepared pursuant to subsection 1 available to licensees which the licensee must distribute to prospective buyers and sellers in the sale of residential property in accordance with the regulations adopted by the Commission.

3. The Commission shall approve the format and content of the information that must be included in the booklet.

~~[4. As used in this section, "residential property" has the meaning ascribed to it in NRS 113.100.]~~

**Sec. 11.** NRS 645.575 is hereby amended to read as follows:

645.575 1. The Commission shall adopt regulations that prescribe the standards for the continuing education of persons licensed pursuant to this chapter.

2. The standards adopted pursuant to subsection 1 must permit alternatives of subject material, taking cognizance of specialized areas of practice and alternatives in sources of programs considering availability in area and time. The standards must include, where qualified, generally accredited educational institutions, private vocational schools, educational programs and seminars of professional societies and organizations, other organized educational programs on technical subjects, or equivalent offerings. The Commission shall qualify only those educational courses that it

determines address the appropriate subject matter and are given by an accredited university or community college. Subject to the provisions of this section, the Commission has exclusive authority to determine what is an appropriate subject matter for qualification as a continuing education course.

3. In addition to any other standards for continuing education that the Commission adopts by regulation pursuant to this section, the Commission may, without limitation, adopt by regulation standards for continuing education that:

(a) Establish a postlicensing curriculum of continuing education which must be completed by a person within the first year immediately after initial licensing of the person.

(b) Require a person whose license as a real estate broker or real estate broker-salesman has been placed on inactive status for any reason for 1 year or more or has been suspended or revoked to complete a course of instruction in broker management that is designed to fulfill the educational requirements for issuance of a license which are described in paragraph (d) of subsection 2 of NRS 645.343 ~~[,]~~ before the person's license is reissued or reinstated.

4. ***In addition to any other standards for continuing education that the Commission adopts by regulation pursuant to this section, the Commission shall adopt by regulation standards for continuing education that require a person who holds a license as a real estate broker, real estate broker-salesman or real estate salesman to complete instruction in energy efficiency in residential property which includes, without limitation, instruction concerning each energy efficiency and conservation feature set forth in section 8 of this act.***

*5.* Except as otherwise provided in this subsection, the license of a real estate broker, broker-salesman or salesman must not be renewed or reinstated unless the Administrator finds that the applicant for the renewal license or for reinstatement to active status has completed the continuing education required by this chapter. Any amendment or repeal of a regulation does not operate to prevent an applicant from complying with this section for the next licensing period following the amendment or repeal.

**Sec. 11.5.** NRS 645.830 is hereby amended to read as follows:

645.830 1. ~~[The]~~ ***Except as otherwise provided in subsection 3, the*** following fees must be charged by and paid to the Division:

| | |
|---|---|
| For each original real estate broker's, broker-salesman's or corporate broker's license | $105 |
| For each original real estate salesman's license | 85 |
| For each original branch office license | 120 |

For real estate education, research and recovery to be paid at the time an application for an original license is filed ..... $40

For real estate education, research and recovery to be paid at the time an application for renewal of a license is filed ..... 40

For each renewal of a real estate broker's, broker-salesman's or corporate broker's license ..... 180

For each renewal of a real estate salesman's license ..... 140

For each renewal of a real estate branch office license ..... 110

For each penalty for late filing of a renewal for a broker's, broker-salesman's or corporate broker's license ..... 95

For each penalty for late filing of a renewal for a salesman's license ..... 75

For each change of name or address ..... 20

For each transfer of a real estate salesman's or broker-salesman's license and change of association or employment ..... 20

For each duplicate license where the original license is lost or destroyed, and an affidavit is made thereof ..... 20

For each change of broker status from broker to broker-salesman ..... 20

For each change of broker status from broker-salesman to broker ..... 40

For each reinstatement to active status of an inactive real estate broker's, broker-salesman's or salesman's license ..... 20

For each reinstatement of a real estate broker's license when the licensee fails to give immediate written notice to the Division of a change of name or business location ..... 30

For each reinstatement of a real estate salesman's or broker-salesman's license when he fails to notify the Division of a change of broker within 30 days of termination by previous broker ..... 30

For each original registration of an owner-developer ..... 125

For each annual renewal of a registration of an owner-developer ..... 125

For each enlargement of the area of an owner-developer's registration ..... 50

For each cooperative certificate issued to an out-of-state broker licensee for 1 year or fraction thereof ..... 150

For each original accreditation of a course of continuing education ..... $100
For each renewal of accreditation of a course of continuing education ..... 50
For each annual approval of a course of instruction offered in preparation for an original license or permit ..... 100

2. The fees prescribed by this section for courses of instruction offered in preparation for an original license or permit or for courses of continuing education do not apply to:

(a) Any university, state college or community college of the Nevada System of Higher Education.

(b) Any agency of the State.

(c) Any regulatory agency of the Federal Government.

3. ***The Division shall not charge and collect a fee for the original or renewal accreditation of an existing course of continuing education solely on the basis that a new component consisting of not more than 1 hour of instruction concerning energy efficiency in residential property is added to the curriculum of the existing course of continuing education.***

*4.* The Commission shall adopt regulations which establish the fees to be charged and collected by the Division to pay the costs of any investigation of a person's background.

**Sec. 12.** NRS 645B.051 is hereby amended to read as follows:

645B.051 1. Except as otherwise provided in this section, in addition to the requirements set forth in NRS 645B.050, to renew a license as a mortgage broker:

(a) If the licensee is a natural person, the licensee must submit to the Commissioner satisfactory proof that the licensee attended at least 10 hours of certified courses of continuing education during the 12 months immediately preceding the date on which the license expires.

(b) If the licensee is not a natural person, the licensee must submit to the Commissioner satisfactory proof that each natural person who supervises the daily business of the licensee attended at least 10 hours of certified courses of continuing education during the 12 months immediately preceding the date on which the license expires.

2. The Commissioner may provide by regulation that if a person attends more than 10 hours of certified courses of continuing education during a 12-month period, the extra hours may be used to satisfy the requirement for the immediately following 12-month period and for that immediately following 12-month period only.

3. *In addition to any other standards for continuing education that the Commissioner adopts by regulation pursuant to NRS 645B.0138, the Commissioner shall adopt by regulation standards for continuing education that require a licensee to complete a course of instruction which includes, without limitation, instruction related to energy efficient mortgages and financing.*

*4.* As used in this section, "certified course of continuing education" means a course of continuing education which relates to the mortgage industry or mortgage transactions and which meets the requirements set forth by the Commissioner by regulation pursuant to NRS 645B.0138.

**Sec. 12.5.** NRS 645C.340 is hereby amended to read as follows:

645C.340 1. Each application for an examination for a certificate or license must be accompanied by the fees established by the Division pursuant to subsection ~~[2]~~ *3* of NRS 645C.450.

2. The examination must test the applicant on his knowledge and understanding of:

(a) Subjects applicable to the type of certificate or license for which he is applying; and

(b) Laws regarding the practice of preparing and communicating appraisals, including the provisions of this chapter and any regulations adopted pursuant thereto.

3. The Division may hire a professional testing organization to create, administer or score the examination.

**Sec. 13.** NRS 645C.440 is hereby amended to read as follows:

645C.440 1. The Commission shall adopt regulations governing the continuing education of certified or licensed appraisers. The regulations must include the criteria for approving each course and the requirements for submission of proof of attendance at a course.

2. In approving courses for continuing education , the Commission shall authorize a variety of subjects and give consideration to specialized areas of practice and the availability of programs. An appropriate educational course given by an accredited university or community college must be approved by the Commission.

*3. In addition to any other standards for continuing education that the Commission adopts by regulation pursuant to this section, the Commission shall adopt by regulation standards for continuing education that require a certified or licensed appraiser to complete instruction in energy efficiency in residential property which includes, without limitation, instruction*

*concerning each energy efficiency and conservation feature set forth in section 8 of this act.*

**Sec. 13.5.** NRS 645C.450 is hereby amended to read as follows:

645C.450 1. ~~[The]~~ *Except as otherwise provided in subsection 2, the* following fees may be charged and collected by the Division:

| | |
|---|---|
| Application for a certificate, license or registration card | $100 |
| Issuance or renewal of a certificate or license as a residential appraiser | 290 |
| Issuance or renewal of a certificate as a general appraiser | 390 |
| Issuance of a permit | 115 |
| Issuance or renewal of a registration card | 190 |
| Issuance of a duplicate certificate or license for an additional office | 50 |
| Change in the name or location of a business | 20 |
| Reinstatement of an inactive certificate or license | 30 |
| Annual approval of a course of instruction offered in preparation for an initial certificate or license | 100 |
| Original approval of a course of instruction offered for continuing education | 100 |
| Renewal of approval of a course of instruction offered for continuing education | 50 |

2. *The Division shall not charge and collect a fee for the original or renewal accreditation of an existing course of continuing education solely on the basis that a new component consisting of not more than 1 hour of instruction concerning energy efficiency in residential property is added to the curriculum of the existing course of instruction for continuing education.*

*3.* The Division shall adopt regulations which establish the fees to be charged and collected by the Division to pay the costs of:

(a) Any examination for a certificate or license, including any costs which are necessary for the administration of such an examination.

(b) Any investigation of a person's background.

**Sec. 14.** (Deleted by amendment.)

**Sec. 15.** 1. This section and section 14 of this act become effective upon passage and approval.

2. Section 8 of this act becomes effective:

(a) Upon passage and approval for the purpose of taking any actions required by a licensee to provide written information

concerning energy efficiency and conservation specified in that section; and

(b) On October 1, 2009, for all other purposes.

3. Sections 1, 11, 11.5, 12, 13 and 13.5 of this act become effective upon passage and approval for the purpose of adopting regulations and on October 1, 2009, for all other purposes.

4. Sections 2 to 5, inclusive, 6, 7, 9, 10 and 12.5 of this act become effective on October 1, 2009.

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# EXHIBIT D

**NRS 704.7811 "Renewable energy" defined.**

1. "Renewable energy" means:

(a) Biomass;

(b) Geothermal energy;

(c) Solar energy;

(d) Waterpower; and

(e) Wind.

2. The term does not include coal, natural gas, oil, propane or any other fossil fuel, or nuclear energy.

3. As used in this section, "waterpower" means power derived from standing, running or falling water which is used for any plant, facility, equipment or system to generate electricity if the generating capacity of the plant, facility, equipment or system is not more than 30 megawatts. Except as otherwise provided in this subsection, the term includes, without limitation, power derived from water that has been pumped from a lower to a higher elevation if the generating capacity of the plant, facility, equipment or system for which the water is used is not more than 30 megawatts. The term does not include power:

(a) Derived from water stored in a reservoir by a dam or similar device, unless:

(1) The water is used exclusively for irrigation;

(2) The dam or similar device was in existence on January 1, 2003; and

(3) The generating capacity of the plant, facility, equipment or system for which the water is used is not more than 30 megawatts;

(b) That requires a new or increased appropriation or diversion of water for its creation; or

(c) That requires the use of any fossil fuel for its creation, unless:

(1) The primary purpose of the use of the fossil fuel is not the creation of the power; and

(2) The generating capacity of the plant, facility, equipment or system for which the water is used is not more than 30 megawatts.

(Added to NRS by 2001, 2527; A 2003, 1875)

**NRS 701.010 Legislative findings; state policy.**

1. The Legislature finds that:

(a) Energy is essential to the economy of the State and to the health, safety and welfare of the people of the State.

(b) The State has a responsibility to encourage the maintenance of a reliable and economical supply of energy at a level which is consistent with the protection of environmental quality.

(c) The State has a responsibility to encourage the utilization of a wide range of measures which reduce wasteful uses of energy resources.

(d) The State and the public have an interest in encouraging public utilities to promote and take actions toward energy conservation.

(e) Planning for energy conservation and future energy requirements should include consideration of state, regional and local plans for land use, urban expansion, transportation systems, environmental protection and economic development.

(f) Government and private enterprise need to accelerate research and development of sources of renewable energy and to improve technology related to the research and development of existing sources of energy.

(g) While government and private enterprise are seeking to accelerate research and development of sources of renewable energy, they must also prepare for and respond to the advent of competition within the electrical energy industry and are, therefore, encouraged to maximize the use of indigenous energy resources to the extent competitively and economically feasible.

(h) Prevention of delays and interruptions in providing energy, protecting environmental values and conserving energy require expanded authority and capability within State Government.

2. It is the policy of this State to encourage participation with all levels of government and private enterprise in cooperative state, regional and national programs to assure adequate supplies of energy resources and markets for such energy resources.

3. It is the policy of this State to assign the responsibility for managing and conserving energy and its sources to agencies whose other programs are similar, to avoid duplication of effort in developing policies and programs for energy.

(Added to NRS by 1977, 1163; A 1983, 2092; 1995, 311; 2001, 3263; 2007, 2973)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA**

Investigation regarding feed-in tariffs. )
)

Docket No. 09-11004

At a general session of the Public Utilities Commission of Nevada, held at its offices on May 12, 2010.

PRESENT: Chairman Sam A. Thompson
Commissioner Rebecca D. Wagner
Commissioner Alaina Burtenshaw
Assistant Commission Secretary Nancy Krassner

**ORDER**

## I. Introduction

On November 19, 2009, the Commission voted to open an investigation regarding feed-in tariffs ("FITs").

## II. Summary

The Commission approves the Presiding Officer's Report attached hereto as Attachment 1. The Commission will not adopt a FIT at this time.

## III. Procedural History

- On November 19, 2009, the Commission voted to open an investigation regarding FITs. The matter has been designated Docket No. 09-11004.
- This investigation is being conducted by the Commission pursuant to Chapters 233B, 703, and 704 of the Nevada Revised Statutes ("NRS") and the Nevada Administrative Code ("NAC").
- On January 15, 2010, the Commission issued a Notice of Investigation and Request for Comments and Proposed Regulations.
- On February 16, 2010, David von Seggern and Vote Solar filed comments.
- On February 17, 2010, Black Rock Solar, Inc., the Office of the Attorney General's Bureau of Consumer Protection ("BCP"), the Electric Auto Association of Northern Nevada ("EAANN"), NV Energy, the Regulatory Operations Staff ("Staff") of the Commission, the Solar Alliance, Solar Wind Works, and Western Resource Advocates ("WRA") filed comments.
- On February 24, 2010, the BCP, the EAANN, NV Energy, Staff, and WRA filed reply comments.
- On February 25, 2010, the Solar Alliance filed reply comments.
- On March 2, 2010, the Commission issued a Notice of Workshop.

DOCUMENT REVIEW AND APPROVAL ROUTING

DRAFTED BY: Anna M. Penrose-Lustig

FINAL DRAFT ON 5/12/10 AT 11:00 a.m.

| REVIEWED & APPROVED BY: | | DATE |
|---|---|---|
| ☐ | ADMIN / ASST. ( ) | / / |
| ☑ | COMM / COUNSEL DSN | 05/12/10 |
| ☐ | SECRETARY / ASST. SEC. | / / |
| ☐ | OTHER ( ) | / / |

- On March 29, 2010, the Commission held a workshop at which the BCP, EAANN, Great Basin Resource Watch, the Nevada State Office of Energy, NV Energy, the Solar Alliance, Staff, SunEdison, Vote Solar, and WRA, participated.
- On April 7, 2010, the Commission reconvened the workshop. The BCP, Great Basin Resource Watch, NV Energy, the Solar Alliance, Solar World California, Inc., Staff, and WRA participated.

## IV. Commission Discussion and Findings

1. The Presiding Officer has issued a Report on FITs as a result of the information gathered in this Investigation.

2. Based on the information in the Report, the Commission finds the decision to adopt a FIT should be made by the Nevada Legislature and not the Commission.

3. The Commission finds that the Report should be approved, and the following recommendations from the Report should be conveyed to the Nevada Legislature:

a. The Nevada Legislature should not replace existing policies and programs (the Renewable Portfolio Standard ("RPS") and the Solar Energy Incentive Program ("Solar Program") ) with a FIT. If a FIT is considered, it should complement these policies and programs. Renewable developers value consistency and predictability. Even modest changes to existing programs can have a negative effect on the industry by creating uncertainty.

b. Before adopting a FIT, the Nevada Legislature should clearly delineate the goals of the policy to avoid overlapping and duplicating existing programs. Identify any market segment that is not being served by the existing programs or policies and then consider modifications to those policies and programs. If an existing policy or program cannot be modified to achieve the goals of the Legislature, then a FIT could be considered. For example, a FIT could be used to stimulate a specific technology like combined heat and power.

c. Before adopting a FIT, the Nevada Legislature should consider the impacts on electric rates. The RPS and the Solar Program, among others, are funded by ratepayers. Given the current economic climate, adding ratepayer funded programs should be weighed carefully to ensure that rate impacts are balanced with the benefits.

d. Before adopting a FIT, the Nevada Legislature should consider the impacts on the electric utilities' transmission and distribution systems, including evaluating studies that provide analysis of how much the transmission and distribution systems can absorb without costly upgrades. For example, an understanding of how much distributed generation can be integrated onto the distribution system will help set the parameters for modifying existing policies and programs or establishing a FIT.

e. The Nevada Legislature should address the issue of the gap that exists for solar projects that are too large for the Solar Program and too small for the RPS. Currently, there is a lack of incentives for this sector.

f. If the Nevada Legislature decides to adopt a FIT, it should give the Commission the authority to implement the policy based on clearly delineated goals. For example, the Legislature could identify parameters like the type of resource and the size of projects and an overall program capacity cap. The Commission should have the authority to design the pricing mechanisms and to administratively set rates. Due to fluctuations in market prices, the Commission needs flexibility in setting the FIT rate to ensure ratepayers are protected and the program achieves its desired goals.

g. The Nevada Legislature should be mindful of the limitations created by the Public Utilities Regulatory Policy Act of 1978 ("PURPA") and the Federal Power Act ("FPA").

THEREFORE, it is ORDERED that:

1. The Report, attached hereto as Attachment 1, is APPROVED.

2. The Commission shall not adopt a feed-in tariff at this time.

3. The Commission shall convey the Report to the Nevada Legislature.

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4. The Commission may correct any errors that may have occurred in the drafting or issuance of this Order without further proceedings.

By the Commission

SAM A. THOMPSON, Chairman

REBECCA D. WAGNER,
Commissioner and Presiding Officer

ALAINA BURTENSHAW, Commissioner

Attest:
NANCY KRASSNER,
Assistant Commission Secretary

Dated: Carson City, Nevada
5/14/10

(SEAL)

PUBLIC UTILITIES COMMISSION OF NEVADA PUC

# Attachment 1

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Investigation regarding feed-in tariffs. )
)
Docket No. 09-11004

# REPORT

## I. INTRODUCTION

Pursuant to a request by State Senator Mike Schneider, Chairman of the Production and Use of Energy Committee, the Public Utilities Commission of Nevada ("Commission") opened a docket in order to investigate the use of a feed-in tariff ("FIT") in Nevada. The Presiding Officer requested and received initial comments and reply comments from interested parties and conducted two workshops. The results of the investigation are detailed in this Report.

## II. SUMMARY

FITs are financial mechanisms used to spur the development of renewable energy. Several European countries, the Canadian province of Ontario, as well as several states and municipalities have adopted FITs or are considering them. For example, Germany has experienced a great deal of success with FITs. Based on this investigation, the Presiding Officer concludes that the decision to enact a FIT should be left to the Nevada Legislature. Should the Legislature choose to pursue a FIT, careful consideration should be given to the goals of the policy as well as the existing renewable energy policies and programs like the Renewable Portfolio Standard ("RPS"), the Solar Energy Incentive Program ("Solar Program"), net metering provisions and third party ownership. A FIT should not replace these policies and programs, but rather complement them. Careful consideration should be given to ratepayer impacts as well as effects of additional renewable energy systems on the transmission and distribution systems.

## III. BACKGROUND

Generally, a FIT is a policy mechanism that requires a utility to pay a specific, premium rate for renewable energy. The rate may differ between types of generation and system sizes depending upon the intended goal of the program.

### A. Spain

Spain created its FIT program in 1997 to promote energy diversification, although it only boosted the wind industry. Program modifications in 2007 unintentionally paired high incentive levels with inexpensive solar panels,[1] creating an artificial solar market. Developers experienced a windfall of profits enabled by a loophole allowing numerous smaller projects[2] to be linked together to benefit from both economies of scale and the higher tariff rates given to smaller facilities, and the certainty provided by the tariff. In 2008, the program was modified again. In 2009 it was temporarily suspended to curtail runaway expenses. Yearly capacity was capped at 500 megawatts ("MW") and rates cut by 25 percent. This effectively tightened the market but

also dramatically reduced solar installations from 2,250 MW in 2008[3] to 125 MW in 2009,[4] and elevated the unemployment rate once developers left the less profitable market. Currently, the FIT contracts are for 25 years. The tariff rates now vary by type of renewable energy and capacity, and pursuant to new revisions, tariff rates are reviewed every four years. The FIT is Spain's main financial mechanism used to promote solar generation.[5]

**B. Germany**

Created in 1990 as a mechanism to advance hydro-electric and wind power for the purpose of greenhouse gas ("GHG") emission reduction, the FIT program became more robust after revisions in 2000 and particularly solar friendly after a 2004 amendment created different tariff rates for different solar installations.[6] Germany's FIT contracts are for 20 years. Tariff rates vary by type of renewable and are reviewed every four years. Rates are based on a levelized cost of generation plus a rate of return,[7] and drop annually by a fixed degression rate.[8] Grid access is legally guaranteed with no project size restrictions or program capacity caps. Currently the FIT is Germany's largest financial mechanism used to promote solar generation.[9]

**C. Ontario**

In the next 20 years it is expected that due to a combination of population growth and old plant retirements, at least 80 percent of Ontario's current generating facilities will be replaced.[10] Ontario's first program, the Renewable Energy Standard Offer Program ("RESOP"), introduced in 2006, offered small (under 10 MW) renewable projects the ability to sell their electricity to the distribution system at a fixed price under a long term contract. In 2009, the RESOP was replaced with the current FIT program. FIT contracts are for 20 years, with the exception of 40-year contracts for hydro-electric systems, and tariff rates are reviewed every two years regardless of contract type. Access to the grid is guaranteed with no project or annual capacity caps. Ontario's MicroFIT program was designed specifically to encourage the installation of systems of 10 kilowatts ("kW") or less.[11] For installations greater than 10 kW, a minimum percent of goods and services are required to come from Ontario. To encourage Aboriginal and community participation, "price adders"[12] are added to their tariff rates. FIT applications are prioritized by ability to become operational most quickly and there are time limits for establishing commercial operation. Applicants will not be penalized for non-generation for up to two years, at which time the contract can be terminated by the utility.

**D. United States**

While FIT policies have been used for many years in Europe, they are in their infancy stage in the United States. Many states, utilities, and commissions have either adopted FITs or are in the process of evaluating them. Due to the lack of meaningful experience in the United States, it is difficult to determine which FIT designs will be the most effective in achieving the policy goals. Listed in Table 1 are some FIT policies currently adopted as well as legislation proposed in some states. It is important to note that this is not a comprehensive list because of the ever changing policy goals of individual states and jurisdictions.

Table 1. State/ Utilities Offering a Production Based Incentive Program[13]

| State/Utility (Program Name) | Key Facts | Introduced/ Adopted | Qualifying Renewables | Facility Size Max. | Program Cap |
|---|---|---|---|---|---|
| California: Sacramento Municipal Utility District (SMUD), (FIT) | Tariff rates vary by time of day, season, length of contract. Combined heat and power ("CHP") rates increase each year through the contract period, rates for other renewables are locked in by initial contract year price. | Adopted Sept. 2009 | CHP, Solar Thermal, Photovoltaics ("PV"), Landfill Gas, Biomass, Geothermal, Municipal Solid Waste ("MSW"), Small Hydro, Biodiesel | 5 MW | 100 MW |
| Hawaii IOUs: HECO, MECO, HELCO (FIT) | Fixed rate over 20 year contract. Rate will be set by the state commission. | Adopted Sept. 2009 | Solar Thermal, PV, Wind, Hydro | Varies by technology and island* | 5 percent of each island's peak |
| Indiana (AB 1190) | Separate rates for projects qualifying for federal subsidies and those that do not. Wind tariffs based on wind site intensity | Introduced Jan. 2010 | Wind, Solar, Hydro, Geothermal, Biogas | 10 MW for PV, none for other types | |
| Oregon (Pilot Solar FIT) | Pilot program, 75percent of the total program capacity must be small scale systems** | Adopted in 2009, PUC to set the rates by July 2010 | Solar PV | 500 kW | 25 MW |
| Vermont (Standard Offering for SPEED Resources) | Long term contracts with a premium paid per kWh | Enacted May 2009 | PV, Landfill gas, Wind, Biomass, Hydro, MSW* | 2.2 MW | 50 MW |
| Washington State (HB 2536) | Tariffs based on average cost of generation plus a 10percent rate of return with 20 year contracts | Introduced Jan 2010 | Wind, Solar, Geothermal, Hydro, Wave, Biomass, Biogas | 2 MW | 5 percent of 2007 peak load |
| Wisconsin (AB 649) | Tariffs based on cost of generation plus a reasonable rate of return plus federal and state incentives, to be set by the state commission | Introduced Jan. 2010 | Wind, Solar, PV, Biogas, "other renewables as defined" | The state commission to set project and program caps | |
| Tennessee Valley Authority ("TVA") | TVA will purchase 100 percent of the output from qualifying facilities at retail prices in addition to a premium per kWh. An incentive of $1000 for new participants to offset start up costs. | Adopted 2009 | PV, Landfill gas, Wind, Biomass, MSW, Small Hydro*** | 500 watt min, 1 MW max | 200 MW |

*Projects can be up to 5 MW in Oahu, 2.72 MW for the islands of Maui and Hawaii.

**"Small scale systems" means 10 kW or less for residential participants and between 10 kW and 100 kW for small commercial participants.

***Premium/tariff is highest for Solar PV facilities

## IV. PARTIES COMMENTS

### A. Black Rock Solar

Black Rock Solar stated that a FIT would allow homeowners and developers alike to overcome the primary hurdle – financing. A FIT accomplishes this by creating a market and a right to sell at a market determined price, in conjunction with a utility's obligation to purchase. The price should be determined by market forces, with some Commission examination.[14]

### B. Bureau of Consumer Protection ("BCP")

The BCP stated that a FIT policy should be considered in conjunction with the existing renewable energy development programs and take into account electric service affordability. Nevada's RPS, with its biannual percentage increase, already significantly promotes renewable energy development. NV Energy's competitive bidding process has resulted in hundreds of megawatts of renewable projects being proposed. In its current integrated resource plan, NPC has requested approval of approximately 330 MW of geothermal capacity, 230 MW of solar capacity, and 150 MW of wind capacity. The BCP stated that distributed generation is promoted through the Solar Program, net metering provisions, and the opportunity to obtain financing through third party ownership. The BCP stated that the RPS and Solar Program are consumer financed programs and, in light of the current recession, consideration should be given to the ratepayers' ability to subsidize another renewable energy development program.[15]

The BCP suggested that any gap in Nevada's renewable energy development could be addressed by modifying existing programs. For example, the net metering cap could be increased from 1 MW to 2 MW. Additionally, the utilities could be required to acquire distributed generation created portfolio energy credits and at an established price.[16]

### C. Electric Car Association of Northern Nevada ("EAANN")

The EAANN stated that Nevada should develop a properly designed FIT policy to stabilize long-term energy policy and promote economic diversification.[17] A properly designed FIT should include the following:

- Allow all entities, including the utility, to participate.
- Guaranteed grid access.
- Price:
    - Differentiate price by both technology and size,
    - Be based upon the cost of generation plus a reasonable rate of return,
    - Be indexed for inflation.
- Offer long-term contracts (15 to 20 years).
- Ideally not have an overall capacity cap, but have a project cap at 20 MW.[18]

EAANN stated that legal constraints to FIT implementation are not insurmountable. For example, the avoided cost cap imposed by PURPA can be supplemented with payments for portfolio energy credits or a system benefits charge. [19, 20]

EAANN stated that it is acceptable to prohibit a renewable energy generator from participating in both an incentive program and the FIT program.[21] While EAANN stated that it understands the needs for commercial to utility scale projects, EAANN's primary interest is small scale projects including community-owned projects.[22]

EAANN cited a German study which concluded a FIT added approximately 5 percent to the price of electricity for ratepayers. However, this price impact would be overstated for Nevada, which has a greater solar resource and lower equipment costs.

EAANN stated that in a European-style FIT, the contract is a must take obligation for the utility. In the U.S., the contracts tend to mirror bilateral negotiated purchased power agreements, which contain guarantees for both parties.[23]

**D. Great Basin Resource Watch**

Great Basin Resource Watch stated that a FIT could reduce environmental concerns related to renewable generation development by encouraging development in urban areas. Further, a FIT could encourage the development of small to intermediate sized projects by allowing more people to participate. Great Basin Resource Watch stated that the price offered in a FIT should be administratively determined as the average customer does not have a chance of being selected in a competitive bidding process.[24]

**E. NV Energy**

NV Energy stated that Nevada should evaluate the need for and the purpose of a FIT. Currently, Nevada promotes small scale renewable development through the incentive programs and supports the development of medium to utility scale projects through the RPS. [25] Prior to the adoption of a FIT, impacts of the modifications to the incentive programs upon renewable generation deployment should be evaluated.[26]

NV Energy stated the following should be considered in the development of any FIT policy:

- Ratepayer impacts;
- Limits on system size to protect the distribution system reliability and minimize the rate effect of the subsidies inherent in net metering;
- Pricing:
    - Establish price based upon cost of generation differentiated by technology and by size, with additional price schedules for entities ineligible for federal tax incentives;
    - Due to renewable energy project long-lead times, developers need the clarity provided by the establishment of a pricing scheme time frames;

- Any new policy should have provisions included to prevent contract payments from growing substantially above the market price over the contract term, based upon lessons learned from prior experience with the provisions of the Public Utility Regulatory Policy Act of 1978 (" PURPA") including the risk of long-term contracts that are borne by the ratepayer;
- Allow for utility participation on the same economic terms as other potential participants. [27]

NV Energy agreed with Staff that the Solar Program addressed the primary barrier to small-scale development – the upfront cost. NV Energy stated that a FIT is not needed for RPS compliance. NV Energy stated it has contracted for nearly 300 MW of solar generation through a competitive bidding process. NV Energy stated that over the past five years the PV bid price has declined from 25 - 30 cents per kWh to 14 cents per kWh, which demonstrates the competitive market is working for the benefit of ratepayers.[28]

**F. Solar Alliance**

The Solar Alliance stated that prior to establishing a FIT policy it is essential to establish clear goals for the policy, such as job creation, economic development, or establishing a sustainable market. A FIT should complement the existing programs[29] and could fill any gap left by existing programs.[30]

The Solar Alliance stated that a number of issues should be considered in framing the appropriate FIT structure, including the applicable market segments, value of the tariff, contract duration, pricing mechanism, and overall budget. The Solar Alliance stated that the following recommendations appropriately address these market structure issues and promote long-term price certainty and process transparency, which are necessary for long-term business planning:[31]

- All customer segments should be able to participate but any particular project's capacity should be capped at 20 MW. Further, regardless of whether regulated by the Commission, all electric utilities operating in the State should offer a FIT.
- The FIT should contain a "must take" obligation for the utility.
- The price should:
  - Be differentiated by both technology and size.
  - Decline with increased participation.
  - Based upon market penetration, be subject to periodic review at least every three years.
- Goals should be reevaluated when the price is being reevaluated.
- Contract term should be 20 years.
- Third party ownership should be permitted.
- Pricing of portfolio energy credits should occur separately from the energy being generated.

The Solar Alliance stated that establishing the proper price would be critical because if it is too low, it stifles development and if too high, it over-heats the market. Creating a FIT also requires navigating federal and state jurisdictional issues.[32] The Solar Alliance recommended

the FIT price for solar generation up to 3 MW be administratively determined by the Commission because projects at or below this cap are unable to meaningfully participate in competitive bidding with larger-scale projects.[33]

**G. Solar Wind Works**

Solar Wind Works stated that Nevada should implement a FIT. A utility's contract issued under the FIT should be for a term of 20 years. The price for the energy produced should be differentiated by technology and set to recover the actual cost of energy production plus a reasonable return on investment of 6 to 10 percent.[34]

**H. Solar World**

Solar World stated that adoption of a FIT policy in Nevada should be driven by the goals of the policy, including increasing green energy or creating jobs.[35] The predictability of a FIT may promote smaller scale project development, which tends to use more local labor than large-scale project developers.[36] Solar World stated that 75 percent of solar industry jobs are associated with system installation, which tends to be local work force.[37]

Solar World stated that current Nevada renewable development program design fails to address the 100 kilowatt to 3 MW capacity project market, which prevents participants from obtaining economies of scale. Solar projects begin experiencing economy of scale benefits with projects ranging from 500 kW to 1 MW of capacity.[38] Net metering does not address this issue as the energy requirements of potential participant's, such as parking garages, are too small to justify the potential generating capacity that could be installed. [39]

Solar World stated that a FIT pricing provision should be performance based and the price set administratively.[40] As certain amounts of capacity are contracted for and/or installed, the price paid to subsequently contracted projects should decline. Periodic price modifications encourage development of a long-term market by preventing the market from overheating.[41] Development of a market improves financing availability.[42]

Solar World stated that improvements in credit markets have increased the availability of financing for large commercial and utility scale projects. A FIT could increase financing availability for smaller projects that continue to have difficulties. [43]

**I. Regulatory Operations Staff ("Staff")**

Staff stated that adoption of any FIT policy in Nevada should be driven by the goals to be achieved by the policy, whether compliance with the RPS, development of solar renewable generation, or economic development. [44] Electric service affordability must also be considered.[45] Further, any FIT policy should avoid overlapping and duplicating existing state renewable energy generation development programs.[46]

Staff stated that mandating a utility to acquire renewable resources exceeding that required for RPS compliance will increase electric rates, as renewable energy tends to be more

expensive than fossil fuel.[47] Further, due to the forecast of low to no load growth for the foreseeable future, additional renewable generation will not displace fossil fuel generation capacity but only add to the capacity available to meet customer requirements. As a result, the benefits to fuel savings will be limited, which will be less than the price paid under the FIT.[48]

Staff stated that a FIT would provide limited solar generation development benefit. Large scale project developers have built in Nevada and several new projects are on the immediate horizon. Small scale project development, particularly residential projects, require no further incentive beyond the existing rebate program, which defrays high initial capital costs.[49] As to economic development, Staff stated that smaller scale projects provide greater potential for economic benefits because more local labor is required, which generates a multiplier effect (i.e., increased property taxes, sales taxes, higher income thus greater consumption). However, any job loss associated with reduced consumption caused by renewable energy related electric rate increases dampens this positive economic impact.[50]

As to RPS compliance, Staff stated that NV Energy minimizes RPS compliance costs by using a competitive bidding process, which potentially excludes smaller projects and associated economic benefits.[51] Additionally, NV Energy has agreed to reinstitute a portfolio energy credit only competitive bidding process.[52] NV Energy offers the winning portfolio credit bid price to all entities willing to sell them portfolio energy credits.[53] If a FIT were implemented, to the extent either Nevada Power Company ("NPC") or Sierra Pacific Power Company ("SPPC") relied upon a contracted project for RPS compliance the contract should include a provision indemnifying the utilities from any RPS non-compliance penalty associated with the renewable generator's non-performance.[54]

Staff stated that in addition to the cost of large-scale projects, there might be costs associated with constructing the transmission facilities needed to serve them. Similarly, renewable systems connected to the distribution system could require significant distribution system upgrades.[55]

**J. Sun Edison**

Sun Edison stated that Nevada does not have a program that promotes deployment of commercial size projects. Sun Edison stated that including a commercial category in the Solar Program would necessitate an increase in the budget. Including commercial customers would allow them to share the same benefits currently offered to smaller customers, including the ability to manage energy costs.[56]

Sun Edison stated that Southern California Edison ("SCE") and Pacific Gas and Electric ("PG&E") addressed the issue of incenting the commercial sector through a standard offer contract. SCE has focused on 1 to 2 MW rooftop systems. PG&E has focused on ground mounted systems of 1 to 20 MW located near substations.[57]

**K. Mr. von Seggern**

Mr. von Seggern stated that a FIT is the "surest means to jumpstart the green industry in Nevada" as it enables participants to earn an income from power generation. If implemented, the entire process must be transparent and understandable to the average homeowner.[58]

**L. Vote Solar**

Vote Solar stated that Nevada has a suite of policies promoting renewable energy development. However, the policies fail to incentivize commercial size distributed generation systems. Vote Solar stated that, while a FIT is one method of filling this gap, it may not be the appropriate policy choice.[59] In fact, most FITs in the United States are pilot programs.[60] The gap is the market segment between the Solar Program cap of 100 kW and the wholesale sized projects deployed in response to the RPS of 20 MW. Projects in this range would build an industry in this State.[61] Vote Solar stated that one way to address the gap is to modify the Solar Program by adding a commercial category, with a commensurate increase in the budget, and eliminate both the category capacity caps and program year.[62]

Vote Solar noted that Colorado recently addressed the issue of incenting the commercial sector by establishing in its RPS a 3 percent distributed generation requirement.[63]

Vote Solar stated that a properly designed FIT should include the following:[64]

- Market based pricing, including recognition of other potential benefits like proximity to existing transmission or distribution facilities. However, federal and state jurisdictional pricing issues need to be considered.
- Payment based upon performance.
- Capacity cap or budget amount established that are adequate for the stated goal.
- Projects selected based upon value to ratepayers.
- To ensure actual construction, a deployment security required in conjunction with a reasonable short development time frame.

**M. Western Resource Advocates ("WRA")**

WRA stated that while FITs have been instrumental in rapid development of renewable energy in Europe, it is important to consider the political and institutional constraints that affect US energy policy. WRA stated that any FIT should be limited to market segments where existing policies have been ineffectual in incenting significant renewable energy development.[65] Nevada's major existing renewable energy development policies are: RPS, which increases incrementally to 25 percent of energy sales by 2025; net metering, which is currently capped at a project size of 1 MW; rebates for solar, wind, and hydro-electric projects; property tax exemptions; and integrated resource planning.[66] WRA was unable to identify any market segment where development has been problematic. [67] WRA agreed with Staff that prior to adopting a FIT policy, clear goals should be delineated and care taken to prevent overlapping existing programs as failure to do so could result in excessive cost to ratepayers.[68]

WRA stated that a FIT could be designed to provide local service or development of resources for export. The local service model encourages development of particular market

segments with the energy serving local customers. The goal of the export model is to increase renewable development in the state to a level necessary to attract renewable energy equipment manufacturing operations. The attracted firms would export equipment and technical services. However, a FIT may be only one of several incentives required to achieve this goal. If the export model is the objective, more targeted methods exist. The potential for overpayment for renewable energy contracted pursuant to a FIT reduces its viability as an industrial development tool.[69]

WRA stated that FITs promote renewable energy development by providing the seller with a known price for a fixed period of time and a market, which improves a developer's ability to obtain financing.[70] While a FIT may be designed in a variety of ways, the following major elements should be considered:

- Eligible type of resource type and size.
- Cap on total capacity eligible.
- Basis for price (e.g., generation cost, generation cost by technology, utility avoided cost).
- Price structure (e.g. fixed, seasonal, time of day, premium – e.g., environmental adder).
- Contract duration.
- Offering price adjustments (e.g., inflation, reduced for projects with later start dates).[71]

## V. LEGAL ISSUES

The recent interest in FITs in the United States has led to concern over legal issues surrounding the adoption of such policy. Specifically, the challenge is navigating between the federal policies of PURPA and the Federal Power Act ("FPA").

There are two legal routes available for a FIT to be adopted in most of the United States including Nevada, assuming that the FIT is the result of a legal mandate by statute or by state commission direction pursuant to a statute.[72] The first legal route for the design of a FIT relies on the requirements of PURPA. A state may choose to shape its state-level FIT requirements to work within the constraints of PURPA, and thereby exempt FIT sellers from the requirements of the FPA.[73] The FPA gives the Federal Energy Regulatory Commission ("FERC") the exclusive authority to regulate the sale of electric energy at wholesale in interstate commerce.[74] The second legal route is for a state to rely on a state statutory mandate independent of PURPA, and thereby require sellers to comply with the FPA. This means that FERC would have to approve any contract that a seller and utility entered into pursuant to a FIT. This effect would essentially defeat the purpose of a FIT. For that reason, the FPA route is not discussed further here as a legal option for use with a FIT.

The PURPA route is most feasible for use with a FIT because, assuming the FIT is successfully designed to comply with the restrictions of PURPA, it simplifies the process for sellers. Sellers do not have to ask FERC to approve the pricing of wholesale energy from the sellers to the utility if the FIT is specifically structured to work within the constraints of PURPA.[75] Taking the PURPA path also makes the task of designing the FIT less complicated than it might otherwise be, but it would still require the gathering of information and the time to consider the many options available for a FIT.

In order to comply with PURPA, sellers pursuant to a FIT would be required to have their generation system certified by FERC as qualifying facilities ("QF"). FERC limits the types and sizes of generation that are eligible to be certified as QFs. Regardless of how a state's FIT is designed, FERC still makes the determination regarding whether a specific power production facility qualifies as a QF.[76]

QFs must sell energy at a price set by the state commission, or negotiated with the utility.[77] Negotiating a price with the utility would defeat the purpose of a FIT in that it would effectively nullify the "must take" aspect of a typical FIT; that option is not discussed further here. If a state commission sets the price, it may not be more than the incremental cost of alternative energy, or the utility's "avoided cost."[78] Because the utilities' avoided cost in Nevada, and in many states, is likely to be much lower than the price necessary to attract participation by sellers in a FIT, the FIT price would have to be based on an avoided cost payment plus some kind of supplemental payment. There are three methods of supplementing avoided cost payments that have been determined by FERC to avoid its PURPA jurisdiction: 1) assigning renewable energy credits ("RECs"), 2) making cash grants or paying production-based incentives, or 3) establishing a purchase price that exceeds avoided cost but granting the purchasing utility a tax credit equal to the excess.[79]

There are challenges associated with each method of supplementing avoided cost payments. RECs offer one way to compensate sellers in addition to the avoided cost payment. Where there is a market and RECs have financial value, if they are awarded to renewable generators for each unit of energy produced, the renewable generators are then able to sell the RECs bundled with the energy or separately. In Nevada, and elsewhere, one challenge inherent in using RECs as the supplement to avoided cost payments is the variability of the price of RECs. If a market exists to indicate what the price of a REC should be, that price will fluctuate with time, leaving renewable generators without a guarantee that their projects will remain financially viable over time.[80]

FERC allows a state to set a PURPA purchase price above avoided cost if the state then grants the purchasing utility a tax credit equal to the difference.[81] This option is not available in Nevada as there is no state income tax.

Other options include loans, subsidies or tax credits granted to particular facilities on environmental or other policy grounds.[82] For example, the Nevada Legislature could authorize a "system benefits charge" to be implemented by the Commission to charge ratepayers for the difference between the avoided cost and the supplemental payment required.

## VI. DISCUSSION

Many of the participants in the Investigation noted that prior to considering a FIT, clear policy goals should be delineated. Renewable energy policy goals include RPS compliance, job creation, economic development and GHG emission reduction to name a few. As noted by many of the participants, if a FIT is considered for Nevada, it should be done in conjunction with the existing policies and programs to avoid overlap and duplication.

Another primary concern raised by participants is the impact of any new renewable energy policy on electric rates. Rate impacts need to be weighed against the potential benefits of the new policy. Similarly, NV Energy expressed concerns about the impact of a FIT on the reliability of the transmission and distribution systems.

The participants identified a gap in policies and programs where there is a lack of incentives for renewable energy systems that are too large for the Solar Program and too small for the RPS. This gap has hindered the meaningful development of facilities for the commercial sector. The existing Solar Program specifically excludes the commercial sector by limiting the small business category to companies with 500 employees or less. The net metering provisions are also limiting as they cap individual projects at 1 MW. While the RPS has been successful in stimulating growth in large, utility-scale projects, it has not provided stimulation in small to medium sized projects.

Taking the foregoing issues into consideration, the participants provided suggestions for designing a FIT. Generally, the participants agreed that if a FIT were to be adopted in Nevada, it should be carefully designed with consideration given to the types and sizes of projects, capacity and program caps, pricing mechanisms, contract terms, must take obligations, and the legal implications of PURPA and the FPA.

## VII. CONCLUSION

The Presiding Officer concludes that while FITs have proven successful at installing new renewable generation in Europe, there is little experience with them in the United States. As such, the decision to implement a FIT policy in Nevada should be carefully considered in light of the existing policies, ratepayer impacts, and transmission and distribution system impacts. For more than a decade, a variety of policies and programs designed to promote the development of renewable resources have been adopted in Nevada. The decision to pursue another renewable energy policy should be left to the Nevada Legislature.

The Presiding Officer agrees with the participants that a gap exists for solar projects that are too large for the Solar Program and too small to participate in the RPS. The Presiding Officer concludes that this gap could be addressed either by the adoption of a FIT or through a modification to existing programs.

## VIII. RECOMMENDATIONS

Based on the foregoing, the Presiding Officer recommends that the Commission find that the decision to adopt a FIT should be made by the Nevada Legislature and not the Commission.

By the means of this Report, the Presiding Officer recommends that the Commission make the following recommendations to the Nevada Legislature:

a. The Nevada Legislature should not replace existing policies and programs (the RPS, the Solar Program, and net metering) with a FIT. If a FIT is considered, it should complement these policies and programs. Renewable developers value consistency and predictability. Even modest changes to existing programs can have a negative effect on the industry by creating uncertainty.

b. Before adopting a FIT, clearly delineate the goals of the policy to avoid overlapping and duplicating existing programs. Identify any market segment that is not being served by the existing programs or policies and then consider modifications to those policies and programs. If an existing policy or program cannot be modified to achieve the goals of the Legislature, then a FIT could be considered. For example, a FIT could be used to stimulate a specific technology like combined heat and power.

c. Before adopting a FIT, the Nevada Legislature should consider the impacts on electric rates. The RPS and the Solar Program, among others, are funded by ratepayers. Given the current economic climate, adding ratepayer funded programs should be weighed carefully to ensure that rate impacts are balanced with the benefits.

d. Before adopting a FIT, the Nevada Legislature should consider the impacts on the electric utilities' transmission and distribution systems. Evaluate studies that provide analysis of how much the transmission and distribution systems can absorb without costly upgrades. For example, an understanding of how much distributed generation can be integrated onto the distribution system will help set the parameters for modifying existing policies and programs or establishing a FIT.

e. The Nevada Legislature should address the issue of the gap that exists for solar projects that are too large for the Solar Program and too small for the RPS. Currently, there is a lack of incentives for this sector.

f. If the Nevada Legislature decides to adopt a FIT, it should give the Commission the authority to implement the policy based on clearly delineated goals. For example, the Legislature could identify parameters like the type of resource and the size of projects and an overall program capacity cap. The Commission should have the authority to design the pricing mechanisms and to administratively set rates. Due to fluctuations in market prices, the Commission needs flexibility in setting the FIT rate to ensure ratepayers are protected and the program achieves its desired goals.

g. The Nevada Legislature should be mindful of the limitations created by PURPA and the FPA.

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[1] Tariff rates were set when solar panel prices were escalated due to a silicon shortage. When the shortage ended and prices dropped dramatically, the FIT tariff rates remained the same created an unexpectedly high profit margin.
[2] Originally, projects less than 10 MW received $0.64 USD and projects between 10 and 50 MW received $0.35 USD.

[3] *US Solar Industry Year in Review 2008*, Solar Energy Industries Association (2009), http://www.seia.org/galleries/pdf/2008_Year_in_Review-small.pdf.
4 Juan Montes, *Spain Sees 125 MW in Photovoltaic Solar Plants Built in 2009*, NASDAQ, Oct. 10, 2010. http://www.nasdaq.com/aspx/stock-market-news story.aspx?storyid=200910011050dowjonesdjonline000570&title=spain-sees-125-mw-in-photovoltaic-solar-plants-built-in-2009.
[5] Spain has several government funded grant programs for research and development ("R&D") for renewable and energy efficient technology but the FIT is the only incentive program aimed at quickly putting the steel in the ground.
[6] There are five separate solar categories: residential rooftops, medium sized agriculturally owned rooftops, medium sized community rooftops, large commercial rooftops and open space projects.
[7] Incentive levels for new rooftop solar systems are expected to be cut by 16 percent by July due to dramatic decreases in solar panel prices.
[8] Rate degression allows the market to keep pace with decreased installation costs and encourage technological advancement.
[9] Germany also has the 1999 100,000 Solar Roofs Program (HTDP) aimed at increasing solar photovoltaic ("PV") electricity by subsidizing the installation of new solar panels. Kate Gordon, Et Al., *Out of the Running, How Germany, Spain and China are seizing the Energy opportunity and Why the United States Risks Getting Left Behind* (2010). http://www.americanprogress.org/issues/2010/03/pdf/out_of_running.pdf.
[10] There will be a need to replace nuclear facilities nearing the end of their service lives and a desire to replace existing coal plants. Fifty-eight percent of Ontario's current energy portfolio comes from nuclear and coal power. Ontario Power Authority, *Renewable and Clean Energy for Ontario* (2010). http://www.powerauthority.on.ca/Page.asp?PageID=122&ContentID=6579&SiteNodeID=120.
[11] As of Dec. 1, 2009, the MicroFit program received applications for 187kW of solar capacity, and the FIT program received applications for 1,600 MW of solar capacity. Ontario Power Authority, *Ontario's Feed in Tariff Program Backgrounder* (2009). http://fit.powerauthority.on.ca/Page.asp?PageID=924&ContentID=10616.
[12] Price adders are additional incentives aimed at leveling the playing field for groups that otherwise may be excluded by ensuring these projects are economically viable.
[13] *Database of State Incentives for Renewables & Efficiency,* NC State University (2010). http://www.dsireusa.org/Index.cfm?EE=0&re=1.
[14] Black Rock Solar, Inc. Initial Comments dated February 17, 2010.
[15] BCP Initial Commented dated February 17, 2010 at 1-5; Transcript at 5-6.
[16] Transcript at 31, 40, 68-73.
[17] EAANN Initial Comments dated February 17, 2010 at 2-3; EAANN Reply Comments dated February 24, 2010 at 9-12; Transcript at 20.
[18] EAANN Initial Comments dated February 17, 2010 at 3, 5-11, 18.
[19] EAANN Initial Comments dated February 17, 2010 at 11-19; Transcript at 21.
[20] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010).
[21] EAANN Reply Comments dated February 24, 2010 at 2.
[22] Transcript at 30, 35-36.
[23] Transcript at 60-62, 64.
[24] Transcript at 112-114.
[25] NV Energy Initial Comments dated February 17, 2010 at 1-2, 5.
[26] Transcript at 10.
[27] NV Energy Comments dated February 17, 2010 at 6-10; Transcript at 10-11, 87.
[28] NV Energy Reply Comments dated February 14, 2010 at 3; Transcript at 10.
[29] Solar Alliance Initial Comments dated February 17, 2010 at 3-5; Transcript at 17.
[30] Transcript at 33.
[31] Solar Alliance Initial Comments dated February 17, 2010 at 9, 11.
[32] Solar Alliance Initial Comments dated February 17, 2010 at 7-10.
[33] Solar Alliance Initial Comments dated February 17, 2010 at 11.
[34] Solar Wind Works comments dated February 17, 2010.
[35] Transcript at 96.
[36] Transcript at 97-98, 102.

[37] Transcript at 107.
[38] Transcript at 101-102.
[39] Transcript at 135-136.
[40] Transcript at 99, 118, 131
[41] Transcript at 99, 118, 131, 138-139, 141-142.
[42] Transcript at 149-150.
[43] Transcript at 149-151.
[44] Staff's Initial Comments dated February 17, 2010 at 2, 6.
[45] Staff's initial Comments dated February 17, 2010 at 6; Transcript at 6-7.
[46] Staff's Reply Comments dated February 14, 2010 at 2.
[47] Staff's Initial Comments dated February 17, 2010 at 2.
[48] Transcript at 31-33.
[49] Staff's Initial Comments dated February 17, 2010 at 2-3.
[50] Staff's Initial Comments dated February 17, 2010 at 4-5; Transcript at __ (4/7).
[51] Transcript at 67-68.
[52] Transcript at 74-75, 79-80.
[53] Transcript at 162.
[54] Transcript at 62-64.
[55] Transcript at 127.
[56] Transcript at 50-52.
[57] Transcript at 58.
[58] Mr. David von Seggern comments dated February 12, 2010.
[59] Vote Solar Comments dated February 16, 2010 at 1-2;Transcript at 12.
[60] Transcript at 44.
[61] Vote Solar Comments dated February 16, 2010 at 2;Transcript at 34-35.
[62] Transcript at 47-49.
[63] Transcript at 77-78.
[64] Vote Solar Comments dated February 16, 2010 at 3-11.
[65] Western Resource Advocates Initial Comments dated February 17, 2010 at 1, 8-9; Western Resource Advocates. Reply Comments dated February 24, 2010 at 1.
[66] Western Resource Advocates Initial Comments dated February 17, 2010 at 1.
[67] Western Resource Advocates Initial Comments dated February 17, 2010 at 9.
[68] Western Resource Advocates Reply Comments dated February 24, 2010 at 2; Transcript at 8.
[69] Western Resource Advocates Initial Comments dated February 17, 2010 at 2-3, 9.
[70] Western Resource Advocates Initial Comments dated February 17, 2010 at 6.
[71] Western Resource Advocates Initial Comments dated February 17, 2010 at 4-5.
[72] Another available legal route that avoids FERC jurisdiction and that is not explored in this report, is the option of allowing renewable energy sellers to make retail sales directly to customers. However, this kind of sale would not be made pursuant to a FIT.
[73] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010).
[74] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010).
[75] Some utilities have been exempted from PURPA purchase obligations. Nevada utilities have not been exempted. See Hempling, et al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, National Renewable Energy Laboratory, January 2010, footnote 27.
[76] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 6-7.
[77] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 8.
[78] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 7.
[79] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 14-18.

[80] It is currently unclear what the market price of a REC would be in Nevada. (See April 7, 2010 Continued Workshop in Docket No. 09-11004, Transcript at 162-164.)
[81] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 16.
[82] Scott Hempling, Et Al., *Renewable Energy Prices in State-Level FITs: Federal Law Constraints and Possible Solutions*, NREL Technical Report NREL/TP-6A2-47408 (2010) 18.

# EXHIBIT E

**NRS 366.022 "Biodiesel" defined.** "Biodiesel" means a fuel composed of mono-alkyl esters of long-chain fatty acids or any other fuel sold or labeled as biodiesel which is suitable for use as a fuel in a motor vehicle.

(Added to NRS by 2009, 2632)

**NRS 366.190 Rate of tax.**

1. Except as otherwise provided in subsection 2, a tax is hereby imposed at the rate of 27 cents per gallon on the sale or use of special fuels.

2. A tax is hereby imposed at:

(a) The rate of 19 cents per gallon on the sale or use of an emulsion of water-phased hydrocarbon fuel;

(b) The rate of 22 cents per gallon on the sale or use of liquefied petroleum gas; and

(c) The rate of 21 cents per gallon on the sale or use of compressed natural gas.

[Part 3:364:1953; A 1955, 425]—(NRS A 1981, 1714, 1715; 1985, 1840; 1987, 1388, 1798; 1989, 1417, 1596; 1991, 1902, 1903; 1993, 597; 1997, 1311)

# EXHIBIT F

**NRS 701B.100 "Program year" defined.** "Program year" means the period of July 1 to June 30 of the following year.

(Added to NRS by 2007, 2968)

**NRS 701B.240 Creation of Solar Program; categories of participation; eligibility requirements.**

1. The Solar Energy Systems Incentive Program is hereby created.
2. The Solar Program must have three categories as follows:

(a) School property;

(b) Public and other property; and

(c) Private residential property and small business property.

3. To be eligible to participate in the Solar Program, a person must:

(a) Meet the qualifications established by the Commission pursuant to NRS 701B.210;

(b) Submit an application to a utility and be selected by the Commission for inclusion in the Solar Program pursuant to NRS 701B.250 and 701B.260;

(c) When installing the solar energy system, use an installer who has been issued a classification C-2 license with the appropriate subclassification by the State Contractors' Board pursuant to the regulations adopted by the Board; and

(d) If the person will be participating in the Solar Program in the category of school property or public and other property, provide for the public display of the solar energy system, including, without limitation, providing for public demonstrations of the solar energy system and for hands-on experience of the solar energy system by the public.

(Added to NRS by 2007, 2970; A 2009, 1383)

**NRS 701B.260 Capacity allocated to each category; reallocation of capacity; limitations on incentives.**

1. Except as otherwise provided in this section, the Commission may approve, for:

(a) The program year beginning July 1, 2009, solar energy systems:

(1) Totaling 2,000 kilowatts of capacity for school property;

(2) Totaling 760 kilowatts of capacity for public and other property; and

(3) Totaling 1,000 kilowatts of capacity for private residential property and small business property; and

(b) Each program year for the period beginning July 1, 2010, and ending on June 30, 2021, an additional 9 percent of the sum of the total allocated capacities of all the categories described in paragraph (a) which must be approved for distributed generation systems.

2. If the capacity allocated to any category for a program year is not fully subscribed by participants in that category, the Commission may, in any combination it deems appropriate:

(a) Reallocate any of the unused capacity in that category to any of the other categories; or

(b) Reallocate any of the unused capacity in that category to future program years within the same category.

3. To promote the installation of solar energy systems on as many school properties as possible, the Commission may not approve for use in the Solar Program a solar energy system having a generating capacity of more than 50 kilowatts if the solar energy system is or will be installed on school property on or after July 1, 2007, unless the Commission determines that approval of a solar energy system with a greater generating capacity is more practicable for a particular school property.

4. The Commission shall not authorize the payment of an incentive for the installation of a solar energy system or distributed generation system if:

(a) For the period beginning July 1, 2010, and ending June 30, 2013, inclusive, the payment of the incentive would cause the total amount of incentives paid by a utility for the installation of solar energy systems and distributed generation systems to exceed $78,260,000; and

(b) For the period beginning July 1, 2010, and ending June 30, 2021, the payment of the incentive would cause the total amount of incentives paid by a utility for the installation of solar energy systems and distributed generation systems to exceed $255,270,000.

(Added to NRS by 2007, 2971; A 2009, 1384)

# EXHIBIT G

**NRS 704.773 Utility required to offer net metering; limitations; rights and duties regarding energy meters and imposition of certain fees and charges; regulations.**

1. A utility shall offer net metering, as set forth in NRS 704.775, to the customer-generators operating within its service area until the cumulative capacity of all such net metering systems is equal to 1 percent of the utility's peak capacity.

2. If the net metering system of a customer-generator who accepts the offer of a utility for net metering has a capacity of not more than 100 kilowatts, the utility:

(a) Shall offer to make available to the customer-generator an energy meter that is capable of registering the flow of electricity in two directions.

(b) May, at its own expense and with the written consent of the customer-generator, install one or more additional meters to monitor the flow of electricity in each direction.

(c) Shall not charge a customer-generator any fee or charge that would increase the customer-generator's minimum monthly charge to an amount greater than that of other customers of the utility in the same rate class as the customer-generator.

3. If the net metering system of a customer-generator who accepts the offer of a utility for net metering has a capacity of more than 100 kilowatts, the utility:

(a) May require the customer-generator to install at its own cost:

(1) An energy meter that is capable of measuring generation output and customer load; and

(2) Any upgrades to the system of the utility that are required to make the net metering system compatible with the system of the utility.

(b) Except as otherwise provided in paragraph (c), may charge the customer-generator any applicable fee or charge charged to other customers of the utility in the same rate class as the customer-generator, including, without limitation, customer, demand and facility charges.

(c) Shall not charge the customer-generator any standby charge.

➥ At the time of installation or upgrade of any portion of a net metering system, the utility must allow a customer-generator governed by this subsection to pay the entire cost of the installation or upgrade of the portion of the net metering system.

4. The Commission shall adopt regulations prescribing the form and substance for a net metering tariff and a standard net metering contract. The regulations must include, without limitation:

(a) The particular provisions, limitations and responsibilities of a customer-generator which must be included in a net metering tariff with regard to:

(1) Metering equipment;

(2) Net energy metering and billing; and

(3) Interconnection,

➥ based on the allowable size of the net metering system.

(b) The particular provisions, limitations and responsibilities of a customer-generator and the utility which must be included in a standard net metering contract.

(c) A timeline for processing applications and contracts for net metering applicants.

(d) Any other provisions the Commission finds necessary to carry out the provisions of NRS 704.766 to 704.775, inclusive.

(Added to NRS by 1997, 778; A 2001, 3253; 2005, 1816; 2007, 3004)

**NRS 704.771 "Net metering system" defined.**

1. "Net metering system" means a facility or energy system for the generation of electricity that:

(a) Uses renewable energy as its primary source of energy to generate electricity;

(b) Has a generating capacity of not more than 1 megawatt;

(c) Is located on the customer-generator's premises;

(d) Operates in parallel with the utility's transmission and distribution facilities; and

(e) Is intended primarily to offset part or all of the customer-generator's requirements for electricity.

2. The term does not include a facility or energy system for the generation of electricity which has a generating capacity that exceeds the greater of:

(a) The limit on the demand that the class of customer of the customer-generator may place on the system of the utility; or

(b) One hundred fifty percent of the peak demand of the customer.

(Added to NRS by 1997, 777; A 2001, 3253; 2003, 1874; 2005, 1816; 2007, 3003)