APPROVED REGULATION OF

THE PUBLIC UTILITIES COMMISSION OF NEVADA

LCB File No. R029-19

Filed October 30, 2019

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

AUTHORITY: §§1-15 and 17, NRS 703.025, 704.210 and 704.741; §16, NRS 703.025, 704.210, 704.741 and 704.751; §18, NRS 703.025, 704.210 and 704.741 and section 3 of Senate Bill No. 146, chapter 590, Statutes of Nevada 2017, at page 4290.

A REGULATION relating to electric service; requiring a utility to submit a distributed resources plan containing certain information; authorizing a utility to deviate from its distributed resources plan under certain circumstances; authorizing a utility to file an amendment to its distributed resources plan; requiring a utility to file an update to its distributed resources plan; revising the requirements for the summary of the integrated resource plan; establishing requirements to determine if the elements of a distributed resources plan are prudent; authorizing a utility to recover the costs it reasonably and prudently incurs in carrying out an approved distributed resources plan; removing certain filing dates for resource plans; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires an electric utility with an annual operating revenue of \$2,500,000 or more in this State to submit to the Public Utilities Commission of Nevada, on or before June 1 of every third year, a resource plan to increase its supply of electricity or decrease the demands made on its system by its customers. As part of this resource plan, existing law requires such a utility to submit a distributed resources plan which: (1) evaluates locational benefits and costs of distributed resources; (2) proposes or identifies mechanisms for the deployment of cost-effective distributed resources; (3) proposes cost-effective methods of coordinating existing programs approved by the Commission; (4) identifies additional spending necessary to integrate costeffective distributed resources into distribution planning; and (5) identifies barriers to the deployment of distributed resources. (NRS 704.736, 704.741) Section 8 of this regulation requires a utility to submit to the Commission a distributed resources plan containing the information required by statute, as well as certain additional information including a grid needs assessment, hosting capacity analysis, recommendations regarding the implementation of distributed resources, a forecast of net distribution system load and distributed resources and a summary describing the results of an informal stakeholder process to discuss recommendations for improvements to the hosting capacity analysis.

Section 9 of this regulation authorizes a utility to deviate from its distributed resources plan to respond to any significant change in circumstances not contemplated by the distributed resources plan. **Section 9** also authorizes a utility to seek authority from the Commission to deviate prospectively from the distributed resources plan at the time the utility submits an update to the plan or by filing an amendment to the distributed resources plan.

Section 10 of this regulation requires a utility to file an update to its distributed resources plan on or before September 1 of the first and second years after the action plan of a utility is filed. **Section 11** of this regulation establishes a timeline for the Commission to conduct a hearing and issue an order regarding an update filed by the utility.

Existing regulations require the resource plan of utility to be accompanied by a summary that is suitable for distribution to the public. (NAC 704.9215) **Section 14** of this regulation requires the summary to include a summary of the distributed resources plan and increases the required length of the summary from approximately 30 pages to approximately 40 pages.

Section 16 of this regulation provides that, if the Commission determines that the elements of the distributed resources plan are prudent, the Commission will include in its approval of the action plan of the utility its determination that the elements contained in the distributed resources plan are prudent. **Section 16** establishes requirements for the Commission to determine that the elements contained in the distributed resources plan are prudent. **Section 16** also authorizes a utility to recover all costs it prudently and reasonably incurs in carrying out an approved distributed resources plan in an appropriate separate rate proceeding.

Sections 12, 13, 15 and 17 of this regulation make conforming changes.

Section 18 of this regulation removes the requirement for certain utilities to file a resource plan every 3 years because existing statutes contain such a requirement.

- **Section 1.** Chapter 704 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 11, inclusive, of this regulation.
- Sec. 2. "Distributed resources" means distributed generation systems, energy efficiency, energy storage, electric vehicles and demand-response technologies, which may be located on the utility side or the customer side of the meter of a utility customer.
- Sec. 3. "Distributed resources plan" means the plan the utility is required to include in its resource plan pursuant to subsection 5 of NRS 704.741.
- Sec. 4. "Grid needs assessment" means an assessment of the constraints on a utility's electric grid and proposed solutions to those constraints.

- Sec. 5. "Hosting capacity analysis" means the analysis to determine the amount of distributed resources that can be accommodated on a particular feeder section of the distribution system at a given time under existing and forecasted grid conditions and operations without adversely impacting safety, power quality, reliability or other operational criteria.
- Sec. 6. "Locational net benefit analysis" means a cost-benefit analysis of distributed resources that incorporates location-specific net benefits to the electric grid.
- Sec. 7. "Non-wires alternative" means a solution to an identified constraint on the utility's electric grid which may include, without limitation, the deployment of a distributed resource or suite of distributed resources.
- Sec. 8. 1. The resource plan of a utility must contain a distributed resources plan for the 3 years covered by the action plan of the utility. The distributed resources plan of a utility must be consistent with the action plan of the utility.
 - 2. The distributed resources plan must:
- (a) Identify and evaluate the locational benefits and costs of distributed resources. The evaluation must be based on:
 - (1) Reductions or increases in local generation capacity needs;
 - (2) Avoided or increased localized investments in distribution infrastructure;
 - (3) Reductions or increases in safety benefits of the electric grid;
 - (4) Reductions or increases in the reliability benefits of the electric grid;
- (5) Any other localized savings that the distributed resources provide to the electric grid; and

- (6) Any other costs that distributed resources impose on customers of the electric utility or utilities.
- (b) As part of the distributed resources plan, the utility may propose tariffs, bilateral contracts, competitive solicitations or other mechanisms that it has identified and evaluated that maximize locational benefits and minimize the incremental cost of distributed resources.
- (c) Identify existing programs approved by the Commission that address the deployment of distributed resources, including, without limitation, tariffs and incentives, and propose cost-effective methods of effectively coordinating the deployment of distributed resources with such existing programs to maximize the locational benefits and minimize the incremental costs of distributed resources.
- (d) Identify and evaluate any incremental utility investment or expenditure necessary to integrate cost-effective distributed resources into the distribution planning process consistent with the goal of yielding a net benefit to the customers of the electric utility or utilities.
- (e) Identify and evaluate potential barriers to the deployment of distributed resources, including, without limitation, safety standards related to technology or operation of the distribution system and make recommendations regarding accepting or overcoming identified potential barriers in a manner that will ensure the safety of the distribution grid and the reliability of service.
- (f) Be developed by a utility using a forecast of net distribution system load and distributed resources. The forecast must be for a period of not less than 6 years, beginning with the year after the distributed resources plan is filed. The net distribution system load and distributed resources forecast will include system, substation and feeder level net load projections and energy and demand characteristics for all distributed resource types.

- 3. The distributed resources plan must include:
- (a) A grid needs assessment, which must be based on the net distribution system load, distributed resource forecast and the facilities capacity analysis. The grid needs assessment must include, without limitation:
 - (1) The hosting capacity analysis described by paragraph (b);
- (2) An analysis of the suitability of non-wires alternatives to mitigate identified transmission and distribution system constraints;
- (3) A locational net benefit analysis to compare utility infrastructure upgrade solutions and distributed resources solutions to forecasted transmission and distribution system constraints; and
- (4) Recommendations for the deployment of utility infrastructure upgrade solutions and non-wires alternative solutions to identified transmission and distribution system constraints.
- (b) A hosting capacity analysis of the distribution system. The hosting capacity analysis shall be performed using a load flow analysis and forecasted distribution facilities and their capacity, configuration, loading and voltage data gathered at the substation, feeder and primary node levels. The utility shall perform scenario analyses to evaluate hosting capacity under normal conditions and planned and unplanned contingency conditions. The utility shall provide a detailed description of the methods and outcomes it used to perform the hosting capacity analysis. The utility shall also provide a detailed narrative describing the utility's progress towards providing publically-available, real-time hosting capacity data.
- (c) Recommendations for new cost-effective distributed resources, sourcing of distributed resource solutions and utility infrastructure upgrade solutions which have been determined to be the preferred solution to constraints on a utility's electric grid on the basis of the analysis in

the grid needs assessment. Such recommendations must be based on the locational net benefit analysis of resource options to utility customers.

- (d) A summary that explains how distributed resources have affected the need for supply side resources in the resource planning process. The summary shall include, without limitation, a description of the effect of distributed resources on the need for new generation and transmission resources and how distributed resources are integrated into the transmission planning and supply side planning portions of the resource planning process.
- (e) A summary that describes the results of an informal stakeholder process to discuss recommendations for improvements to the hosting capacity analysis. The informal stakeholder process shall occur not less than 120 days before the filing of a distributed resources plan and be organized by the utility.
 - (f) A technical appendix that conforms to the requirements of NAC 704.922.
- 4. If the utility changes the methodology of forecasting or the methodology used to conduct the hosting capacity analysis or grid needs assessment from the methodology used in the previous resource plan filed by the utility, the utility shall identify and provide a justification for the change.
- 5. Unless otherwise ordered by the Commission, in addition to, and separately from, the updates required pursuant to section 10 of this regulation, the utility shall, not less than once per year, post publically on its Internet website an update to the hosting capacity analysis of the distribution system. The Internet website of the utility shall contain a portal that provides maps and accessible electronic data suitable for distribution to the public.
- Sec. 9. 1. Notwithstanding the approval of the Commission of the distributed resources plan of a utility, the utility may deviate from the approved distributed resources plan to the

extent necessary to respond adequately to any significant change in circumstances not contemplated by the distributed resources plan. A significant change in circumstances includes, without limitation:

- (a) A material change in net system, feeder or nodal customer load or demand;
- (b) A material difference between the estimated and actual locational net benefit results for any or all resources analyzed in the grid needs assessment;
- (c) A material difference between estimated and actual in-service dates or performance of the distributed resources analyzed and selected pursuant to the distributed resources plan; and
- (d) Any other circumstance that the utility demonstrates to the Commission warrants a deviation.
- 2. If the utility deviates from its approved distributed resources plan, the utility shall include in the rate proceeding in which costs associated with the deviation are first sought to be recovered a description and justification for the deviation.
- 3. The utility may seek authority from the Commission to deviate prospectively from the distributed resources plan in an update filed pursuant to section 10 of this regulation, or by filing an amendment to the distributed resources plan in accordance with subsection 4.
 - 4. An amendment to the distributed resources plan of a utility must contain:
- (a) A section that identifies the specific approvals requested by the utility in the amendment;
- (b) A section that specifies any changes in assumptions or data that have occurred since the utility's last resource plan was filed; and
 - (c) As applicable, information required by section 8 of this regulation.

- 5. The Commission shall conduct its evaluation of the amendment of the distributed resources plan in accordance with subsection 4 of NAC 704.9494 and issue an order approving the amendment as filed, modifying the amendment or specifying any portions of the amendment that the Commission deems to be inadequate.
- Sec. 10. 1. Beginning in calendar year 2020, on or before September 1 of the first and second years after the action plan of a utility is filed, the utility shall file an update of the distributed resources plan that will be applicable for each year remaining in the period covered by the action plan.
- 2. The update of the distributed resources plan must comply with the requirements of section 8 of this regulation.
- Sec. 11. 1. The Commission will conduct a hearing within 60 days after a utility files an update of its distributed resources plan pursuant to section 10 of this regulation and issue an order within 120 days after the filing of that update by the utility.
- 2. The Commission will conduct its evaluation of the update of the distributed resources plan in accordance with subsection 4 of NAC 704.9494 and issue an order approving the update as filed, modifying the update or specifying any portions of the update that the Commission deems to be inadequate.
 - **Sec. 12.** NAC 704.9005 is hereby amended to read as follows:
- 704.9005 As used in NAC 704.9005 to 704.9525, inclusive, *and sections 2 to 11, inclusive*, *of this regulation* and when used in a utility's resource plan, unless the context otherwise requires, the words and terms defined in NAC 704.9006 to 704.9173, inclusive, *and sections 2 to* 7, *inclusive*, *of this regulation* have the meanings ascribed to them in those sections.
 - **Sec. 13.** NAC 704.9156 is hereby amended to read as follows:

704.9156 "Resource plan" means the plan that a utility is required by NRS 704.741 to submit every third year to the Commission, that consists of, and provides an integrated analysis of:

- 1. A load forecast;
- 2. A demand side plan;
- 3. A supply plan;
- 4. A financial plan;
- 5. An energy supply plan; [and]
- 6. A distributed resources plan; and
- 7. An action plan.

Sec. 14. 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] 40 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 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.
- (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 distributed resources plan for the next 3 years covered by the action plan of the utility setting out:
- (1) The locational benefits and costs of the distributed resources, which may include benefits and costs to the electric grid.

- (2) Identified barriers and recommendations to accept or overcome these barriers to the deployment of cost-effective distributed resources and proposed mechanisms pursuant to which cost-effective distributed resources will be deployed, in coordination with existing programs that have been approved by the Commission.
- (3) Incremental utility investment or expenditures to be funded for the next 3 years to identify, evaluate and integrate cost-effective distributed resources into the distribution planning process.
- (4) A summary of the methods and outcomes of the hosting capacity analysis described by paragraph (b) of subsection 3 of section 8 of this regulation.
- (5) A summary of forecasted loads and the forecasted growth of distributed energy resources for the electric grid over a 6-year period, at minimum, beginning with the year after the distributed resources plan is filed.
- (h) A summary of the activities, acquisitions and costs included in the action plan of the utility.
- [(h)] (i) 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. 15.** NAC 704.9489 is hereby amended to read as follows:
- 704.9489 1. Each resource plan of a utility must include a detailed action plan based on an integrated analysis of the demand side plan and supply plan of the utility. In its action plan, the utility shall specify all its actions that are to take place during the 3 years commencing with the year following the year in which the resource plan is filed. The action plan must contain:

- (a) An introductory section that explains how the action plan fits into the longer-term strategic plan of the utility.
 - (b) A list of actions for which the utility is seeking the approval of the Commission.
- (c) A schedule for the acquisition of data, including planned activities to update and refine the quality of the data used in forecasting.
- (d) A specific timetable for acquisition of options for the supply of electric energy and for programs for energy efficiency and conservation.
- (e) If changes in the methodology are being proposed, a description fully justifying the proposed changes, including an analysis of the costs and benefits. Any changes in methodology that are approved by the Commission must be maintained for the period described in the action plan.
 - (f) A section describing any plans of the utility to acquire additional modeling instruments.
 - (g) A section for the utility's program for energy efficiency and conservation, including:
 - (1) A description of continued planning efforts;
- (2) A plan to carry out and continue selected measures for energy efficiency and conservation that have been identified as desirable; and
- (3) Any impacts of imputed debt calculations associated with energy efficiency contracts in the preferred plan.
- (h) A section for the utility's program for acquisition of resources for the supply of electric energy for the period covered by the action plan, including:
- (1) The immediate plans of the utility for construction of facilities or long-term purchases of power;

- (2) The expected time for construction of facilities and acquisition of long-term purchases of power identified in subparagraph (1);
 - (3) The major milestones of construction; and
- (4) Any impacts of imputed debt calculations associated with renewable energy contracts or energy efficiency contracts in the preferred plan.
 - 2. The action plan must contain an energy supply plan and a distributed resources plan.
- 3. The action plan must contain a budget for planned expenditures suitable for comparing planned and achieved expenditures. Expenses must be listed in a format that is consistent with the categories and periods to be presented in subsequent filings. The budget must be organized in the following categories:
 - (a) Forecasting of loads;
 - (b) Energy efficiency and conservation;
 - (c) Distributed resources;
 - (d) Plan for supply; and
 - (d) (e) Financial plan.
- 4. The action plan must contain schedules suitable for comparing planned and actual activities and accomplishments. Milestones and points of decision committing major expenditures must be shown.
- 5. The action plan must contain a renewable energy zone transmission action plan for serving one or more of the renewable energy zones designated by the Commission or an explanation of why no renewable energy zone transmission action plan is contained in the action plan. In addition to the other action plan requirements set forth in this section, the renewable

energy zone transmission action plan must include, with supporting data and documentation, for each action item recommended by the utility:

- (a) For permitting, routing study and right-of-way acquisition expenses, evidence addressing:
- (1) How such expenditures will facilitate compliance with NRS 704.7821 in a manner consistent with NAC 704.8901 to 704.8937, inclusive; and
 - (2) All other benefits Nevada retail ratepayers will derive from the expenses;
 - (b) For proposed construction and expansion of transmission facilities:
- (1) Evidence of how the proposed construction and expansion will facilitate compliance with NRS 704.7821 in a manner consistent with NAC 704.8901 to 704.8937, inclusive;
- (2) A listing and description, including detailed cost estimates and development schedules, of the transmission facilities recommended by the utility for construction or expansion;
- (3) A listing and description of transmission alternatives that were considered by the utility, including transmission development partnerships;
- (4) Data and economic analysis that supports the transmission projects recommended by the utility, including, without limitation, a comparison of the levelized cost, including transmission, of procuring renewable resources from the renewable energy zones proposed to be served by the utility's recommended transmission projects to other renewable resource options, including those that are located in and out of renewable energy zones designated by the Commission;
- (5) Evidence of the financial commitments from developers of renewable energy projects located in the affected renewable energy zones;

- (6) An estimate of the level of capacity and energy that the utility expects to utilize from the affected renewable energy zones in the next 20 years, commencing with the year following the year in which the resource plan is filed; and
- (7) The estimated time frame to fully utilize the capacity of the construction and expansion of transmission facilities recommended by the utility; and
- (c) In addition to the renewable energy zone transmission action plan requirements set forth in paragraph (b), for construction and expansion of transmission infrastructure that will serve both Nevada retail ratepayers and export markets outside of Nevada:
- (1) Evidence that any renewable energy developers wishing to export energy outside of Nevada have a buyer for their energy and that the buyer has a means of delivering the energy from the transmission system of the Nevada utility to the point of delivery;
- (2) A strategic plan to mitigate the potential financial risks to Nevada retail ratepayers associated with stranded investment and infrastructure that is not intended to provide service to Nevada retail ratepayers, including, without limitation, safeguards to monitor the financial risk to Nevada's retail ratepayers and criteria to trigger an amendment to the renewable energy transmission action plan should changes in circumstance occur which could expose Nevada retail ratepayers to such risks; and
- (3) Identification of the potential resources in the renewable energy zones, including the resources under contract, resources under development, known completion dates and the known amount of capacity and energy to be produced by renewable energy projects in the affected renewable energy zones for customers outside of Nevada.
 - **Sec. 16.** NAC 704.9494 is hereby amended to read as follows:
 - 704.9494 1. The Commission will issue an order:

- (a) Approving the action plan of the utility as filed; or
- (b) If the plan is not approved as filed, specifying those parts of the action plan the Commission considers inadequate.
- 2. Approval by the Commission of an action plan constitutes a finding that the programs and projects contained in that action plan, other than the energy supply plan [,] and distributed resources plan, are prudent, including, without limitation, construction of facilities, purchased power obligations, programs for energy efficiency and conservation and impacts of imputed debt calculations associated with renewable energy contracts or energy efficiency contracts. If the Commission subsequently determines that any information relied upon when issuing its order approving the action plan was based upon information that was known or should have been known by the utility to be untrue or false at the time the information was presented, the Commission may revoke, rescind or otherwise modify its approval of the action plan.
- 3. If, at the time that the Commission approves the action plan of the utility, the Commission determines that the elements of the energy supply plan are prudent, the Commission will specifically include in the approval of the action plan its determination that the elements contained in the energy supply plan are prudent. For the Commission to make a determination that the elements of the energy supply plan are prudent:
- (a) The energy supply plan must not contain any feature or mechanism that the Commission finds would impair the restoration of the creditworthiness of the utility or would lead to a deterioration of the creditworthiness of the utility.
- (b) The energy supply plan must optimize the value of the overall supply portfolio for the utility for the benefit of its bundled retail customers.

- (c) The utility must demonstrate that the energy supply plan balances the objectives of minimizing the cost of supply, minimizing retail price volatility and maximizing the reliability of supply over the term of the plan.
- Failure by a utility to demonstrate that its energy supply plan is prudent in accordance with this subsection does not otherwise affect approval of the action plan, including the energy supply plan, and the utility may subsequently seek a determination that the energy supply plan is prudent in the appropriate deferred energy proceeding.
- 4. If, at the time that the Commission approves the action plan of the utility, the Commission determines that the elements of the distributed resources plan are prudent, the Commission will specifically include in the approval of the action plan its determination that the elements contained in the distributed resources plan are prudent. For the Commission to make a determination that the elements of the distributed resources plan are prudent:
- (a) The net distribution system load and distributed resource forecasts, hosting capacity analysis, grid needs assessment and non-wires alternative and locational net benefit analyses must have been prudently performed; and
- (b) The selections of new distributed resources set forth in the distributed resources plan must be reasonable.
- 5. A utility may recover all costs that it prudently and reasonably incurs in carrying out an approved action plan in the appropriate separate rate proceeding. A utility may recover all costs it prudently and reasonably incurs in carrying out an approved distributed resources plan in an appropriate separate rate proceeding. A utility may recover all costs that are prudently and reasonably incurred in carrying out the approved energy supply plan, including deviations

pursuant to subsection 1 of NAC 704.9504 approved by the Commission in the appropriate deferred energy application filed pursuant to NAC 704.023 to 704.195, inclusive.

Sec. 17. NAC 704.9525 is hereby amended to read as follows:

704.9525 If any provision of NAC 704.9005 to 704.9525, inclusive, *and sections 2 to 11*, *inclusive, of this regulation* is held invalid, the Commission intends that such invalidity not affect the remaining provisions to the extent that they can be given effect.

Sec. 18. NAC 704.9208 is hereby repealed.

TEXT OF REPEALED SECTION

704.9208 Dates for certain utilities to file resource plans. (NRS 703.025, 704.210, 704.741)

- 1. The resource plans required to be submitted by Nevada Power Company pursuant to NRS 704.741 must be filed on July 1, 1988, and every 3 years thereafter.
- 2. The resource plans required to be submitted by Sierra Pacific Power Company pursuant to NRS 704.741 must be filed on July 1, 1989, and every 3 years thereafter.