

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Public Service Commission
Resource Plans and Cyber Security
Rulemaking

Case No. PU-22-163

Chapter 69-09-12
Resource Plans and Cybersecurity

69-09-12-01. Definitions

1. “Resource Plan” means a set of resource options an electric public utility plans to use to meet the electric capacity and energy requirements of the utility’s customers over a planning horizon, including an explanation of the electric supply and demand circumstances when each resource option would be used to meet the capacity and energy needs in an adequate and reliable manner.
2. “Externality” means numerical costs or quantified values assigned to represent environmental costs that are not internalized in the cost of production, or the market price of electricity from a particular electric resource or the alleged costs of complying with future environmental laws or regulations that have not yet been enacted.
3. “Renewable Integration Cost” means the cost of measures to help meet the incremental needs of the system as more renewable energy is added to the resource mix.
4. “Unserved Energy” means the amount of end-customer demand measured in megawatt-hours that cannot be supplied due to a deficiency of generation either generated or imported by the electric public utility or transmission capacity.

69-09-12-02. Resource Plan Procedure

1. An electric public utility shall file a resource plan on a three-year cycle. The electric public utility may file a supplement to the plan with necessary updates and shall file a supplement upon commission request.
2. The commission may investigate a resource plan. Foregoing an investigation or inaction upon completion of an investigation does not bind the commission in the commission’s review of a resource plan in conjunction with a rate case or bind the commission for the purpose of setting rates.
3. The commission shall issue a notice of opportunity to comment on the resource plan when opening an investigation under subsection 2. The comment period must remain open for a period of sixty days, unless ordered otherwise by the commission.

4. During an investigation, an electric public utility may request a commission determination on any issue related to the resource plan. Approval, rejection, or modification of a resource plan, or a commission determination may be presented as prima facie evidence in other proceedings.
5. The commission shall designate by order the commencement of the cycle wherein a resource plan must be filed. The commission may allow for a variance from a filing requirement or procedure upon request.

69-09-12-03. Resource Plan Attributes

1. A resource plan must identify the resources needed to meet forecasted capacity and energy needs including a reserve requirement, subject to various objectives including reliability, planning, operational, and regulatory requirements. The resource plan must provide a North Dakota Preferred Plan.
2. If an electric public utility's existing resources are inadequate to meet forecasted capacity and energy requirements, the utility shall identify in the resource plan the proposed actions to meet current and future electric capacity and energy needs, including generating facility additions of various types, sizes, fuel types, any known new transmission facilities, life extensions of existing generation facilities, load-modifying equipment, sponsored conservation programs, market purchases, power purchases from other utilities, and contracted capacity.
3. All resources must be evaluated on a consistent and comparable basis, and the resource plan must describe, and select resources representing the least-cost plan for providing adequate, safe, and reliable service to ratepayers consistent with the public interest and North Dakota energy policy.
4. The resource plan must have a planning horizon of at least fifteen years detailing both supply-side and demand-side resources.
5. The resource plan must describe how the electric public utility intends to meet the forecasted capacity and energy needs within the next five years, along with construction and in-service timelines for generation and associated interconnection and network upgrade and new transmission facilities. The resource plan also must describe how the electric public utility intends to meet the forecasted energy and capacity needs for at least a fifteen-year planning horizon.
6. Except as otherwise required by law or by order of the commission, the North Dakota Preferred Plan must not select resources based on a carbon cost, greenhouse gas reduction goals, renewable energy standards, emissions goal, or other externalities.
7. The electric public utility may provide alternative scenarios with sensitivities based on proposed and current federal, state, and utility goals and mandates relating to carbon cost, emissions goal, or other externalities.

8. The electric public utility shall describe how scenarios and sensitivities influenced the selection of the North Dakota Preferred Plan. The scenarios and sensitivities must be evaluated on a consistent and comparable basis, and the utility shall identify and assess the risks of each scenario and sensitivity.

69-09-12-04. Filing Requirements

1. The resource plan must describe the:
 - a. Key data, assumptions, model inputs, information used in producing forecasts and models, and how uncertainties in assumptions were incorporated into the analysis;
 - b. Type, cost, and relevant operating characteristics of demand-side and supply-side resources considered and a description of the type and cost of additional transmission facilities necessitated by the resources;
 - c. Modeling and methodological approach to load forecasting, an assessment of load forecast uncertainty, and the cost and effectiveness of existing and future utility and state-sponsored conservation and load management efforts;
 - d. Projected load for the electric public utility over the planning horizon and the underlying assumptions for the projection. The information must be as geographically specific as possible and describe how the electric public utility will meet the projected load; and
 - e. Criteria used in determining the appropriate level of reliability, including any required reserve or capacity margin seasonal accreditation levels and how the determinations influenced the resource plan.
2. The resource plan must include:
 - a. A robust set of scenarios and sensitivities, including changes to the resource mix, fuel prices, load, resource costs, inflation, operating and maintenance costs, capital costs, transmission interconnection and network upgrade costs, congestion costs, renewable integration costs, and resource accreditation.
 - b. Reliability and resource adequacy assessments using quantitative metrics capturing the size, frequency, duration, and timing during extreme weather events and normal weather conditions for the fifth, tenth, and final year of the planning horizon. The assessment should include the annual expected unserved energy, the annual expected cost of unserved energy, peak seasonal capacity shortfall in megawatts, number of negative capacity shortfalls, average capacity shortfall in megawatts, longest hourly capacity

shortfall, and number of hours requiring the utility to use the maximum available energy imports during a capacity shortfall.

- c. Reliability and resource adequacy assessments using quantitative metrics including expected unserved energy during correlated natural gas-fired generation fuel delivery outages for the fifth, tenth, and final year of the planning horizon.
- d. A description of energy conversion facilities and associated interconnection and network upgrade and new transmission facilities the electric public utility intends to own and operate, or from which the utility intends to purchase energy output during the ensuing planning horizon, and the energy conversion facilities to be removed from service over the planning horizon.
- e. Plans for energy conversion facility retirements, asset extensions, de-rates, market purchases and sales, and how scenarios affect cost, affordability, reliability, and resiliency.
- f. To the extent possible, qualitative benefits and quantitative value of baseload and load-following generation resources and the value of proximity of such resources to load.
- g. The estimated annual and total revenue requirement broken out by new and existing resources by cost category such as generation, transmission, fuel, and energy efficiency.
- h. Any other information as may be requested by the commission.

3. The resource plan must include information on:

- a. Expansion of, improvements to, and more efficient use of existing electric public utility generation, distribution, and transmission facilities;
- b. Opportunities for energy conversion facilities, including economic opportunities to partner with other utilities in constructing and operating new facilities and extending the useful lives of existing facilities;
- c. Opportunities to pursue power purchase agreements with or develop baseload and load-following generation within the state;
- d. Opportunities to pursue power purchase agreements, demand or supply-side resources, or develop generation;
- e. Distributed generation, including generating capacity provided by co-generation, technologies relying on renewable resources, non-utility generation, and other sources;

- f. Recent or expected changes to generation dispatch across all generation technologies;
- g. Opportunities for existing and planned transmission facilities to reduce congestion, transmission line losses, energy costs, and to increase export or import capability;
- h. The accuracy of the peak demand and energy forecasts compared to the previous integrated resource plan forecasts and an explanation for the causes of any deviation from the previous integrated resource plan forecasts;
- i. The risk of fuel supply disruption due to extreme weather or market events; and
- j. How the electric public utility intends to reconcile potential jurisdictional differences in resource selection.

69-09-12-05. Cybersecurity

- 1. An electric public utility shall meet with the Commission annually to report on cybersecurity preparedness.
- 2. The report must provide:
 - a. Information on the policies, procedure, and process used to inform the management of cybersecurity risk;
 - b. Information on any critical technology, constraints related to procurement, supply chain risk, impact of compromise to the supply chain, and controls to manage risk associated with dependency on external entities;
 - c. An assessment of emerging threats and efforts taken by the electric public utility to implement cybersecurity measures;
 - d. A description of the process used to support compliance with applicable standards, laws, regulations, and best practices;
 - e. A description of the policies and protections used to ensure the security of information and operational systems and safeguard against loss of confidential information;
 - f. Information on activities to monitor, detect, and analyze information related to cybersecurity threats;
 - g. Information on the systems used for collaboration and communication of information and intelligence sharing;

