2020 LCIRP Supplement

STATUTORY FRAMEWORK

Pursuant to RSA 378:39, the Commission is directed to:

> [R]eview integrated least cost resource plans in order to evaluate the consistency of each utility's plan with [RSA 378:39], in an adjudicative proceeding. In deciding whether or not to approve the utility's plan, the [C]omission shall consider potential environmental, economic, and health-related impacts of each proposed option. The [C]omission is encouraged to consult with appropriate state and federal agencies, alternative and renewable fuel industries, and other organizations in evaluating such impacts. The commission's approval of a utility's plan shall not be deemed a pre-approval of any actions taken or proposed by the utility in implementing the plan. Where the [C]omission determines the options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts, the following order of energy policy priorities shall guide the [C]ommission's evaluation: I. Energy efficiency and other demand side management resources; II. Renewable energy sources; III. All other energy sources.

As an electric distribution company, the Public Service Company of New Hampshire d/b/a Eversource Energy (the "Company") has an obligation to provide safe and reliable electric distribution service to customers at a reasonable cost. The Company views this obligation as the starting place for all planning decisions. The Company considers several factors when evaluating the reliability benefit of project alternatives that are discussed in more detail in the testimony accompanying this supplement. The provision of safe and reliable distribution service at a reasonable cost has environmental, economic and health-related benefits for the residents of New Hampshire. The outcomes are discussed below.

I. Environmental Impacts

The Company addresses the environmental impacts of its distribution system and services through a number of initiatives and assessments. At an enterprise level, the Company has set an aggressive greenhouse gas emissions reduction target of carbon neutrality by 2030. To achieve this goal, the Company is working to address line loss, reducing methane emissions through its gas distribution infrastructure, upgrading its facilities to reduce electricity and fuel consumption, adding electric and hybrid vehicles to the Company's fleet, and adopting innovation solutions to replace the use of sulfur hexafluoride in electric equipment. The Eversource Energy Climate Adaptation and Mitigation Plan (the "CAMP") is attached to this supplement as Appendix A. The

CAMP was developed in response to a Massachusetts electric docket, and although the focus is on those projects, many of the same programs and processes are being used in New Hampshire. As detailed in the CAMP, Eversource Energy is also engaged in providing solutions to bring clean, renewable energy to New England; hardening its systems to withstand the impacts of climate change and respond quickly when those impacts occur; and engaging with stakeholders to provide energy efficient solutions for customers and communities to ensure a just climate future.

Eversource Energy reports on its progress in meeting its emission reduction and other environmental goals through its annual sustainability report that is released in or about July of each year. The 2021 Sustainability Report is attached to this supplement as Appendix B.

As part of these enterprise-wide initiatives, the Company sources materials and equipment that comply with the latest environmental requirements and guidance. The Company also looks for innovative ways to upgrade its equipment (e.g., piloting the replacement use of sulfur hexafluoride in certain electric equipment).

On a project-by-project basis, the Company takes more specific impacts into account related to routing and site selection (e.g., wetlands, cultural resources, habitat, etc.), community impacts (e.g., including in environmental justice communities), and enabling a clean grid (e.g., planning to meet future needs). These project-by-project impacts are considered in a few different ways and at different points in the project evaluation process.

One way the Company has begun to consider enablement of a clean grid is through its transition to advanced forecasting and modeling frameworks that allows the Company to account for electrification of vehicles and heating systems. These advanced forecasting and modeling frameworks allow the Company to consider whether a potential solution will meet not just an immediate need, but a projected future need. This reduces the risk that a selected project will use equipment that becomes obsolete prior to the end of its useful life; this is an important consideration as technologies and policy objectives continue to evolve.

The Company also has a non-wires alternative ("NWA") framework that it has provided in this proceeding. As set forth in the Company's rebuttal testimony, the NWA framework is applied to any project where the cost of the identified traditional solution exceeds $3 million. This threshold is necessary because an NWA can be costly and would only constitute a more cost-effective solution where the costs of the traditional solution are within the same cost range. However, where an NWA framework is appropriate, it can provide an additional alternative when analyzing environmental impacts associated with the potential solutions to an identified need. NWA analysis is also used to avoid infrastructure projects thereby avoiding certain potential environmental impacts (e.g., impacts to wetlands).

After the project need has been identified, the impacts associated with each potential solution can be considered using the Company's decisional matrix. An example of a recently completed decisional matrix is attached to this supplement as Appendix C. As shown in Appendix C, the

decisional matrix allows the Company to consider the environmental impacts of each solution and to assign a score to these impacts that becomes part of the solution rankings. As part of the development of the decisional matrix for substation projects, the Company may also complete a constructability review that is used to estimate the costs associated with each solution. A copy of the constructability review template is included as part of Appendix C. The constructability review is performed as part of the conceptual engineering activities. This constructability review also must account for certain environmental impacts, including the need to conduct remediation, in order to inform the cost estimate. Distribution and transmission projects also include a project review that is completed by the Licensing and Permitting Group. A copy of the project review is also included as part of Appendix C.

II. Economic Impacts

The Commission has indicated that a measure of economic impacts is creation of jobs.[1] As an electric distribution company, Eversource is a major supporter of the New Hampshire economy including retention and creation of jobs by providing safe and reliable electric distribution service. Customer expectations regarding reliable service have been increasing over time as customer reliance on electric distribution service also increases. These expectations will only continue to grow as customers electrify their heating systems, increase purchase of electric vehicles, and engage in a hybrid working environment where customers work from their homes. In order to support a competitive economy that can maintain a work force, it is imperative for New Hampshire to have reliable electric service.

As discussed above, providing safe, reliable and cost-effective electric service is the overarching objective of the Company's distribution system planning. Ensuring that each option considered for an identified need will meet this objective is a baseline consideration by the Company. Therefore, the best measure of the Company's economic impact is the reliability of its distribution system.

In addition to its focus on a reliable system, the Company is committed to facilitating the transition to grid modernization. This includes deployment of equipment that allows interconnection by DER and energy storage. A modern electric grid in New Hampshire will ensure that the state is competitive with its neighbors in other New England states that are similarly facilitating adoption of advanced grid modernization and clean energy technologies.

III. Health Impacts

The third category for consideration under RSA 378:39 is health impact. Following

---

[1] Docket No. 19-126, Order No. 26,664, at 15 (August 8, 2022) (directing Northern Utilities to estimate direct jobs created but noting that Northern Utilities should not perform its own economic analysis or develop a complex model).

divestiture of the generation function, the Company's direct impacts on health through emissions has decreased. The Company is no longer permitted to own generation and provides supply directly to customers on a limited basis through its default service option. This default service option is competitively bid to ensure that least cost default supply is procured on behalf of customers. As described in Appendix A of the 2020 LCIRP, the ISO-NE wholesale market for electric generation is presently dominated by natural gas but is continuing to shift toward less carbon-intensive sources. The Company continues to monitor this mix and evaluate the best options for procuring least cost, reliable supply on behalf of its default customers.

The Company does, however, consider whether an investment will enable DER or distributed generation as part of its efforts to mitigate or reduce emissions. The Company also evaluates opportunities to incorporate renewable energy which creates far less harmful air pollutants for generating electricity. In these ways, the Company is mitigating GHG emissions which can also have impacts to human health.

In addition, the Company's commitment to ensuring reliability service has direct, positive health impacts. Reliable distribution services ensures that heating and air conditioning equipment function to protect customer health, including the Company's most vulnerable customers. Reliable distribution service also ensures that health facilities and emergency shelters in the state of New Hampshire are able to provide necessary services. Lastly, reliable distribution services protect customers who rely on medical equipment including life support.