APPROVED REGULATION OF THE

PUBLIC UTILITIES COMMISSION OF NEVADA

LCB File No. R060-18

Effective December 19, 2018

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

AUTHORITY: §§1-4, NRS 703.025, 704.210 and 704.741; §5, NRS 703.025, 704.210, 704.741 and section 1 of Senate Bill No. 65, chapter 383, Statutes of Nevada 2017, at page 2471 (NRS 704.744).

A REGULATION relating to electric utilities; requiring a resource plan submitted by an electric utility to contain certain information concerning the reduction of consumer exposure to the price volatility of fossil fuels and the potential social cost of carbon; establishing the method for calculating the social cost of carbon; requiring an electric utility to hold a meeting with certain parties and interested persons before filing a resource plan or an amendment to a resource plan; establishing requirements for providing notice of such a meeting; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

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. (NRS 704.741) Under existing law, in determining the adequacy of a utility's resource plan, the Commission is required to give preference to those measures and sources of supply that provide the greatest economic and environmental benefits to the State, as well as those that provide for diverse electricity supply portfolios and which reduce customer exposure to price volatility of fossil fuels and the potential costs of carbon. In determining the preference given to such measures and sources of supply, existing law requires the Commission to consider the cost of those measures and sources of supply to the customers of the electric utility. (NRS 704.746) Finally, existing law requires any order of the Commission accepting or modifying a utility's resource plan or an amendment to such a plan to include the Commission's justification for the preferences given to those measures and sources of supply. (NRS 704.751) **Sections 1-4** of this regulation revise existing regulations governing the information required to be included in a utility's resource plan to require a utility to include in its plan certain information related to reducing customer exposure to the price volatility of fossil fuels and the potential costs of carbon.

Existing regulations require that the resource plan be accompanied by a summary of the resource plan, including, without limitation, a summary of the preferred plan of the electric

utility. (NAC 704.9215) **Section 1** of this regulation requires the summary of the preferred plan to include an explanation of how the preferred plan reduces consumer exposure to the price volatility of fossil fuels and the potential social cost of carbon.

Existing regulations require the environmental costs to the State associated with operating and maintaining a supply plan or demand side plan be quantified for air emissions, water and land use. (NAC 704.9359) **Section 2** of this regulation requires the environmental costs to the State associated with operating and maintaining a supply plan or demand side plan also to be quantified for the social cost of carbon.

Existing regulations require an electric utility to calculate the present worth of societal costs for each alternative plan for the supply of power submitted as part of the electric utility's supply plan, including environmental costs that are not internalized as private costs to the utility. (NAC 704.937) **Section 3** of this regulation requires that the social cost of carbon, excluding the cost from emissions of carbon internalized as private costs to the utility, be included in the calculation of such environmental costs. **Section 3** also requires an electric utility to determine the social cost of carbon using the best available science and economics, such as the analysis set forth in the "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis" released by the Interagency Working Group on Social Cost of Greenhouse Gases in August 2016. Additionally, **section 3** requires an electric utility to submit information to support the method used by the utility to calculate the social cost of carbon.

Existing regulations require a resource plan submitted by an electric utility to include certain graphs and tables regarding the electric utility's preferred plan and other supply plans. (NAC 704.945) **Section 4** of this regulation requires a resource plan to include a table showing the projected mix of generation by fuel type and the projected total emissions of carbon dioxide for each supply plan analyzed. **Section 4** also requires a resource plan to include a graph for each supply plan analyzed that shows, for each year of the resource plan, the percentage change in the preferred plan's projected total emissions of carbon dioxide resulting from that supply plan.

Existing law requires the Commission to require each electric utility to meet with personnel from the Commission and the Bureau of Consumer Protection in the Office of the Attorney General and any other interested persons to provide an overview of an anticipated filing or amendment to a resource plan. (Section 1 of Senate Bill No. 65, chapter 383, Statutes of Nevada 2017, at page 2471 (NRS 704.744)) **Section 5** of this regulation imposes this requirement on electric utilities. **Section 5** also requires an electric utility to prepare a notice for each such meeting and to take certain action to distribute the notice.

Section 1. NAC 704.9215 is hereby amended to read as follows:

704.9215 1. A utility's resource plan must be accompanied by a summary that is suitable for distribution to the public. The summary must contain easily interpretable tables, graphs and

maps and must not contain any complex explanations or highly technical language. The summary must be approximately 30 pages in length.

- 2. The summary must include:
- (a) A brief introduction, addressed to the public, describing the utility, its facilities and the purpose of the resource plan, and the relationship between the resource plan and the strategic plan of the utility for the duration of the period covered by the resource plan.
- (b) The forecast of low growth, the forecast of high growth and the forecast of base growth of the peak demand for electric energy and of the annual electrical consumption, for the next 20 years, commencing with the year following the year in which the resource plan is filed, both with and without the impacts of programs for energy efficiency and conservation and an explanation of the economic and demographic assumptions associated with each forecast.
- (c) A summary of the demand side plan listing each program and its effectiveness in terms of costs and showing the 20-year forecast of the reduction of demand and the contribution of each program to this forecast.
 - (d) A summary of the preferred plan [showing]:
- (1) Showing each planned addition to the system for the next 20 years, commencing with the year following the year in which the resource plan is filed, with its anticipated capacity, cost and date of beginning service [-]; and
- (2) Explaining how the preferred plan reduces customer exposure to the price volatility of fossil fuels and the potential social cost of carbon as calculated pursuant to subsection 5 of NAC 704.937.
- (e) A summary of renewable energy showing how the utility intends to comply with the portfolio standard and listing each existing contract for renewable energy and each existing

contract for the purchase of renewable energy credits and the term and anticipated cost of each such contract.

- (f) A summary of:
- (1) The energy supply plan for the next 3 years setting out the anticipated cost, price volatility and reliability risks of the energy supply plan;
 - (2) The risk management strategy;
 - (3) The fuel procurement plan; and
 - (4) The purchased power procurement plan.
- (g) A summary of the activities, acquisitions and costs included in the action plan of the utility.
- (h) An integrated evaluation of the components of the resource plan which relates the preferred plan to the objectives of the strategic plan of the utility, and any other information useful in presenting to the public a comprehensive summary of the utility and its expected development.
 - **Sec. 2.** NAC 704.9359 is hereby amended to read as follows:

704.9359 The environmental costs to the State associated with operating and maintaining a supply plan or demand side plan must be quantified for air emissions, water and land use [-] and the social cost of carbon as calculated pursuant to subsection 5 of NAC 704.937.

Environmental costs are those costs, wherever they may occur, that result from harm or risks of harm to the environment after the application of all mitigation measures required by existing environmental regulation or otherwise included in the resource plan.

Sec. 3. NAC 704.937 is hereby amended to read as follows:

- 704.937 1. A utility's supply plan must contain a diverse set of alternative plans which include a list of options for the supply of capacity and electric energy that includes a description of all existing and planned facilities for generation and transmission, existing and planned power purchases, and other resources available as options to the utility for the future supply of electric energy. The description must include the expected capacity of the facilities and resources for each year of the supply plan. At least one alternative plan must be of low carbon intensity and include:
- (a) The generation or acquisition of an amount of renewable energy greater than required by NRS 704.7821;
 - (b) Changes to the utility's existing fleet of resources for the generation of power;
 - (c) The application of technology that would significantly reduce emissions of carbon; or
 - (d) Any combination thereof.
- 2. A utility shall identify the criteria it has used for the selection of its options for meeting the expected future demands for electric energy and shall explain how any conflicts among criteria are resolved.
- 3. In comparing alternative plans containing different resource options, the utility shall calculate the present worth of future requirements for revenue for each alternative plan for the supply of power. A comparison of the present worth of future requirements for revenue for each alternative plan must be presented in the resource plan. As calculated pursuant to this subsection, the present worth of future requirements for revenue for each alternative plan must include, without limitation, a reasonable range of costs associated with emissions of carbon in the 20-year period of the resource plan as private costs to the utility.

- 4. The utility shall calculate the present worth of societal costs for each alternative plan for the supply of power. The present worth of societal costs of a particular alternative plan must be determined by adding the environmental costs that are not internalized as private costs to the utility pursuant to subsection 3 to the present worth of future requirements for revenue. In calculating the present worth of societal costs for each alternative plan pursuant to this subsection, the utility shall include as environmental costs the utility's estimate of the level of environmental costs resulting from carbon dioxide emissions for that year and the social cost of carbon.
- 5. For the purposes of subsection 4 and NAC 704.9215 and 704.9359, the social cost of carbon must be determined by subtracting the costs associated with emissions of carbon internalized as private costs to the utility pursuant to subsection 3 from the net present value of the future global economic costs resulting from the emission of each additional metric ton of carbon dioxide. The net present value of the future global economic costs resulting from the emission of an additional ton of carbon dioxide must be calculated using the best available science and economics such as the analysis set forth in the "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis" released by the Interagency Working Group on Social Cost of Greenhouse Gases in August 2016. This publication may be obtained, free of charge, at the Internet website https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_2 6_16.pdf. The utility shall submit information supporting the method used by the utility to calculate the social cost of carbon.
 - **6.** The utility shall consider for each alternative plan the mitigation of risk by means of:
 - (a) Flexibility;

- (b) Diversity;
- (c) Reduced size of commitments;
- (d) Choice of projects that can be completed in short periods;
- (e) Displacement of fuel;
- (f) Reliability;
- (g) Selection of fuel and energy supply portfolios; and
- (h) Financial instruments or electricity products.
- [6.] 7. The alternative plans of the utility must:
- (a) Provide adequate reliability;
- (b) Be within regulatory and financial constraints;
- (c) Meet the portfolio standard; and
- (d) Meet the requirements for environmental protection.
- [7.] 8. The utility shall identify its preferred plan and fully justify its choice by setting forth the criteria that influenced the utility's choice.
 - **Sec. 4.** NAC 704.945 is hereby amended to read as follows:
- 704.945 1. A utility shall include in its resource plan a table of loads and resources for each supply plan analyzed. The table must include the following data for each year of the resource plan:
 - (a) The capacity provided by each supply resource;
 - (b) The total expected capacity of all resources;
 - (c) The forecasted peak demand;
 - (d) The estimated impact of new programs for energy efficiency and conservation;
 - (e) The expected capacity and energy provided by renewable resources, categorized by type;

- (f) The required planning reserves;
- (g) The total capacity required;
- (h) The excess or deficiency of capacity without additional resources; and
- (i) The excess or deficiency of capacity with additional planned resources.
- 2. A graph must be included for the preferred plan of the utility showing, over the 20-year planning period:
 - (a) The total resources requirements;
 - (b) The total demand without new programs for energy efficiency and conservation;
 - (c) The total demand with new programs for energy efficiency and conservation;
 - (d) The total capacity with additional planned resources; and
 - (e) The total capacity without additional resources.
- 3. A graph must be included for the preferred plan that shows, for each year of the 20-year planning period, the excess or required capacity both with and without the additional planned resources.
- 4. A table must be included for each supply plan analyzed that shows, for each year of the resource plan:
 - (a) The projected mix of generation by fuel type; and
 - (b) The projected total emissions of carbon dioxide.
- 5. A graph must be included for each supply plan analyzed that shows, for each year of the resource plan, the percentage change in the preferred plan's projected total emissions of carbon dioxide resulting from that supply plan.

- 6. A graph or table must be provided that shows the allocation of the capacity of the transmission system of the utility between bundled retail transmission customers, unbundled retail transmission customers and wholesale transmission customers.
 - **Sec. 5.** NAC 704.952 is hereby amended to read as follows:
- 704.952 1. A utility may schedule sessions for reviewing plans and providing an opportunity for interested persons to:
 - (a) Learn of progress by the utility in developing plans and amendments to plans;
- (b) Determine whether key assumptions are being applied in a consistent and acceptable manner;
 - (c) Determine whether key results are reasonable; and
 - (d) Offer suggestions on other matters as appropriate.
- 2. If the utility, the Bureau of Consumer Protection in the Office of the Attorney General, the staff or any other person participating in the process cannot agree to schedule sessions for reviewing plans, any of those persons may petition the Commission to schedule the sessions.
- 3. The parties involved in the review sessions may establish, at the beginning of the sessions, a procedure to resolve any technical issues that are discussed during the sessions.
- 4. If review sessions are held pursuant to subsection 1, the utility shall prepare a brief summary of the major topics on the agendas and the conclusions reached by the parties during the review sessions. The summary must be provided to the Commission in conjunction with testimony supporting the utility's plan.
- 5. [At least] Not less than 4 months before [the anticipated date for] filing [the resource] a plan [,] required by NRS 704.741, or within a reasonable period before filing an amendment to such a plan pursuant to NRS 704.751, the utility shall meet with staff, [and] the personnel of

the Bureau of Consumer Protection *and any other interested persons* to provide an overview of the [anticipated filing.] *plan or amendment*.

- 6. [Before a utility may file an amendment to its resource plan, the utility must meet with staff and the personnel of the Bureau of Consumer Protection to provide an overview of the anticipated amendment.] For each meeting held pursuant to subsection 5, the utility shall prepare a notice of the meeting which must include, without limitation, the date, time and location of the meeting and an explanation of the purpose of the meeting. The utility shall distribute the notice by:
 - (a) Posting the notice on the Internet website of the utility;
- (b) Sending the notice via electronic mail to each person on the relevant service list maintained by the Commission; and
- (c) Providing the notice to staff of the Commission for publication on the Internet website of the Commission.