PROPOSED REGULATION OF THE DIRECTOR OF THE OFFICE OF ENERGY

LCB File No. R024-11

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

AUTHORITY: §§1-10, NRS 701.220.

A REGULATION relating to energy conservation in buildings; providing for the adoption of the 2009 version of the International Energy Conservation Code 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; prescribing 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; prescribing a process for seeking an exemption from the provisions of the Code; and prescribing a process for seeking an allowance from the provisions of the Code for a Renewable Energy System and an appeal process thereto.

Section 1. Chapter 701 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 16, inclusive, of this regulation.

Sec. 2. ***"Director" means the Director of the Nevada State Office of Energy.***

Sec. 3. ***"International Energy Conservation Code" means the building code created by the International Code Council that establishes minimum design and construction standards for energy efficiency.***

Sec 4. ***"Renewable Energy System" has the meaning ascribed in NRS 704.7815.***

Sec 5. ***1. The Director hereby adopts by reference: (a) the 2009 version of the International Energy Conservation Code; and (b) any amendments made to the 2009 version of the International Energy Conservation Code by the International Code Council.***

2. The 2009 International Energy Conservation Code and any amendments thereto, published by the International Code Council, may be obtained from the International Code Council, 25442 Network Pl., Chicago, IL 60673-1254, by telephone at 1-800-786-4452,

or at the internet address http://www.iccsafe.org, for the price of $26.50 for members and $35.50 for nonmembers.

3. Every third year from the date upon which this regulation was adopted by the Director, the most recent version of the International Energy Conservation Code, and any amendments thereto, shall be newly adopted by the Director.

a. The Director shall post the adoption notice on the Office of Energy website and xxx and include the date of adoption and any amendments adopted with the Code.

b. A governing body of a local government that is authorized by law to adopt and enforce a building code in this State shall have 120 days from the adoption of the most recent version of the Code to adopt and enforce the Code in their jurisdiction.

Sec 6. ***1. Any amendments of the following building systems, materials or other factors made by a county, local jurisdiction, or municipality (referred to as "local amendments") to the International Energy Conservation Code, may be deemed necessary to support effective compliance and enforcement of the International Energy Conservation Code in this State, and shall not lessen the effective energy savings requirements of the code:***

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

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

(c) For electrical equipment and systems;

(d) For insulation; and

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

2. The Director, at the request of a municipality or county, shall determine the relative impact of proposed local amendments to the adopted International Energy Conservation Code, including whether proposed amendments are substantially equal to or less

stringent that the unamended International Energy Conservation Code.

a. The municipality or county shall submit the request in writing to the Director.

b. The Director will consider the request and grant, deny or set the request for further proceedings within 30 days after the request is filed with the Director.

c. If the request is set for further proceedings, the Director may request additional information necessary to render a decision on the request and make a determination within 120 days after the date on which the Director set the request for further proceedings.

3. Local amendments may not result in less stringent energy efficiency requirements in nonattainment areas and in affected counties than the energy efficiency chapter of the International Residential Code or International Energy Conservation Code.

4. For the purpose of establishing uniform requirements throughout a region, and on request of a county, or a municipality, the Director may recommend a climatically appropriate modification or a climate zone designation for a county or group of counties that is different from the climate zone designation in the unamended International Energy Conservation Code.

Sec. 7. *1. Any person seeking to exempt a building from a standard contained in the International Energy Conservation Code may petition the Director for an exemption.*

2. The petition must state the specific provision or provisions of the International Energy Conservation Code for which an exemption is sought, and must state why the application of the provision or provisions to the building would not accomplish the purpose of the provision or provisions of the International Energy Conservation Code.

3. The Director will consider each petition submitted in accordance with this section and will grant, deny, or set the petition for further proceedings within 30 days after the

petition is filed.

4. If the Director sets a petition for further proceedings, the Director will rule on the petition within 120 days after the date on which the Director set the petition for further proceedings.

Sec. 8. ***1. The governing body of a local government that is authorized by law to adopt and enforce a building code in this State shall authorize allowances to the International Energy Conservation Code in design and construction of a building if the allowance is for the installation of a renewable energy system that will be used to supply all or part of the energy required in a building.***

Sec. 9. ***1. If a governing body of a local government that is authorized by law to adopt and enforce a building code in this State denies an allowance requested pursuant to the provisions of Section 8, the person may petition the Director to overturn the denial.***

2. The petition must state and/or provide the following:

(a) The name of the governing body of a local government that issued the denial and the date of the denial;

(b) The specific provision or provisions of the International Energy Conservation Code from which an allowance was sought;

(c) A copy of the decision or document denying the allowance from the governing body of a local government that issued the denial; and

(d) A description of the Renewable Energy System sought to be installed.

3. The Director will consider each petition submitted in accordance with this section and will grant, deny, or set the petition for further proceedings within 30 days after the petition is filed.

4. If the Director sets a petition for further proceedings, the Director will rule on the petition within 120 days after the date on which the Director set the petition for further proceedings.

Sec. 10. *1. The governing body of a local government that is authorized by law to adopt and enforce a building code in this State that has adopted higher and more stringent standards than the standards contained in the International Energy Conservation Code or the standards adopted by the Director in Section 6 of this regulation shall file with the Director the following documentation upon adoption of the standard:*

(a) A copy of the higher or more stringent standard adopted and a copy of the decision adopting the standard, if available; and

(b) A brief description and justification of the higher or more stringent standard adopted on a form provided by the Director.

Sec. 11. *1. General enforcement of the provisions of the International Energy Conservation Code shall be the responsibility of the local building department and shall be administered and enforced in the manner prescribed by local law or ordinance. If the Director or the local code authority finds, within two years from the date a building is first occupied, that the building, at the time of construction, did not comply with the adopted International Energy Conservation Code or equivalent code adopted by a county, city, or municipality in effect at such time, the Director or code authority may order the owner and/or the individuals or parties responsible for the construction of the building to take those actions necessary to bring the building into compliance.*

a. This section does not limit the right of the owner to bring civil action against the contractor, architect, or engineer for the cost of bringing the building into

compliance.

b. The owner or prime contractor shall have 120 days to remedy the building, or portion of the building that is out of compliance with the adopted Code.

Sec. 12. *Individuals or parties responsible for the construction of a building who fail to comply with the provisions of this chapter or those who order, instruct or direct another to cause a building to fail to comply with this chapter shall be liable for costs required to bring subject building into compliance.*

Sec. 13. *1. For construction outside of the local jurisdiction of a municipality:*

(a) a building certified by a national, state, or local accredited energy efficiency program shall be considered in compliance;

(b) a building with inspections from private code-certified inspectors using the energy efficiency chapter of the International Residential Code or International Energy Conservation Code shall be considered in compliance; and

(c) Individuals or parties responsible for the construction of a building who do not have access to either of the above methods for a building shall certify compliance using a form provided by the Director, enumerating the code-compliance features of the building.

2. Individuals or parties responsible for the construction of a building shall retain until the third anniversary of the date on which compliance is achieved the original copy of any documentation that establishes compliance under this section.

Sec. 14. *Any person who willfully violates any provisions of this chapter or who willfully violates any provisions of the codes enumerated in this chapter, is guilty of a misdemeanor.*

Violations of this chapter shall be tried in any court of competent jurisdiction within the state of Nevada.

Sec. 15. This regulation becomes effective on July 1, 2012.

Sec. 16. NAC 701.010, 701.020, 701.030, 701.040, 701.050, 701.060, 701.070, 701.080, 701.090, 701.100, 701.110, 701.120 , 701.130, 701.140, 701.150, 701.160, 701.170, 701.180, 701.190, 701.200, 701.210, 701.220, 701.230, 701.240, 701.250, 701.260, 701.270, 701.280, 701.290, 701.300, 701.310, 701.320, 701.330, 701.340, 701.350, 701.360, 701.370, 701.380, and 701.390 are hereby repealed.

TEXT OF REPEALED SECTIONS

NAC 701.010 Definitions. (NRS 701.220) As used in NAC 701.010 to 701.390, inclusive, unless the context otherwise requires, the words and terms defined in NAC 701.020 to 701.170, inclusive, have the meanings ascribed to them in those sections.

NAC 701.020 "Code" defined. (NRS 701.220) "Code" means the 1986 edition of the Model Energy Code, as adopted by the Council of American Building Officials.

NAC 701.030 "Director" defined. (NRS 701.220) "Director" means the Director of the Office.

NAC 701.040 "Evaporative cooling" defined. (NRS 701.220) "Evaporative cooling" means the adiabatic exchange of heat between air and a water spray or wetted surface.

NAC 701.050 "Gross area of a roof assembly" defined. (NRS 701.220)

1. Except as otherwise provided in subsection 2, “gross area of a roof assembly” means the total interior surface of the roof assembly, including any skylight exposed to a space which is heated or mechanically cooled.

2. If a return air ceiling plenum is used, “gross area of a roof assembly” is the area of the interior

face of the upper plenum surface.

NAC 701.060 “Manufactured home” defined. (NRS 701.220) “Manufactured home” has the meaning ascribed to it in NRS 489.113.

NAC 701.070 “Mechanical cooling” defined. (NRS 701.220) “Mechanical cooling” means cooling accomplished by the expenditure of energy. The term does not include:

1. Evaporative cooling; or

2. Natural or mechanical ventilation using outdoor air.

NAC 701.080 “Mechanical ventilation” defined. (NRS 701.220) “Mechanical ventilation” means the process of supplying or removing conditioned or unconditioned air, by mechanical means, to or from any space.

NAC 701.090 “Mobile home” defined. (NRS 701.220) “Mobile home” has the meaning ascribed to it in NRS 489.120.

NAC 701.100 “Occupancy” defined. (NRS 701.220) “Occupancy” means the purpose for which a building or part of a building is used or intended to be used.

NAC 701.110 “Office” defined. (NRS 701.220) “Office” means the Office of Energy.

NAC 701.120 “Percent glazed opening” defined. (NRS 701.220) “Percent glazed opening” means the percentage of the gross vertical exterior wall and roof areas consisting of glazing or glass, including glazing or glass used in any window, door, skylight or other opening.

NAC 701.130 "Residential building" defined. (NRS 701.220) "Residential building" means any hotel, apartment, house, convent, monastery, dwelling, condominium or other building within occupancy group "R" as set forth in the Uniform Building Code.

NAC 701.140 "Roof assembly" defined. (NRS 701.220)

1. Except as otherwise provided in subsection 2, "roof assembly" means the components of the roof/ceiling envelope through which heat flows, creating a building transmission heat loss or gain, if the components are exposed to outdoor air and enclose a space which is heated or mechanically cooled.

2. If a return air ceiling plenum is used, "roof assembly" does not include the ceiling proper or the

plenum space.

NAC 701.150 "Thermal insulation" defined. (NRS 701.220) "Thermal insulation" means a material or combination of materials which retards the flow of heat energy.

NAC 701.160 "Thermal transfer value" defined. (NRS 701.220) "Thermal transfer value" means the quantity of heat, expressed in British thermal units per hour, transferred through a square foot of building surface under a particular set of interior and exterior design conditions.

NAC 701.170 "Uniform Building Code" defined. (NRS 701.220) "Uniform Building Code" means the current edition of the Uniform Building Code, as adopted by the International Conference of Building Officials. A copy of the Uniform Building Code may be purchased from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601, for $50.75. A copy of those provisions of the Uniform Building Code referred

to in NAC 701.010 to 701.390, inclusive, is available for public inspection and may be obtained from the Office at 727 Fairview Drive, Suite F, Carson City, Nevada 89701.

NAC 701.180 Applicability of provisions. (NRS 701.220)

1. Except as otherwise provided in NAC 701.010 to 701.390, inclusive, and in subsection 4 of NRS 701.220, the design of any new building or any addition to an existing building must conform to the standards for the conservation of energy set forth in NAC 701.010 to 701.390, inclusive, if:

(a) The building or addition is used or to be used for public assembly, educational, business, mercantile, institutional, storage or residential purposes; and

(b) Construction of the building or addition begins on or after July 8, 1988. For the purposes of this paragraph, construction begins on the date a fee is paid for the issuance of a building permit.

2. The provisions of NAC 701.010 to 701.390, inclusive, do not apply to any:

(a) Mobile home;

(b) Manufactured home;

(c) Greenhouse;

(d) Pump house; or

(e) Building or portion of a building which is not heated or cooled by any system of heating or mechanical cooling involving the expenditure of electrical energy or energy derived from fossil fuel.

NAC 701.190 Adoption by reference of <u>Model Energy Code</u>. (NRS 701.220)

1. Except as they are inconsistent with the provisions of NAC 701.010 to 701.390, inclusive, and except as otherwise provided in this section, the provisions of the <u>Code</u> are hereby adopted

by reference. A copy of the Code may be purchased from the Council of American Building Officials, 5203 Leesburg Pike, Falls Church, Virginia 22041, for $4.

2. The provisions of the current edition or version of each standard described in section 701.1 of the Code are hereby adopted by reference.

3. Sections 101.3.1.2, 302.1, 303.1, 502.1.2, 504.5.2 and 505.3.4.2 of the Code are not adopted by reference.

NAC 701.200 Severability. (NRS 701.220) If any provision of NAC 701.010 to 701.390, inclusive, or its application to any person, thing or circumstance is held to be invalid, it is intended that the invalidity not affect the other provisions of NAC 701.010 to 701.390, inclusive, to the extent that they can be given effect.

NAC 701.210 Certification of plans prepared for building official. (NRS 701.220) Plans prepared for the building official must bear a certificate, signed by the architect, professional engineer, contractor, designer or building owner responsible for the preparation of the plans, stating that he has reviewed the provisions of NAC 701.010 to 701.390, inclusive, and that the plans conform to the requirements of NAC 701.010 to 701.390, inclusive.

NAC 701.220 Petition for variance. (NRS 701.220)

1. Any person otherwise subject to the provisions of NAC 701.010 to 701.390, inclusive, may submit a petition to the building official for a variance from the application of those provisions to the construction of a building.

2. A petition submitted pursuant to subsection 1 must:

(a) Be in writing;

(b) Contain the name and address of the petitioner; and

(c) Set forth in short and plain terms the basis for the petition, together with any supporting information.

3. Upon receiving the petition, the building official shall review it and forward it, with his comments and recommendations, to the Office.

4. The Office will review the petition and will render a decision on its merits within 30 days after it is received by the Office. A formal or informal hearing may be held on the petition. Notice of the disposition of the petition must be given, in writing, to the petitioner at the address set forth in the petition.

5. Any petitioner aggrieved by the disposition of the petition may appeal to the Director by submitting a written request for a hearing on the matter. The request must be received by the Office within 15 days after the date the notice of disposition is mailed to the petitioner pursuant to subsection 4.

NAC 701.230 Petition for adoption, filing, amendment or repeal of regulation. (NRS 701.220)

1. Any person who requests the adoption, filing, amendment or repeal of any provision of NAC 701.010 to 701.390, inclusive, pursuant to NRS 233B.100 must submit to the Office a petition in writing setting forth his request. Three copies of the petition must be filed.

2. A petition submitted pursuant to subsection 1 must:

(a) Contain the name and address of the petitioner; and

(b) Set forth in short and plain terms the action requested of the Office and the basis for the petition, together with any supporting information.

3. The Office may hold a formal or informal hearing on the petition.

NAC 701.240 Parameters for exterior design. (NRS 701.220)

1. The thermal design requirements of the building envelope and the design of the heating, ventilating and air-conditioning system must be based on the following exterior design parameters for the location of the building:

	Winter Design Dry-bulb °F	Summer °F Design Dry-bulb	Design Wet bulb	Heating Degree Days	North Latitude Degrees	Minutes
Carson City	9	91	61	5766	39	9
Elko	-2	92	62	7248	40	50
Ely	-4	87	59	7700	39	17
Las Vegas	28	106	70	2532	36	5
Lovelock	12	96	65	5836	40	4
Reno (Airport)	10	92	62	6030	39	30
Reno (Downtown)	11	93	62	6030	39	30
Tonopah	10	92	62	5753	38	4
Winnemucca	3	94	62	6409	40	54

2. If the building is not at a location specified in subsection 1, the exterior design parameters for the nearest specified location with similar climatic conditions must be applied.

NAC 701.250 Adjustment of thermal transmittance value for masonry. (NRS 701.220) For the purposes of the heating criteria set forth in section 502 of the Code, in determining the overall thermal transmittance value of masonry wall construction, its thermal transmittance value may be adjusted according to a mass correction factor. This factor must be calculated according to the weight of the masonry used in the construction and the number of Fahrenheit heating degree days in the location:

Weight of Masonry Wall Construction lbs./sq. ft.	Mass Correction Factor 3500 Degree Days or Less	Mass Correction Factor More than 3500 Degree Days
0-25.....	1.000	1.000
26-40.....	.850	.880
41-80.....	.750	.791
81 and above.....	.650	.775

NAC 701.260 Insulation in crawl spaces. (NRS 701.220) In any building governed by section 502 of the Code:

1. Notwithstanding any provision of section 503.9, 503.11 or 504.7 of the Code, insulation of duct work or piping in unheated crawl spaces is not required if the requirements of subsection 3 of this section are met.

2. Notwithstanding any provision of section 502.2.1.3 or 502.3.1.3 of the Code, insulation of floors of heated spaces over unheated crawl spaces is not required if:

(a) Duct work and piping in the unheated spaces is uninsulated; and

(b) The requirements of subsection 3 are met.

3. Foundation walls enclosing unheated crawl spaces containing uninsulated duct work or piping must provide a thermal resistance at least equal to that required by section 502.2.1.5 of the Code. Any insulation used must extend from the bottom of the floor sheathing to the top of the footing. Any vent supplied to the crawl space must be of the closeable type.

NAC 701.270 Insulation of slab-on-grade floors. (NRS 701.220) For the purposes of the heating criteria for slab-on-grade floors set forth in sections 502.2.1.4 and 502.3.1.4 of the Code, insulation is not required for a heated slab in any location having less than 3,000 Fahrenheit heating degree days.

NAC 701.280 Gain or loss of heat in building with air curtain at entrance. (NRS 701.220)

1. In any building governed by section 502.3 of the Code and having an air curtain entrance, the total heat gain or loss of the building, whichever is greater, calculated as provided in subsections 2 and 3, must not exceed the total heat gain or loss calculated as provided in subsection 4.

2. Heat gain resulting from the air curtain entrance, expressed in British thermal units per hour, must be included in the total calculated heat gain for the building by multiplying 10,000 by a number equal to the width of the curtain in linear feet.

3. Heat loss resulting from the air curtain entrance, expressed in British thermal units per hour, must be included in the total calculated heat loss for the building by multiplying 30,000 by a number equal to the width of the curtain in linear feet.

4. The total heat gain or loss for the building without an air curtain entrance must be calculated by replacing the area of the air curtain with gross wall having an overall thermal transmittance value conforming to that required for the building by sections 502.3.1.1 and 502.3.2.1 of the Code.

5. In making the calculations of heat gain and loss required by this section, heat gains or losses resulting from ducts, piping or infiltration need not be considered.

NAC 701.290 Exemption from heating criteria for certain buildings. (NRS 701.220)

1. Except as otherwise provided in subsection 3 of this section, in a building otherwise governed by section 502.3.1 of the Code, compliance with the heating criteria set forth in that section is not required if:

(a) The building is heated but not cooled;

(b) The building is heated primarily for the purpose of maintaining an inside temperature above freezing; and

(c) The total calculated heat loss for the building, at an inside design temperature of 42 degrees Fahrenheit, does not exceed the total calculated heat loss for that building, constructed in conformity with those criteria:

(1) At an inside design temperature of 72 degrees Fahrenheit; and

(2) At the outside winter design temperature for the building, as determined in accordance with NAC 701.240.

2. In making the calculations of heat loss required by subsection 1, heat losses from ducts, piping or infiltration need not be considered.

3. In a building otherwise meeting the requirements of subsection 1, compliance with the heating criteria set forth in section 502.3.1 of the Code is required for any space within the building which is heated primarily for a purpose other than that specified in paragraph (b) of subsection 1.

NAC 701.300 Exemption from cooling criteria for certain buildings. (NRS 701.220) In a building otherwise governed by section 502.3.2 of the Code, compliance with the cooling criteria set forth in that section is not required for any building or portion of a building cooled by evaporative cooling.

NAC 701.310 Use of new energy for control of temperature. (NRS 701.220) If new energy is used for temperature control as provided in section 503.3.3 of the Code:

1. Exterior and interior zones of a constant volume reheat system must not be served by a cooling coil if more than 20 percent of the quantity of air passing through the cooling coil is used to serve exterior zones.

2. Consideration must be given to the use of recovery systems for the conservation of energy if the amount of energy expended is less than the amount of energy recovered, giving consideration to the energy transfer potential and operating hours of the system for temperature control.

NAC 701.320 Exemption for swimming pool used for therapeutic purposes. (NRS 701.220) A swimming pool otherwise subject to the provisions of section 504.5.1 of the Code is

exempt from those provisions if it is used for therapeutic purposes and the exemption is approved by the building official.

NAC 701.330 Insulation in crawl spaces. (NRS 701.220) In any building governed by section 602 or 603 of the Code:

1. Notwithstanding any provision of section 603.4, 603.5 or 604.3 of the Code, insulation of duct work or piping in unheated crawl spaces is not required if the requirements of subsection 3 of this section are met.

2. Notwithstanding any provision of section 602.2.3 of the Code, insulation of floors of heated spaces over unheated crawl spaces is not required if:

(a) Duct work and piping in the unheated spaces is uninsulated; and

(b) The requirements of subsection 3 are met.

3. Foundation walls enclosing unheated crawl spaces containing uninsulated duct work or piping must provide a thermal resistance at least equal to that required by section 602.2.5 of the Code. Any insulation used must extend from the bottom of the floor sheathing to the top of the footing. Any vent supplied to the crawl space must be of the closeable type.

NAC 701.340 Insulation of slab-on-grade floors. (NRS 701.220) For the purposes of the heating criteria for slab-on-grade floors set forth in section 602.2.4 of the Code, insulation is not required for a heated slab in any location having less than 3,000 Fahrenheit heating degree days.

NAC 701.350 Exemptions regarding swimming pools. (NRS 701.220)

1. A swimming pool otherwise subject to the provisions of section 604.1.2.3 of the Code is exempt from those provisions if it is used for therapeutic purposes and the exemption is approved by the building official.

2. Notwithstanding the provisions of section 604.1.2.3, a pool cover is not required on a heated swimming pool.

NAC 701.360 Applicability of provisions. (NRS 701.220) NAC 701.360 to 701.390, inclusive, apply to any building:

1. Located in a county whose population is 100,000 or more; and

2. Constructed on or after October 1, 1983. For the purposes of this subsection, a building is constructed on the date a fee is paid for the issuance of a building permit.

NAC 701.370 Petition to install system. (NRS 701.220)

1. A person who intends to install a system using electric resistance for heating spaces in a building subject to the provisions of NAC 701.360 to 701.390, inclusive, must first submit a petition to the building official as provided by NAC 701.220. The petition will be reviewed and disposed of by the Office in the manner provided by that section.

2. A petition submitted pursuant to subsection 1 must include any documents or calculations relied upon by the petitioner to justify the use of the system under the provisions of NRS 701.230.

NAC 701.380 Determination that system is supplementary; use of heat pump. (NRS 701.220)

1. For the purposes of paragraph (a) of subsection 1 of NRS 701.230, a system using electric resistance for heating spaces is "supplementary to another means of heating" if it is designed or used to provide not more than 25 percent of the total calculated design hourly heat loss for the building.

2. If the primary means of heating is an electric heat pump, the maximum allowed installed supplemental heat strip capacity must not exceed the minimum capacity specified or

recommended by the manufacturer of the heat pump or by the engineer responsible for the design of the application.

4. Nothing in this section shall be construed to prohibit the use of any heat pump having a coefficient of performance at least equal to that required by section 503.4.2 of the Code.

NAC 701.390 Consideration of feasible and economical alternatives. (NRS 701.220)

1. A person who intends to install a system using electric resistance for heating spaces, in determining whether any means of heating:

(a) Is a feasible alternative to heating by electric resistance, shall consider any system which uses current technology and is commercially available.

(b) Is an economical alternative to heating by electric resistance, shall consider the capital, operational and fuel costs of each system during its life cycle.

2. The Office will not approve a petition submitted pursuant to NAC 701.370 if the costs referred to in paragraph (b) of subsection 1 are, for the proposed system of heating by electric resistance, greater than or equal to those for any feasible alternative.