

**REVISED PROPOSED REGULATION OF THE  
PUBLIC UTILITIES COMMISSION OF NEVADA**

**LCB File No. R104-07**

November 27, 2007

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~~ :

(a) *Paragraph* (b) of subsection 2 of NRS 704.7821; and

(b) *Subsection 3 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:

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:

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.

FIRST  
PARALLEL  
SECTION

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SECTION

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:

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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  $(F \times T) \times 500$ , 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.

~~11.1~~ **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.

~~12.1~~ **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.

~~13.1~~ (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:

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 ~~H0.~~ *II*, 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  $(F \times T) \times 500$ , 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.

~~(e)~~ (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.