ADOPTED REGULATION OF THE

PUBLIC UTILITIES COMMISSION OF NEVADA

LCB File No. R104-07

§§1, 2, 4 and 6 effective January 30, 2008
§§3 and 5 effective July 1, 2010

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

AUTHORITY: §§1-6, NRS 703.025, 704.210, 704.7821 and 704.7828.

A REGULATION relating to energy; providing a formula for calculating the energy generated by a geothermal energy system for the purpose of complying with portfolio standards applicable to certain providers of electric service; and providing other matters properly relating thereto.

Section 1. NAC 704.8875 is hereby amended to read as follows:

704.8875 In calculating the total number of kilowatt-hours that a provider generates, acquires or saves from portfolio energy systems or efficiency measures during a compliance year, the provider may use the following kilowatt-hours if the provider has complied with all requirements for inclusion of the kilowatt-hours in its calculation:

1. Any kilowatt-hours generated by the provider from its own renewable energy systems during the compliance year;

2. Any kilowatt-hours acquired or saved by the provider during the compliance year pursuant to preexisting renewable energy contracts or energy efficiency contracts;

3. Any kilowatt-hours acquired or saved by the provider during the compliance year pursuant to new renewable energy contracts or energy efficiency contracts;

4. Any equivalent kilowatt-hours attributable to the provider during the compliance year from solar thermal systems;

5. Any excess kilowatt-hours fed back to the provider during the compliance year from net metering systems used by customer-generators pursuant to NRS 704.766 to 704.775, inclusive;

6. Any kilowatt-hours saved during the compliance year as a result of an energy efficiency measure, subject to the limitations set forth in ~~[paragraph (b) of subsection 2 of]~~ NRS 704.7821; and

7. Any kilowatt-hours that the provider is authorized to carry forward from previous compliance years.

Sec. 2. NAC 704.8908 is hereby amended to read as follows:

FIRST PARALLEL SECTION

704.8908 "Portfolio energy credit" means a unit of credit which:

1. Equals 1 kilowatt-hour of electricity generated or saved by a portfolio energy system or efficiency measure.

2. For a solar facility that reduces the consumption of electricity by the generation of solar energy, equals the amount of consumption of electricity or any fossil fuel that is reduced at the facility by the operation of the solar facility.

3. For a net metering system, equals the amount of metered electricity generated by the system or, if the system does not use a meter to measure the kilowatt-hours of electricity generated by the system, equals the estimate of the electricity generated by the system in the manner prescribed in subsection ~~[9]~~ ***10*** of NAC 704.8927.

Sec. 3. NAC 704.8908 is hereby amended to read as follows:

SECOND PARALLEL SECTION

704.8908 "Portfolio energy credit" means a unit of credit which:

1. Equals 1 kilowatt-hour of electricity generated or saved by a portfolio energy system or efficiency measure.

2. For a solar facility that reduces the consumption of electricity by the generation of solar energy, equals the amount of consumption of electricity or any fossil fuel that is reduced at the facility by the operation of the solar facility.

3. For a net metering system, equals the amount of metered electricity generated by the system or, if the system does not use a meter to measure the kilowatt-hours of electricity generated by the system, equals the estimate of the electricity generated by the system in the manner prescribed in subsection ~~[8]~~ ***9*** of NAC 704.8927.

Sec. 4. NAC 704.8927 is hereby amended to read as follows:

FIRST PARALLEL SECTION

704.8927 1. Except as otherwise provided in NAC 704.8893, electricity generated by a renewable energy system which is authorized to participate in the system of portfolio energy credits must be metered and the renewable energy system shall submit meter readings quarterly to the Commission.

2. Except as otherwise provided in subsections 3 to ~~[11,]~~ ***12,*** inclusive, the Administrator shall certify portfolio energy credits to a portfolio energy system or efficiency measure for:

(a) The net metered output of electricity in kilowatt-hours delivered to the transmission system or the distribution system and sold to a provider of electric service. The net metered output must be provided to the Administrator by the entity that owns, operates or controls the meters used to monitor the net metered output of electricity of the renewable energy system.

(b) The difference between the metered generation of electricity in kilowatt-hours and the net metered output of electricity set forth in paragraph (a). Unless otherwise provided for in a contract for renewable energy, the portfolio energy credits certified by the Administrator pursuant to this paragraph must be awarded to the owner of the renewable energy system.

3. The Administrator shall certify portfolio energy credits for the line loss factor of:

(a) A customer-maintained distributed renewable energy system by multiplying the metered number of kilowatt-hours generated and used by the customer who is served by the customer-maintained distributed renewable energy system by a factor of 1.05; and

(b) An energy efficiency measure by multiplying the number of kilowatt-hours saved by the energy efficiency measure by a factor of 1.05.

4. The Administrator shall certify portfolio energy credits for participants in the Solar Energy Systems Demonstration Program created in section 14 of chapter 331, Statutes of Nevada 2003, as amended by section 17 of chapter 478, Statutes of Nevada 2003, by multiplying the actual kilowatt-hours produced by the solar renewable energy system by a factor of 2.4.

5. The Administrator shall certify portfolio energy credits for solar photovoltaic systems described in NRS 704.7822 by multiplying the actual kilowatt-hours produced by the solar renewable energy system by a factor of 2.4.

6. The Administrator shall certify portfolio energy credits for a system that uses a reverse polymerization process described in NRS 704.7823 by multiplying the actual kilowatt-hours produced by the renewable energy system by a factor of 0.7.

7. The Administrator shall certify portfolio energy credits for electricity saved by a utility provider during its peak load periods, as defined in the utility provider's approved tariffs, from energy efficiency measures described in NRS 704.7802, by multiplying each kilowatt-hour of electricity saved by the utility provider during its peak load period from energy efficiency measures by a factor of 2.0.

8. A solar thermal energy system may use a thermal energy meter to measure the amount of energy generated by the system. The system will be credited with 1 kilowatt-hour of electricity

generated for each 3,412 British thermal units of heat generated by the solar thermal energy system.

9. ***Except as otherwise provided in this subsection, the energy, measured in British thermal units, generated by a geothermal energy system providing heated water to one or more customers must be calculated as (F x T) x 500, less the system losses as calculated by a professional engineer and accepted by the Administrator, where:***

(a) "F" equals the flow rate, measured in gallons per minute; and

(b) "T" equals the change in temperature across a heat exchanger or system, measured by the difference in temperature of the incoming fluid in degrees Fahrenheit and the temperature of the outgoing fluid in degrees Fahrenheit after it has passed through the heat exchanger or system.

➥ For heat exchangers used by end-use customers, it is assumed that no system losses occur, and no calculation of system losses by a professional engineer is required.

10. A net metering system will be credited annually with portfolio energy credits based upon the amount of metered electricity generated by the system or, if metering is not used, upon an estimate of the electricity generated by the net metering system by using the method of calculation designated by the Regulatory Operations Staff of the Commission for a solar energy system which does not use a meter to measure the generation of electricity of the system.

~~[10.]~~ ***11.*** The portfolio energy credits generated by a net metering system must be assigned to the owner of the net metering system, unless the provisions of subparagraph (4) of paragraph (c) of subsection 2 of NRS 704.775 or subparagraph 3 of paragraph (c) of subsection 3 of NRS 704.775 apply, or another allocation of the portfolio energy credits is provided for in a written agreement between the utility provider and the owner of the net metering system.

~~[11.]~~ ***12.*** If the Administrator is required by subsections 4 to 7, inclusive, to apply a multiplier in certifying portfolio energy credits for a portfolio energy system or efficiency measure and he determines that more than one multiplier may be applicable to the portfolio energy system or efficiency measure, the Administrator shall only apply the largest applicable multiplier in certifying the portfolio energy credits.

~~[12.]~~ ***13.*** As used in this section:

(a) "Customer-maintained distributed renewable energy system" means a facility or energy system which:

(1) Is used and maintained by an end-use customer;

(2) Uses renewable energy to generate electricity;

(3) Does not use the utility's system to transmit or distribute electricity; and

(4) Uses a meter and other equipment to:

(I) Measure the electricity generated by the energy system; and

(II) Reduce part, but not more than all, of the electrical load of the customer.

(b) ***"Geothermal energy system" means an energy system that provides geothermally heated water to one or more customers and reduces the consumption of electricity or any fossil fuel.***

(c) "Reverse polymerization process" has the meaning ascribed to it in NRS 704.7823.

~~[(c)]~~ ***(d)*** "Solar thermal energy system" means a renewable energy system that uses solar energy for the purpose of producing heat to reduce directly the consumption of electricity, natural gas or propane.

Sec. 5. NAC 704.8927 is hereby amended to read as follows:

SECOND PARALLEL SECTION

704.8927 1. Except as otherwise provided in NAC 704.8893, electricity generated by a renewable energy system which is authorized to participate in the system of portfolio energy credits must be metered and the renewable energy system shall submit meter readings quarterly to the Commission.

2. Except as otherwise provided in subsections 3 to ~~[10,]~~ ***11,*** inclusive, the Administrator shall certify portfolio energy credits to a portfolio energy system or efficiency measure for:

(a) The net metered output of electricity in kilowatt-hours delivered to the transmission system or the distribution system and sold to a provider of electric service. The net metered output must be provided to the Administrator by the entity that owns, operates or controls the meters used to monitor the net metered output of electricity of the renewable energy system.

(b) The difference between the metered generation of electricity in kilowatt-hours and the net metered output of electricity set forth in paragraph (a). Unless otherwise provided for in a contract for renewable energy, the portfolio energy credits certified by the Administrator pursuant to this paragraph must be awarded to the owner of the renewable energy system.

3. The Administrator shall certify portfolio energy credits for the line loss factor of:

(a) A customer-maintained distributed renewable energy system by multiplying the metered number of kilowatt-hours generated and used by the customer who is served by the customer-maintained distributed renewable energy system by a factor of 1.05; and

(b) An energy efficiency measure by multiplying the number of kilowatt-hours saved by the energy efficiency measure by a factor of 1.05.

4. The Administrator shall certify portfolio energy credits for solar photovoltaic systems described in NRS 704.7822 by multiplying the actual kilowatt-hours produced by the solar renewable energy system by a factor of 2.4.

5. The Administrator shall certify portfolio energy credits for a system that uses a reverse polymerization process described in NRS 704.7823 by multiplying the actual kilowatt-hours produced by the renewable energy system by a factor of 0.7.

6. The Administrator shall certify portfolio energy credits for electricity saved by a utility provider during its peak load periods, as defined in the utility provider's approved tariffs, from energy efficiency measures described in NRS 704.7802, by multiplying each kilowatt-hour of electricity saved by the utility provider during its peak load period from energy efficiency measures by a factor of 2.0.

7. A solar thermal energy system may use a thermal energy meter to measure the amount of energy generated by the system. The system will be credited with 1 kilowatt-hour of electricity generated for each 3,412 British thermal units of heat generated by the solar thermal energy system.

8. ***Except as otherwise provided in this subsection, the energy, measured in British thermal units, generated by a geothermal energy system providing heated water to one or more customers must be calculated as (F x T) x 500, less the system losses as calculated by a professional engineer and accepted by the Administrator, where:***

(a) "F" equals the flow rate, measured in gallons per minute; and

(b) "T" equals the change in temperature across a heat exchanger or system, measured by the difference in temperature of the incoming fluid in degrees Fahrenheit and the temperature of the outgoing fluid in degrees Fahrenheit after it has passed through the heat exchanger or system.

➥ For heat exchangers used by end-use customers, it is assumed that no system losses occur, and no calculation of system losses by a professional engineer is required.

9. A net metering system will be credited annually with portfolio energy credits based upon the amount of metered electricity generated by the system or, if metering is not used, upon an estimate of the electricity generated by the net metering system by using the method of calculation designated by the Regulatory Operations Staff of the Commission for a solar energy system which does not use a meter to measure the generation of electricity of the system.

~~[9.]~~ ***10.*** The portfolio energy credits generated by a net metering system must be assigned to the owner of the net metering system, unless the provisions of subparagraph (4) of paragraph (c) of subsection 2 of NRS 704.775 or subparagraph 3 of paragraph (c) of subsection 3 of NRS 704.775 apply, or another allocation of the portfolio energy credits is provided for in a written agreement between the utility provider and the owner of the net metering system.

~~[10.]~~ ***11.*** If the Administrator is required by subsections 4, 5 and 6 to apply a multiplier in certifying portfolio energy credits for a portfolio energy system or efficiency measure and he determines that more than one multiplier may be applicable to the portfolio energy system or efficiency measure, the Administrator shall only apply the largest applicable multiplier in certifying the portfolio energy credits.

~~[11.]~~ ***12.*** As used in this section:

(a) "Customer-maintained distributed renewable energy system" means a facility or energy system which:

(1) Is used and maintained by an end-use customer;

(2) Uses renewable energy to generate electricity;

(3) Does not use the utility's system to transmit or distribute electricity; and

(4) Uses a meter and other equipment to:

(I) Measure the electricity generated by the energy system; and

(II) Reduce part, but not more than all, of the electrical load of the customer.

(b) ***"Geothermal energy system" means an energy system that provides geothermally heated water to one or more customers and reduces the consumption of electricity or any fossil fuel.***

(c) "Reverse polymerization process" has the meaning ascribed to it in NRS 704.7823.

~~[(c)]~~ ***(d)*** "Solar thermal energy system" means a renewable energy system that uses solar energy for the purpose of producing heat to reduce directly the consumption of electricity, natural gas or propane.

Sec. 6. 1. This section and sections 1, 2 and 4 of this regulation become effective upon filing with the Secretary of State.

2. Sections 2 and 4 of this regulation expire by limitation on June 30, 2010.

3. Sections 3 and 5 of this regulation become effective on July 1, 2010.

NOTICE OF ADOPTION OF PROPOSED REGULATION
LCB File No. R104-07

The Public Utilities Commission of Nevada adopted regulations assigned LCB File No. R104-07 which pertain to chapter 704 of the Nevada Administrative Code.

INFORMATIONAL STATEMENT

1. A description of how public comment was solicited, a summary of public response, and explanation of how other interested persons may obtain a copy of the summary.

Copies of the proposed regulations, notice of intent to act upon the regulation and notice of workshop and hearing were sent by U.S. mail and email to persons who were known to have an interest in the subject of renewable portfolio standards for geothermal energy systems. These documents were also made available at the website of the Public Utilities Commission ("PUC"), **http://pucweb1.state.nv.us/PUCN/**, mailed to all county libraries in Nevada, published in the following newspapers:

Elko Daily Free Press
Las Vegas Review Journal
Nevada Appeal
Reno Gazette Journal
Tonopah Times-Bonanza

and posted at the following locations:

Public utilities Commission
1150 East William Street
Carson City, NV 89701

Public Utilities Commission
101 Convention Center Drive, Suite 250
Las Vegas, NV 89109

First Judicial District Court
885 East Musser Street
Carson City, Nevada 89701

Second Judicial District Court
75 Court Street
Reno, NV 89501

Eighth Judicial District Court
Regional Justice Center
200 Lewis Avenue
Las Vegas, NV 89155

Participants discussed the method of calculating the energy produced by the geothermal energy system and agreed on a mathematical calculation that includes common uses of geothermal fluid such as in laundries and under surfaces such as sidewalks to melt ice, but does not include parasitic load. Participants discussed and agreed upon clarification of the definition of "geothermal energy system" to clearly differentiate it from a "geothermal energy generating station." Measurement and

verification of energy efficiency measures was discussed, and participants agreed that the regulations should not address a specific standard at this time.

A copy of the transcript of the proceedings is available for review at the office of the PUC, 1150 East William Street, Carson City, Nevada 89701 and 101 Convention Center Drive, Suite 250, Las Vegas, Nevada 89109.

2. The number of persons who:

(a) attended each hearing: December 12, 2007 - 5
(b) testified at each hearing: December 12, 2007 - 3
(c) submitted to the agency written comments: 4

3. A description of how comment was solicited from affected businesses, a summary of their response and an explanation how other interested persons may obtain a copy of the summary.

Comments were solicited from affected businesses in the same manner as they were solicited from the public.

The summary may be obtained as instructed in the response to question #1.

4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.

The permanent regulations were adopted on January 9, 2008. The regulations were revised to clarify a reference to another regulation.

5. The estimated economic effect of the adopted regulation on the businesses which it is to regulate and on the public. These must be stated separately, and each case must include:
(a) Both adverse and beneficial effects;
(b) Both immediate and long-term effects;

(a) Both adverse and beneficial effects:

No adverse effects of the proposed regulations on small businesses are anticipated. The greater array of means available to comply with the portfolio standard might lead to lower costs incurred by the utilities in complying with the portfolio standard, which may in turn reduce the cost to ratepayers including small businesses.

(b) Both immediate and long-term effects:

See Item #5(a).

6. The estimated cost to the agency for enforcement of the adopted regulation.

There is no additional cost to the agency for enforcement of these regulations.

7. A description of any regulation of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.

These regulations do not overlap or duplicate any federal, state, or local regulations.

8. If the regulation includes provisions that are more stringent than a federal regulation which regulates the same activity, a summary of such provisions.

N/A

9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.

N/A

10. If the proposed regulation is likely to impose a direct and significant economic burden upon a small business or directly restrict the formation, operation or expansion of a small business? What methods did the agency use in determining the impact of the regulation on a small business?

The PUC determined that the proposed regulations do not impose a direct and significant economic burden upon a small business or restrict the formation, operation or expansion of a small business. In making this determination, the PUC adopted the findings of the Regulatory Operations Staff, which conducted a Delphi Method exercise to determine the impacts. The Delphi Method is a systematic, interactive, forecasting method based on independent inputs of selected experts.