

# EXECUTIVE SUMMARY

## INTRODUCTION

**Northern Pass appreciates the considerable time and effort that the New Hampshire Site Evaluation Committee (SEC) has devoted to reviewing the Joint Application for Certificate of Site and Facility (application) in this proceeding. After 70 days of evidentiary hearings, 19 public information and comment sessions, and seven days of site tours, Northern Pass has received the most extensive review of any electric transmission project in the history of New Hampshire.**

The SEC's impending decision will have a significant impact on energy development in New Hampshire and the region. New England's energy costs are among the highest in the nation while carbon emissions are rising. As coal and nuclear plants are retiring or scheduled for shutdown, the region's increasing reliance on natural gas has led to a constrained fuel supply for New England generators, particularly during the winter. Northern Pass was conceived and developed to bring much-needed, clean, affordable, baseload hydropower into the New England electric grid to reduce carbon emissions and address rising energy costs. The SEC's approval of the Northern Pass Application would allow New Hampshire and the region to make significant progress towards achieving a cleaner, more affordable energy future.

Extensive stakeholder outreach resulted in significant improvements to the project's design and route, achieving a balanced proposal that addresses view shed concerns while reducing the size of the project by 10 percent and adding \$500 million to its cost. The proposed 192-mile Northern Pass transmission line makes use of existing transmission corridors, public highway rights-of-way, and fee-owned properties. The HVDC transmission line begins at the U.S.-Canada border in the town of Pittsburg, New Hampshire and extends 158 miles south and southeast to Franklin, where the power will be converted from DC to AC. The project continues from the Franklin converter station over a new 345 kV AC transmission line for approximately 34 miles to the existing Deerfield Substation, where it will interconnect with the ISO-New England transmission system. A 52-mile segment of underground construction in and around the White Mountain National Forest will eliminate visual impacts in that area and will be the longest underground segment of HVDC transmission cable constructed in North America.

The decision now before the SEC rests on four statutory criteria.

In order to issue the requested Certificate of Site and Facility, the SEC must find that: *(i) the Applicants possess the financial, technical and managerial capability to construct, operate and maintain the project; (ii) the project will not unduly interfere with the orderly development of the region; (iii) the project will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment and public health and safety; and, as required by a 2014 legislative enactment, (iv) the issuance of a certificate will serve the public interest.* Northern Pass believes that the evidence in the record clearly demonstrates that these criteria have been met.

### Northern Pass at a Glance

- Delivery of 1,090 MW of clean, reliable hydropower to New Hampshire
- 192-mile transmission line, including 60 miles underground, from Pittsburg to Deerfield
- No view impacts in the White Mountain National Forest, Appalachian Trail and Franconia Notch areas
- More than 80% of line proposed in existing ROWs or underground to minimize impacts

## **Northern Pass undeniably possesses the requisite financial, technical and managerial capability to construct, operate and maintain the project**

The project's financial capability is based on the financial strength of its parent company, Eversource Energy, whose credit ratings are consistently among the strongest in the utility sector. Further proof of financial capability is the Transmission Service Agreement between Northern Pass and Hydro Renewable Energy Inc. (HRE), approved by the Federal Energy Regulatory Commission, and the financial strength of HRE's parent, Hydro-Québec, a Canadian Crown Corporation.

Northern Pass will be built by a project team that possesses substantial experience constructing high-voltage transmission lines in New England, across the United States, and abroad.

The project has engaged industry leaders Burns & McDonnell, Quanta Services, and ABB to execute the design and construction of the project. In addition, Northern Pass, its major contractors, and the International Brotherhood of Electrical Workers entered into a Project Labor Agreement to ensure that a highly-trained workforce will construct the project.

The project's own technical and managerial capabilities are grounded in Eversource's extensive experience building and operating New England's largest electric system, with more than \$7 billion in transmission assets. Over the past 11 years, the company has built numerous large and complex transmission projects on time and under budget. These include the Middletown to Norwalk (Connecticut) 345 kV transmission project, which featured the installation of underground cables along a 24-mile route — the longest continuous section of cross-linked polyethylene (XLPE) underground conductor cable used anywhere in the U.S.

In approving construction of the Merrimack Valley Reliability project in 2016, the SEC found that Eversource had the financial, technical and managerial capability along with its co-applicant, National Grid, to construct and operate the 345 kV electric transmission line that provides a critical interface between New Hampshire and Massachusetts. That project was recently completed on time and under budget.

With the foundation of Eversource's financial stability, technical experience and capability, and proven track record building major infrastructure projects efficiently and cost-effectively, there is no question that Northern Pass has the requisite financial, technical and managerial experience to construct, operate and maintain the proposed transmission line.

## **The Northern Pass project will not unduly interfere with — and, indeed, will advance — the orderly development of the region**

Northern Pass will avoid or minimize interference with the orderly development of the region by maximizing the use of existing transmission corridors and public highway rights-of-way, land which has long been dedicated to this purpose in a manner consistent with master plans and zoning ordinances. Beyond that, the project will help advance the orderly development of the region through its substantial employment and economic benefits, including 2,600 jobs during construction, an increase of approximately \$162 million in the average New Hampshire GDP, and approximately \$600 million in state, county and local tax revenues over the first 20 years of operation, providing communities with economic resources they can use at their discretion to reduce taxes, invest in infrastructure or otherwise advance their own development plans. These positive impacts, together with the lack of any negative impact on community services and infrastructure, isolated impacts on property values, and short-duration, limited impacts on tourism, support the conclusion that the project will not unduly interfere with the orderly development of the region.

### **Public Process**

- 10 open houses
- 19 SEC public hearings and public information sessions
- 5 DOE public hearings
- 2 joint SEC and DOE hearings
- 7 days of site tours of the proposed route
- 70 days of testimony at public hearings before the SEC

## Northern Pass will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment or public health and safety

As a result of the design of the project in existing transmission corridors and public highway rights-of-way, together with substantial mitigation, Northern Pass will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment or public health and safety. Independent experts who helped to inform project design and mitigation measures provided testimony in each of these areas that fully supports this conclusion. Additionally, state and federal agencies, including the N.H. Department of Environmental Services, the N.H. Department of Transportation, the U.S. Department of Energy, and the U.S. Forest Service have thoroughly reviewed the project and issued final decisions approving Northern Pass.

Regarding aesthetics, Terrence DeWan demonstrated in great detail that the project will not have an unreasonable adverse effect on aesthetics. The United States Department of Energy (DOE) also independently concluded in its Final Environmental Impact Statement (“Final EIS”) that the average scenic impact of the project will range from very low to moderate. As to historic and archaeological resources, Northern Pass has entered into a Programmatic Agreement with the Department of Energy and several other state and federal agencies, such as the New Hampshire Division of Historical Resources, which will ensure that the project meets the requirements of the National Historic Preservation Act of 1966.

Northern Pass has taken extraordinary steps to minimize and mitigate the environmental impacts of the proposed transmission line, as the New Hampshire Department of Environmental Services (DES) recognized in its March 1, 2017 final decision approving the project’s environmental permit applications. The DES in its Final Decision concluded that the proposed Northern Pass route is the least impactful among the potential alternatives, noting Northern Pass had demonstrated that it avoids visual impacts to the White Mountain National Forest and other iconic scenic resources by installing the longest underground segment of HVDC cable in North America. The DES further noted that the evidence showed that more than 80 percent of the Northern Pass transmission line will be installed in existing transmission corridors or underground in public roadways, and its overhead segments are in less populated areas and sited to avoid high elevations and concentrations of wetlands, water resources, archaeological resources and wildlife habitats. The recently issued final Record of Decision by the U.S. Forest Service noted that Northern Pass will increase the reliability of our region’s power supply by reducing reliance on imported natural gas, helping to reduce greenhouse gas emissions consistent with public policy goals and the New Hampshire Climate Action Plan, and providing “meaningful benefits to air quality” in the White Mountain National Forest. By way of compensatory mitigation, Northern Pass will preserve more than 1,600 acres of land and contribute more than \$6 million to conservation projects.

Finally, public health and safety are assured as a result of the roles of the Department of Transportation, the Public Utilities Commission, the Federal Aviation Administration and the New Hampshire Department of Safety, including the State Fire Marshall’s Office. The agencies will have continuing responsibilities in overseeing various aspects of the project’s construction and operation.

### Agency Review

Northern Pass has been thoroughly reviewed by various state and federal agencies, including:

- U.S. Department of Energy
- U.S. Forest Service
- NH Department of Transportation
- NH Department of Environmental Services
- NH Public Utilities Commission

### Serving the Public Interest

Northern Pass will provide New Hampshire residents with more than \$3 billion in benefits at no cost to the state’s energy customers.

- Create or generate 2,600 jobs during construction, with a commitment to hire NH workers first
- \$162 million in average New Hampshire GDP growth
- \$62 million in annual average electricity cost savings
- \$35-\$40 million in annual NH property taxes revenues
- \$200 million to the Forward New Hampshire Fund, dedicated to community betterment, tourism, clean energy innovation and economic development
- \$7.5 million to the North Country Job Creation Fund
- \$3 million already allocated to the National Fish and Wildlife Fund to support action-based conservation and habitat restoration projects in New Hampshire
- Set aside 5,000 acres for mixed uses important to the North Country’s future
- Much-needed upgrade to the constrained “Coös Loop” transmission system to unlock other sources of renewable energy
- Reduce regional greenhouse gas emissions by more than 3.2 million tons per year, equal to the emissions of 670,000 cars

## **Northern Pass will indisputably serve the public interest through the substantial benefits it will bring to New Hampshire**

Northern Pass is poised to provide in excess of \$3 billion in benefits to New Hampshire. Without question, Northern Pass will serve the public interest through these substantial benefits. The new public interest finding, enacted in 2014, requires the SEC to determine that a proposed project has positive attributes in addition to the other findings aimed at ensuring there are no undue or unreasonable negative impacts. First and foremost, the project will provide clean, affordable Canadian hydropower, thus reducing energy costs for New Hampshire customers, increasing GDP, creating jobs, increasing the tax base, reducing carbon emissions, diversifying the regional power supply, enhancing the reliability of the electric system, and advancing state and regional energy and environmental policies. Moreover, as part of the Forward New Hampshire Plan valued well in excess of \$3 billion, Northern Pass will commit \$200 million to the Forward New Hampshire Fund, dedicated to community betterment, tourism, clean energy innovation and economic development, contribute \$7.5 million to the North Country Job Creation Fund, reserve 5,000 acres in the North Country for mixed uses important to that region's future, upgrade the "Coös Loop" transmission system, and partner with the National Fish and Wildlife Foundation to restore and sustain healthy forests and rivers in New Hampshire.

## **CONCLUSION**

After an extensive review, the SEC is now ready to begin deliberations on the Northern Pass application. The record in this proceeding, as summarized in Northern Pass' brief, irrefutably supports the conclusion that Northern Pass meets each of the four statutory criteria for issuance of a Certificate of Site and Facility. Northern Pass has respectfully requested that, at the conclusion of deliberations, the SEC approve the application and allow this much-needed project to move forward and deliver clean, affordable hydropower into the New England power grid, providing substantial energy and economic benefits to the state of New Hampshire.