



Sudbury to Hudson Transmission Reliability Project Frequently Asked Questions (FAQs)

June 2, 2016 revised

Project Overview

Eversource is proposing to construct a new 115-kilovolt (kV) transmission line between Sudbury and Hudson, Massachusetts. This upgrade is one of a suite of projects designed to improve the reliability of the electric system serving the Greater Boston/Metro West area, both today and in the future. The new line would be constructed between the Eversource substation in Sudbury, and the Hudson Light and Power substation in Hudson, passing through portions of Sudbury, Marlborough, Stow, and Hudson.

Eversource hopes that the following FAQs address questions about the proposed Sudbury to Hudson Transmission Reliability Project (“Project”).

Ownership and Regulation

Q: Who owns and operates the transmission line and substations?

A: For the proposed Project, Eversource will own and operate the transmission line. The transmission line will connect the Sudbury and Hudson substations. Eversource also owns and operates the Sudbury substation and Hudson Light & Power owns and operates the Hudson substation.

The Independent System Operator for New England (“ISO-NE”) coordinates the operation of the transmission lines through designated Local Control Centers (LCC). ISO-NE is the independent, not-for-profit corporation authorized and regulated by the Federal Energy Regulatory Commission (FERC) to perform three critical, complex, interconnected roles for the region spanning all six New England states: (1) grid operation: keeping electricity flowing over the region’s high voltage transmission system; (2) market administration: designing, running, and overseeing the billion-dollar markets where wholesale electricity is bought and sold; and (3) power system planning: doing studies, analyses, and planning to make sure New England’s electricity needs will be met now and into the future. Together, these three responsibilities help protect the health of the region’s economy and the well-being of its people by ensuring the constant availability of competitively-priced wholesale electricity – today and for future generations.

Q: Who regulates the location, construction and operation of the transmission lines?

A: There are many regulatory agencies involved in the approval of the location, construction and operation of the transmission lines in the area, including this

transmission line project. ISO-NE is responsible for planning and managing the operation of the New England regional transmission network and continually analyzes whether the transmission system meets mandatory national and regional reliability standards necessary to meet current customer demand and projected future growth.

This Project requires the approval of the Massachusetts Energy Facilities Siting Board (EFSB or Siting Board), including the project route. The EFSB is charged with ensuring a reliable energy supply for Massachusetts with a minimum impact on the environment at the lowest possible cost. The Siting Board's primary function is to license the construction of major energy infrastructure in Massachusetts, including electric transmission lines. Approvals issued by the EFSB often have requirements related to the way the project is constructed to help further minimize impacts. This Project also requires additional state and local permits and approvals. However, the EFSB has the authority to issue an overriding approval if the Company is hindered from building a project approved by the EFSB because of undue delay or denials from other state or local agencies.

Q: What is the process for planning, permitting and constructing transmission lines?

A: Determining the reliability need and selecting the preferred transmission upgrade takes place through a process approved by FERC and managed by ISO-NE, and involves several opportunities for stakeholder input. After ISO-NE has selected the preferred solution to address the identified reliability need, the permitting process typically entails three levels of regulatory oversight: federal, state and local.

At the federal level, all transmission improvements must meet national reliability standards, be prudently administered and meet federal environmental requirements as applicable.

At the state level, each project balances three basic principles:

- Reliability, including timeframe to meet identified need
- Cost, including those related to constructability
- Environmental impacts, including community impacts

At the local level, the Project may require certain municipal permits including Grants of Location, Street Opening permits, and/or Conservation Commission approvals.

In addition to these regulatory requirements, we also meet with the municipal officials in host communities and other stakeholders to solicit their input and feedback on the proposed Project, and incorporate such suggestions into the proposed project route and/or design when technically and prudently feasible to do so.

Q: What criteria does the Massachusetts Energy Facilities Siting Board consider in approving the route to be constructed?

A: The EFSB is mandated by state statute to ensure the Project will provide a “reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost”. The EFSB may approve the preferred route or any of the noticed alternative routes/variations/designs contained in the Petition, and considers a variety of factors in the approval of an electric transmission line route, including system reliability, impacts to the human and natural environment, constructability, and cost. These factors will be described in detail in the Project’s EFSB Petition which, once filed, will be available for review in the host communities’ libraries as well as on-line through the EFSB and Project websites. General details about the EFSB process are also provided in the EFSB/DPU document “The Energy Facility Siting Handbook” (February, 2016); available at: <http://www.mass.gov/eea/docs/dpu/siting/handbook.pdf>.

Project Need and Benefit

Q: What are the needs and benefits of the Sudbury to Hudson Transmission Reliability Project?

A: Per the rules of the FERC-jurisdictional North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council (NPCC) (as delegated by NERC), and ISO-NE, the transmission system must be planned and built to withstand certain contingency situations while, at the same time, meeting customer demand on the system. In a recent study, ISO-NE concluded that there are inadequate transmission resources to serve the electricity needs in the Greater Boston/Metro West and Southern New Hampshire areas under certain conditions. To address these deficiencies and the growing customer demands on the electric system, ISO-NE has directed the utilities to implement a series of transmission projects. The series of projects is called the Greater Boston-New Hampshire Solution (“Solution”). One of the Solution projects is the Sudbury to Hudson Transmission Reliability Project, a new 115-kV transmission line between existing substations in Sudbury and Hudson.

The proposed new 115-kV transmission line between Sudbury and Hudson will provide a new transmission path to supplement the existing system, address identified thermal and voltage problems in the area, and provide other benefits. Under certain operating conditions, the new line will prevent the loss of approximately 550 MW of load throughout the local region. Hudson Power & Light is currently supplied by two transmission lines on the same set of structures. Adding a 3rd transmission line on different structures from an alternate substation would provide redundancy to their current transmission supply in case of a contingency event.

In addition, the Solution, in aggregate, is expected to save the Greater Boston/Metro West area customers hundreds of millions of dollars annually in reduced transmission congestion costs and allow lower cost electricity generation from outside the area to serve the capacity needs within the area.

Routes

Q: What routes were evaluated?

A: Eversource established route selection guidelines to identify all feasible routes between the Sudbury and Hudson substations. The routes were evaluated using detailed environmental, constructability, community impacts, and conceptual cost estimate criteria. The evaluation criteria, to be described in detail in our upcoming EFSB Petition, were used to select a proposed preferred and potential alternative route/variation/design.

At a meeting held on November 19, 2015 with representatives from the towns of Hudson, Stow, and Sudbury, Eversource was asked to consider an underground route within the Massachusetts Bay Transit Authority (MBTA) unused railroad property spanning through these three towns. This MBTA property is rail transportation land with a long history of rail use; it is the location of the former Massachusetts Central Railroad right of way, a passenger and freight service rail line originally extending from Boston to Northampton. The MBTA property contains legacy railroad materials and crosses environmental resources at many locations. Eversource took that feedback and developed a new proposed noticed alternative design reflecting an underground route in the MBTA property to share with the communities and gather feedback.

Q: Who owns the unused railroad property?

A: The property is owned by the MBTA. Eversource would acquire rights to build, operate and maintain the transmission line from the MBTA.

Q: Will Eversource consider in-street alternatives?

A: Eversource has actively sought community input on the proposed Project and route design, and has listened to suggestions and concerns. Based on that feedback, Eversource commits to re-evaluating potential in-street options using the evaluation criteria described above and to continue our dialog with town/city officials in each of the four communities in that effort.

Q: Who will determine the final route for the Project?

A: Eversource will present a preferred Project route, along with one or more noticed route alternatives/variations/designs in its Petition to the EFSB (to be determined but anticipated to occur in late summer). The ultimate decision of which of the potential routing options best suits the area while, at the same time, adequately addresses the identified system reliability needs, lies with the EFSB.

Q: Who pays for these projects?

A: New England shares one transmission grid. For projects deemed to be of regional benefit, such as the Sudbury to Hudson Transmission Reliability Project, the cost of the new transmission facilities are shared by all electric consumers in New England based on the level of energy consumed (“load share”). Underground lines are traditionally significantly higher in cost than overhead lines. Where lines can be constructed

overhead but are put underground instead, there is a high likelihood that most, if not all, of the incremental costs of the underground line construction would be charged to local consumers. While Eversource would, in consultation with state leaders, propose how to allocate those local costs, e.g., state-wide, portion of the state, community, etc., in its localized cost allocation filing to the FERC, FERC is the ultimate decision-maker on how those local costs would be allocated.

Next Steps

Q: What are the next steps for the Project?

A:

- Engineering analyses continue for both the underground and overhead routes along the MBTA railroad property.
- Eversource will re-evaluate and discuss potential in-street routes with municipal officials from Sudbury, Stow, Marlborough and Hudson.
- If, after receiving input from municipal officials and other stakeholders, a viable in-street option is selected, we will reach out to businesses and residents along that in-street option to brief them on the proposed Project, address any questions or concerns, and explain how they may participate in the EFSB siting process.
- Eversource will file its Petition with the EFSB. (Given that we are currently re-examining routes, the filing date has not been established. Host communities will be advised of the revised filing date once that date had been determined.)

Construction Impacts (MBTA railroad property)

Q: How much vegetation clearing within the MBTA railroad property is required for the overhead and underground routes and what will be allowed to regrow?

A: If the Preferred Route (overhead) along the MBTA railroad property is selected, the full width of the ROW will be cleared of vegetation. Only trees on the MBTA property will be removed. Following construction, compatible vegetation will be allowed to regrow to a height not to exceed 15 feet in height within 15 feet of the overhead wires (wire zone). Outside of the 15 foot wire zone, compatible vegetation will be allowed to regrow in the ROW to a maximum height of 25 feet (peripheral zone).

If the underground route along the MBTA property is selected, 25' of the MBTA property will be cleared of vegetation.

Q: If the Project is installed overhead, how tall and far apart are the structures?

A: The new structures height will vary between 75 feet and 105 feet depending on topography. The average distance (span length) between structures is approximately 450 feet, but will vary depending on the environment, topography and other factors (existing roads, etc.).

Q: Will Eversource be providing a rail trail within the MBTA property after construction is completed?

A: A 12 foot wide access road will be created to facilitate construction of the Project. The access road will be left in place and may be developed as a bike path or recreation trail by others after Project construction is completed.

Q: Does a new transmission line affect property values?

A: The new transmission line is proposed to be installed primarily in existing roadways and/or unused railroad property, not on private property. Eversource, and studies conducted by third-party experts, have not found any evidence of systematic effects on residential real estate values due to the visibility or proximity of overhead transmission lines. We are not aware of any studies that have measured the effects of underground transmission lines on real estate values.

Environmental Impacts

Q: How will the Project protect the environment?

A: Eversource has taken great care to identify environmental resources such as wetlands and water bodies, vegetation, wildlife and threatened or endangered species. For example, Eversource is aware that the MBTA property is rail transportation land with a long history of rail use and that this land contains legacy railroad materials, and crosses wetlands and other environmental resources at many locations. During the planning, permitting and construction stages of the Project, the Project Team will work with local, state, and federal agencies to establish work methods that minimize impacts to these resources and implement mitigation for permanent impacts. All construction will be conducted in an environmentally acceptable manner that will meet our regulators' expectations and avoid long-term adverse impacts. No herbicides will be used during construction of the Project.

Q: Will there be electric and magnetic fields (EMF) effects from the transmission line?

A: Eversource has contracted with Gradient, an environmental and risk sciences consulting firm located in Harvard Square, Cambridge, to perform an independent assessment of the potential EMF impacts from the proposed transmission line.

Gradient's draft assessment found that all predicted EMF values for the Sudbury to Hudson Transmission Reliability Project within, and at the edges of, the MBTA property were well below the health based guidelines issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) for continuous public exposure to EMF (4.2 kV/m and 2,000 mG; ICNIRP, 2010). The Petition, once filed, will contain details of that assessment.

Community Outreach

Q: When and how are abutters and the general public notified about the Project?

A: We take a very hands-on, individualized approach with affected customers in host communities. During the siting process for these Projects, we hosted a series of well-

publicized public open houses to brief the residents, businesses, and other stakeholders on the proposed Project, provide opportunities to discuss the Project with subject matter experts, and solicit input. These events were held in Hudson on March 15, 2016 and in Sudbury on March 16, 2016. Personal invitations to all of the open houses were sent to all property owners along or near the Project routes under consideration.

The EFSB will hold a public comment hearing approximately 6-8 weeks after Eversource files the Project petition. The exact date will be determined by the EFSB. Abutting property owners within 300 feet of both the preferred routes and noticed alternative routes/variations will be individually notified of the Project and have an opportunity to attend the hearing and participate in the EFSB process. Notice of the hearings will be published in multiple local and regional newspapers (TBD) and posted both at the Town Clerk's office and libraries in the host communities.

During construction, pamphlets, letters or postcards will be periodically mailed or hand-delivered to abutting property owners to keep them apprised of Project activities in their area. We will also conduct pre-construction briefings with town officials, business owners and other stakeholders to outline the construction process, key milestones, and expected timelines, and will work with each as needed to mitigate project impacts.

Q: Who can I contact for additional information?

A: Additional information can be obtained by visiting the Project webpage at www.Eversource.com, calling the Transmission Project hotline at 1-800-793-2202, or by email at TransmissionInfo@Eversource.com.

Eversource values community input. We are committed to being a good neighbor and responsible provider of the power that is essential for the daily needs of those we serve.