SENATE BILL NO. 293–SENATORS DONATE AND DALY

MARCH 15, 2023

Referred to Committee on Growth and Infrastructure

SUMMARY—Revises provisions relating to renewable energy and energy conservation. (BDR 58-459)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact. Effect on the State: Yes.

EXPLANATION - Matter in bolded italics is new; matter between brackets fomitted material; is material to be omitted.

AN ACT relating to energy; revising provisions governing the conservation of energy in certain buildings; requiring an electric utility to file a plan to increase access to renewable energy systems by residential electric customers; repealing limitations on the use of electric resistance for heating spaces; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires the Director of the Office of Energy within the Office of the Governor to adopt regulations for the conservation of energy in buildings, including regulations adopting the most recent version of the *International Energy* Conservation Code, issued by the International Code Council, and certain amendments to the Code. (NRS 701.220) The governing body of a local government that is authorized by law to adopt and enforce a building code is required to incorporate the standards adopted by the Director in its building code. (NRS 701.220) **Section 1** of this bill requires the Director and the governing body of a local government that is authorized by law to adopt and enforce a building code to adopt one or more alternative options to comply with the regulations for the conservation of energy in buildings, in addition to the compliance options provided in the International Energy Conservation Code. Section 1 provides requirements for the alternative options for compliance which the Director and the governing body of a local government are required to adopt.

Existing law requires each electric utility to submit to the Public Utilities Commission of Nevada every 3 years an integrated resource plan to increase the utility's supply of electricity or decrease the demands made on its system by its customers. Existing law provides that the integrated resource plan must include certain components, including, without limitation, a distributed resources plan. (NRS 704.741) **Sections 2 and 5** of this bill require the distributed resources plan submitted by an electric utility to include a plan to increase access to renewable energy systems by residential electric customers in this State. Section 2 establishes





requirements for the plan and requires the Commission to adopt regulations, including, without limitation, regulations establishing criteria for determining the adequacy of the plan. **Section 6** of this bill requires an electric utility to file an amendment to its most recent distributed resources plan on or before September 1, 2024 to add a plan to increase access to renewable energy systems by residential electric customers. **Sections 3 and 4** of this bill make conforming changes to indicate the proper placement of **section 2** in the Nevada Revised Statutes.

Existing law places limitations upon the use of electric resistance as a heating

Existing law places limitations upon the use of electric resistance as a heating source in certain buildings in a county whose population is 100,000 or more (currently Clark and Washoe Counties). (NRS 701.230) **Section 7** of this bill repeals these limitations.

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

Section 1. NRS 701.220 is hereby amended to read as follows: 701.220 1. The Director shall adopt regulations for the conservation of energy in buildings, including manufactured homes. Except as otherwise provided in [subsection 5,] this section, 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 <u>International Energy Conservation Code</u>, and any amendments thereto, every third year.
- 2. The Director may exempt a building from a standard if the Director determines that application of the standard to the building would not accomplish the purpose of the regulations.
- 3. The regulations adopted by the Director pursuant to this section 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 Director 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 Director in its building code;
- (b) Except as otherwise provided in [subsection 5,] this section, may adopt higher or more stringent standards and must report any such higher or more stringent standards, along with supporting documents, to the Director; and
 - (c) Shall enforce the standards adopted.

- 5. The Director or the governing body of a local government shall not adopt a standard which mandates a requirement for air changes per hour that is outside the following ranges:
- (a) Less than 4 1/2 or more than 7 air changes per hour for an attached residence or any residence for which fire sprinklers are installed; or
- (b) Less than 4 or more than 7 air changes per hour for any residence other than a residence described in paragraph (a).
- 6. A design professional who complies with the standards adopted by the Director or the governing body of a local government pursuant to this section is not subject to disciplinary action by the State Board of Architecture, Interior Design and Residential Design pursuant to paragraph (f) of subsection 1 of NRS 623.270 or the State Board of Professional Engineers and Land Surveyors pursuant to NRS 625.410.
- 7. The Director and the governing body of a local government that is authorized by law to adopt and enforce a building code shall adopt, in addition to the compliance options provided in the <u>International Energy Conservation Code</u>, one or more alternative options for compliance with the regulations for the conservation of energy in buildings adopted pursuant to subsection 1 that:
- (a) Use a home energy rating system index utilizing the most recent version of the "Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index," ANSI/RESNET/ICC 301;
- (b) In calculating the energy rating of a building, provide credit for reductions to the purchase power needs of the building that are attributable to the installation of a renewable energy system that is commensurate with the credit provided for other energy efficient building components, including, without limitation, insulation; and
- (c) Require buildings using the alternative compliance option to be at least 5 percent more efficient than a building built to the prescriptive compliance option set forth in the version of the <u>International Energy Conservation Code</u> adopted pursuant to subsection 1.





- 8. Nothing in this section shall be deemed to prohibit the Director or the governing body of a local government from approving and implementing a program for the purpose of increasing energy efficiency in new residential construction through the use of sample inspections.
- [8.] 9. The Director 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 Director must conduct at least three hearings in different locations in the State, after giving 30 days' notice of each hearing, before the Director may adopt any regulations pursuant to this section.
 - [9.] 10. As used in this section [, "design]:
- (a) "Design professional" means a person who holds a professional license or certificate issued pursuant to chapter 623 or 625 of NRS.
- (b) "Renewable energy system" means a system for producing thermal energy or electric power that relies on naturally occurring, on-site resources that are not depleted as a result of their use, including, without limitation, solar, wind and biomass energy systems.
- **Sec. 2.** Chapter 704 of NRS is hereby amended by adding thereto a new section to read as follows:
- 1. An electric utility in this State shall file with the Commission, as part of the distributed resources plan required to be submitted pursuant to NRS 704.741, a plan to increase access to renewable energy systems by residential electric customers in this State. Two or more electric utilities that are affiliated through common ownership and that have an interconnected system for the transmission of electricity shall submit a joint plan.
 - 2. A plan submitted pursuant to subsection 1:
- (a) May include a plan for the sale or lease of renewable energy systems to residential customers.
- (b) Shall prioritize the development of renewable energy systems in a manner which will reduce peak load, increase reliability and eliminate the need for additional nonrenewable generation resources.
- (c) Shall offer access to renewable energy in historically underserved communities.
- 3. The Commission shall adopt regulations necessary to carry out the provisions of this section, including, without limitation,





regulations establishing the criteria for determining the adequacy of a plan submitted pursuant to this section.

4. As used in this section:

(a) "Block" means the smallest geographical unit whose boundaries were designated by the Bureau of the Census of the United States Department of Commerce in its topographically integrated geographic encoding and referencing system.

(b) "Block group" means a combination of blocks whose

numbers begin with the same digit.

- (c) "Census tract" means a combination of block groups.
- (d) "Electric utility" has the meaning ascribed to it in NRS 704.187.
 - (e) "Historically underserved community" means:
 - (1) A census tract:
- (I) Designated as a qualified census tract by the Secretary of Housing and Urban Development pursuant to 26 U.S.C. § 42(d)(5)(B)(ii); or
- (II) In which, in the immediately preceding census, at least 20 percent of households were not proficient in the English language; or
 - (2) Qualified tribal land, as defined in NRS 370.0325.
- (f) "Renewable energy" has the meaning ascribed to it in NRS 704.7715.
- (g) "Renewable energy system" means a facility or energy system for the generation of electricity that:
- (1) Uses renewable energy as its primary source of energy to generate electricity; and
 - (2) Is located on the premises of a residential customer.
 - **Sec. 3.** NRS 704.736 is hereby amended to read as follows:
- 704.736 The application of NRS 704.736 to 704.754, inclusive, *and section 2 of this act* is limited to any public utility in the business of supplying electricity which has an annual operating revenue in this state of \$2,500,000 or more.
 - **Sec. 4.** NRS 704.7362 is hereby amended to read as follows:
- 704.7362 As used in NRS 704.736 to 704.754, inclusive, *and section 2 of this act*, unless the context otherwise requires, the words and terms defined in NRS 704.7364, 704.7366 and 704.7368 have the meanings ascribed to them in those sections.
 - **Sec. 5.** NRS 704.741 is hereby amended to read as follows:
- 704.741 1. A utility which supplies electricity in this State shall, on or before June 1 of every third year, in the manner specified by the Commission, submit a plan to increase its supply of electricity or decrease the demands made on its system by its customers to the Commission. Two or more utilities that are affiliated through common ownership and that have an





interconnected system for the transmission of electricity shall submit a joint plan.

2. The Commission shall, by regulation:

- (a) Prescribe the contents of such a plan, including, but not limited to, the methods or formulas which are used by the utility or utilities to:
- (1) Forecast the future demands, except that a forecast of the future retail electric demands of the utility or utilities must not include the amount of energy and capacity proposed pursuant to subsection 5 as annual limits on the total amount of energy and capacity that eligible customers may be authorized to purchase from providers of new electric resources through transactions approved by the Commission pursuant to an application submitted pursuant to NRS 704B.310 on or after May 16, 2019; and
- (2) Determine the best combination of sources of supply to meet the demands or the best method to reduce them; and
- (b) Designate renewable energy zones and revise the designated renewable energy zones as the Commission deems necessary.
- 3. The Commission shall require the utility or utilities to include in the plan:
- (a) An energy efficiency program for residential customers which reduces the consumption of electricity or any fossil fuel and which includes, without limitation, the use of new solar thermal energy sources.
- (b) A proposal for the expenditure of not less than 10 percent of the total expenditures related to energy efficiency and conservation programs on energy efficiency measures for customers of the electric utility in low-income households and residential customers and public schools in historically underserved communities, through both targeted programs and programs directed at residential customers and public schools in general.
- (c) A comparison of a diverse set of scenarios of the best combination of sources of supply to meet the demands or the best methods to reduce the demands, which must include at least one scenario of low carbon dioxide emissions that:
- (1) Uses sources of supply that result in, by 2050, an amount of energy production from zero carbon dioxide emission resources that equals the forecasted demand for electricity by customers of the utility;
 - (2) Includes the deployment of distributed generation; and
- (3) If the plan is submitted on or before June 1, 2027, uses sources of supply that result in, by the year 2030, an 80 percent reduction in carbon dioxide emissions from the generation of electricity to meet the demands of customers of the utility as compared to the amount of such emissions in the year 2005.





- (d) An analysis of the effects of the requirements of NRS 704.766 to 704.776, inclusive, on the reliability of the distribution system of the utility or utilities and the costs to the utility or utilities to provide electric service to all customers. The analysis must include an evaluation of the costs and benefits of addressing issues of reliability through investment in the distribution system.
- (e) A list of the utility's or utilities' assets described in NRS 704.7338.
 - (f) A surplus asset retirement plan as required by NRS 704.734.
- 4. The Commission shall require the utility or utilities to include in the plan a distributed resources plan. The distributed resources plan must:
- (a) Evaluate the locational benefits and costs of distributed resources. This evaluation must be based on reductions or increases in local generation capacity needs, avoided or increased investments in distribution infrastructure, safety benefits, reliability benefits and any other savings the distributed resources provide to the electricity grid for this State or costs to customers of the electric utility or utilities.
- (b) Propose or identify standard tariffs, contracts or other mechanisms for the deployment of cost-effective distributed resources that satisfy the objectives for distribution planning.
- (c) Propose cost-effective methods of effectively coordinating existing programs approved by the Commission, incentives and tariffs to maximize the locational benefits and minimize the incremental costs of distributed resources.
- (d) Identify any additional spending necessary to integrate costeffective distributed resources into distribution planning consistent with the goal of yielding a net benefit to the customers of the electric utility or utilities.
- (e) Identify barriers to the deployment of distributed resources, including, without limitation, safety standards related to technology or operation of the distribution system in a manner that ensures reliable service.
- (f) Include a transportation electrification plan as required by NRS 704.7867.
- (g) Include a plan to increase access to renewable energy systems by residential electric customers as required by section 2 of this act.
- 5. The Commission shall require the utility or utilities to include in the plan a proposal for annual limits on the total amount of energy and capacity that eligible customers may be authorized to purchase from providers of new electric resources through transactions approved by the Commission pursuant to an application submitted pursuant to NRS 704B.310 on or after May 16, 2019. In





developing the proposal and the forecasts in the plan, the utility or utilities must use a sensitivity analysis that, at a minimum, addresses load growth, import capacity, system constraints and the effect of eligible customers purchasing less energy and capacity than authorized by the proposed annual limit. The proposal in the plan must include, without limitation:

- (a) A forecast of the load growth of the utility or utilities;
- (b) The number of eligible customers that are currently being served by or anticipated to be served by the utility or utilities;
- (c) Information concerning the infrastructure of the utility or utilities that is available to accommodate market-based new electric resources;
- (d) Proposals to ensure the stability of rates and the availability and reliability of electric service; and
- (e) For each year of the plan, impact fees applicable to each megawatt or each megawatt hour to account for costs reflected in the base tariff general rate and base tariff energy rate paid by enduse customers of the electric utility.
- 6. The annual limits proposed pursuant to subsection 5 shall not apply to energy and capacity sales to an eligible customer if the eligible customer:
- (a) Was not an end-use customer of the electric utility at any time before June 12, 2019; and
- (b) Would have a peak load of 10 megawatts or more in the service territory of an electric utility within 2 years of initially taking electric service.
 - 7. As used in this section:
- (a) "Distributed generation system" has the meaning ascribed to it in NRS 701.380.
- (b) "Distributed resources" means distributed generation systems, energy efficiency, energy storage, electric vehicles and demand-response technologies.
- (c) "Eligible customer" has the meaning ascribed to it in NRS 704B.080.
 - (d) "Energy" has the meaning ascribed to it in NRS 704B.090.
- (e) "Historically underserved community" has the meaning ascribed to it in NRS 704.78343.
- (f) "Low-income household" has the meaning ascribed to it in NRS 704.78347.
- (g) "New electric resource" has the meaning ascribed to it in NRS 704B.110.
- 42 (h) "Provider of new electric resources" has the meaning ascribed to it in NRS 704B.130.
 - (i) "Renewable energy zones" means specific geographic zones where renewable energy resources are sufficient to develop





generation capacity and where transmission constrains the delivery of electricity from those resources to customers.

- (j) "Sensitivity analysis" means a set of methods or procedures which results in a determination or estimation of the sensitivity of a result to a change in given data or a given assumption.
- **Sec. 6.** 1. An electric utility shall, on or before September 1, 2024, file an amendment to its most recent distributed resources plan filed pursuant to NRS 704.741, as amended by section 5 of this act, to incorporate into the distributed resources plan a plan that complies with the provisions of section 2 of this act.
- 2. As used in this section, "electric utility" has the meaning ascribed to it in NRS 704.187.
 - Sec. 7. NRS 701.230 is hereby repealed.
- **Sec. 8.** 1. This section becomes effective upon passage and approval.
 - 2. Sections 1 to 8, inclusive, of this act become effective:
- (a) Upon passage and approval for the purpose of adopting any regulations and performing any other preparatory administrative tasks that are necessary to carry out the provisions of this act; and
 - (b) On October 1, 2023, for all other purposes.

TEXT OF REPEALED SECTION

701.230 Prohibition against inclusion in buildings of system using electric resistance for heating spaces; applicability; exceptions; enforcement by local governments.

- 1. In a county whose population is 100,000 or more, a building whose construction, or retrofit that replaces the heating source of the premises, exclusive of maintenance, began on or after October 1, 1983, must not contain a system using electric resistance for heating spaces unless:
- (a) The system is merely supplementary to another means of heating;
- (b) Under the particular circumstances, no other primary means of heating the spaces is possible other than electric resistance;
- (c) The system is a hydronic radiant heating system or a system that uses ground-source heat pumps or water-source heat pumps; or
- (d) The system using electric resistance for heating spaces uses electricity produced from renewable energy systems that exist on the owner's property, including, without limitation, net metering systems.



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- 2. The owner of a property who seeks to use a system using electric resistance for heating spaces must submit an application for an exception pursuant to subsection 1 to the governing body of the applicable local government before beginning construction or retrofitting of the system.
 - 3. The governing body of the local government:
 - (a) Shall enforce subsection 1;
- (b) Shall determine whether the property owner is eligible for an exception pursuant to subsection 1 within 30 days after receiving a complete application from the owner of the property; and

(c) Shall forward its decision to the owner of the property and to

the Director.

- 4. This section does not prohibit the use of incandescent or fluorescent lighting.
- 5. As used in this section, "electric resistance" means passing an electric current through a resistance, coil, wire or other obstacle which impedes electricity and causes it to produce heat.





