# Sudbury to Hudson Transmission Reliability Project EEA#15703 MEPA Scoping Session

Lincoln-Sudbury Regional High School June 12, 2017

# **Meeting Ground Rules**

- Staying on schedule is everyone's responsibility; honor time limits.
- Communicate with mutual respect, courtesy, and patience. Refrain from clapping, applauding, heckling or verbal outbursts in support or opposition to comments.
- Only 1 person talks at a time. Refrain from side conservations and from interrupting the speaker.
- Reserve right to end the meeting if ground rules cannot be followed or behavior becomes disruptive to the order of the meeting.

# **Overview of Consultation Session**

- Overview of MEPA Process (MEPA Analyst) 15 minutes
- Overview of the Proposed Project (Proponent) –
   15 minutes
- Floor opened for questions/clarifications Approx. 3 hours
  - Elected Officials,
  - State Agency Officials,
  - Local Officials, and
  - Members of the public (based on sign-in sheet; time will be limited per speaker)

# What is MEPA?

- MEPA: Massachusetts Environmental Policy Act
- MEPA review is not a permitting process. MEPA does not approve or deny projects.
- Requires State Agencies study the environmental consequences of their actions and take all feasible measures to avoid, minimize, or mitigate Damage to the Environment.
- MEPA requires public study, review of alternatives, and development of feasible mitigation measures.

# When is MEPA Review Required?

- Project requires a State Agency Action:
  - Proposed by a State Agency
  - -State Permit
  - —Financial Assistance
  - —Land Transfer
- Project Meets or exceeds a MEPA review threshold:
  - Land, Rare Species, Wetlands, Water, Wastewater,
     Transportation, Energy, Air, Solid/Hazardous
     Waste, Historical/Archaeological Resources

# **MEPA Applicability**

- Project requires State Agency Actions (Permits)
  - Approval to Construct and Request for Zoning Exemption (EFSB/DPU)
  - 401 Water Quality Certificate (MassDEP)
  - Vehicular Access Permit (MassDOT)
  - Potential Conservation and Management Permit (NHESP)
- Meets/exceeds ENF review thresholds:
  - Land: 301 CMR 11.03(1)(b)(1): Direct alteration of  $\geq$  25 acres of land.
  - Energy: 301 CMR 11.03(7)(b)(4): Construction of electric transmission line with a capacity of ≥ 69 kV, provided the transmission lines are ≥ 1mile in length along new, unused, or abandoned right-of-way.
  - Wetlands: 301 CMR 11.03(3)(b)(1)(d): Alteration of ≥ 5,000 sf of bordering vegetated wetlands.
  - Wetlands: 301 CMR 11.03(3)(b)(1)(f): Alteration of  $\ge \frac{1}{2}$  acre of any other wetlands.
- Based on the threshold the project meets/exceeds, the project is not subject to mandatory Environmental Impact Report (EIR).
- Proponent has committed to voluntarily proceed through EIR process.

# **Purpose of Tonight**

- Learn about the project, existing conditions, what is proposed, potential impacts, measures that have been taken to avoid, minimize, and mitigate impacts, and potential mitigation measures.
- Opportunity for questions/clarifications. Time limited per speaker based on attendance.
  - Clarify issues to assist you in preparing written comments;
  - Identifying other measures consistent with project purpose that can be implemented to further avoid, minimize, or mitigate project impacts; or
  - Recommendations for items to require in the Scope of the EIR.
- If you want comments included in public record and considered by Secretary Beaton, they must be submitted in writing.

## **MEPA Review Schedule**

- ENF Filed with MEPA: 5/15/17
- Published in Environmental Monitor: 5/24/17
  - Start of public comment period
- MEPA Scoping Session: 6/12/17
- Comments Due: June 20, 2017
- Secretary's Certificate to be Issued: 6/30/17
  - Will identify remaining issues and analysis to be addressed in the subsequent EIR.
  - The EIR will provide another opportunity for public review and comment.

## **Public Comment**

- Comments on the proposed project must be submitted by June 20th in writing via hard copy or email to:
- 1. Secretary Matthew Beaton

**Executive Office of Energy and Environmental Affairs** 

**Attn: MEPA Office** 

Page Czepiga, EEA No. 15703

100 Cambridge Street, Suite 900

Boston, MA 02114

OR

2. Email comments to: <a href="mailto:Page.Czepiga@state.ma.us">Page.Czepiga@state.ma.us</a>

Note: comments submitted on MEPA documents are public records.



# Sudbury to Hudson Transmission Reliability Project

**MEPA Scoping Session** 

Lincoln-Sudbury Regional High School June 12, 2017

# **Greater Boston Solution to Address Identified System Reliability Needs**



- A strong electrical transmission grid is vital to the safety, security and economic prosperity of the region. The transmission system serves a critical role to ensure that electricity flows with a high degree of reliability from wherever the power is generated to where power is needed.
- In a recent study, ISO-New England, the independent system operator for New England, concluded that there are inadequate transmission resources to serve the electricity needs in the Greater Boston/Metro West and surrounding area.
- To proactively address these deficiencies and the growing customer demands on the electric system, Eversource is implementing a series of transmission projects called the "Greater Boston and Southern New Hampshire Solution."
- One of the selected projects to solve the identified system reliability problems is a new 115-kV power line between existing substations in Sudbury and Hudson, called the Sudbury to Hudson Transmission Reliability Project.

#### **Review of Project Need and Benefits**



#### **Project Need**

- The proposed 115-kV transmission line between Sudbury and Hudson will provide a new transmission path to supplement the existing system and address identified thermal and voltage problems in the area.
- ISO-NE has determined that certain contingency events, e.g., loss of line or piece of equipment, would result in voltage collapse and loss of over 400MW of "load" in the local area, resulting in the loss of power to customers in Framingham, Marlborough, Northborough, Westborough, Grafton, Hudson, Stow, Shrewsbury, Berlin, and Southborough.

#### Other Benefits

- Once completed, these transmission projects will substantially increase the amount of power that can be imported to the area, providing access to lower-cost, cleaner power sources.
- As an additional benefit, the Sudbury to Hudson Transmission Reliability Project will also significantly add to property tax revenue for the municipalities where new facilities are located.

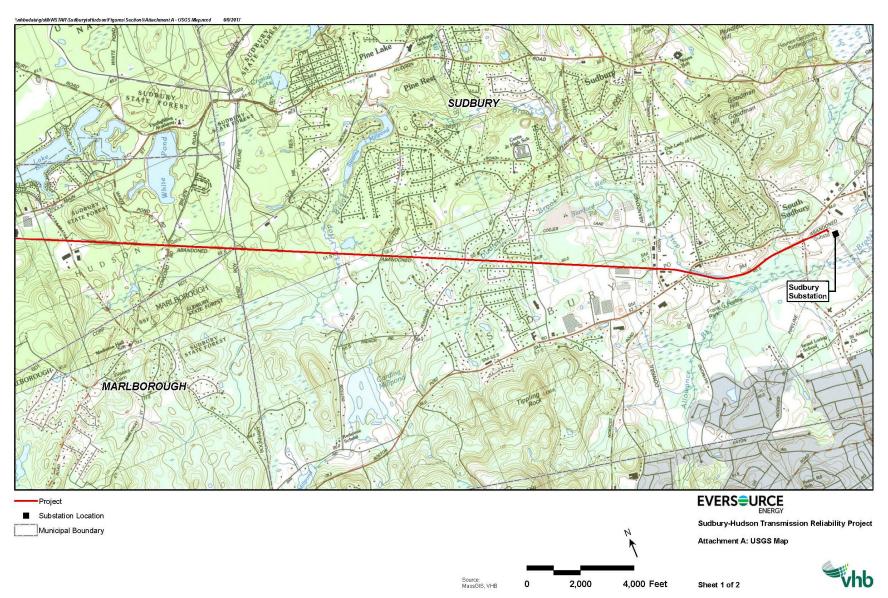
#### **Project Overview**



- Eversource is proposing to build an approximately 9-mile, 115-kilovolt (kV) underground electric transmission line from Eversource's existing Sudbury Substation on Route 20 to Hudson Light and Power Department's (HLPD) existing substation on Forest Avenue in Hudson.
- The Project route includes 7.6 miles within an existing, inactive Massachusetts Bay Transportation Authority (MBTA) railroad corridor, passing through Sudbury, Marlborough, Stow and Hudson.
   The remaining 1.4 miles are located under paved roadways in Hudson.
- In addition, the Project requires upgrades at Eversource's Sudbury Substation
  - All proposed work at Sudbury Substation is within existing fence line of the substation

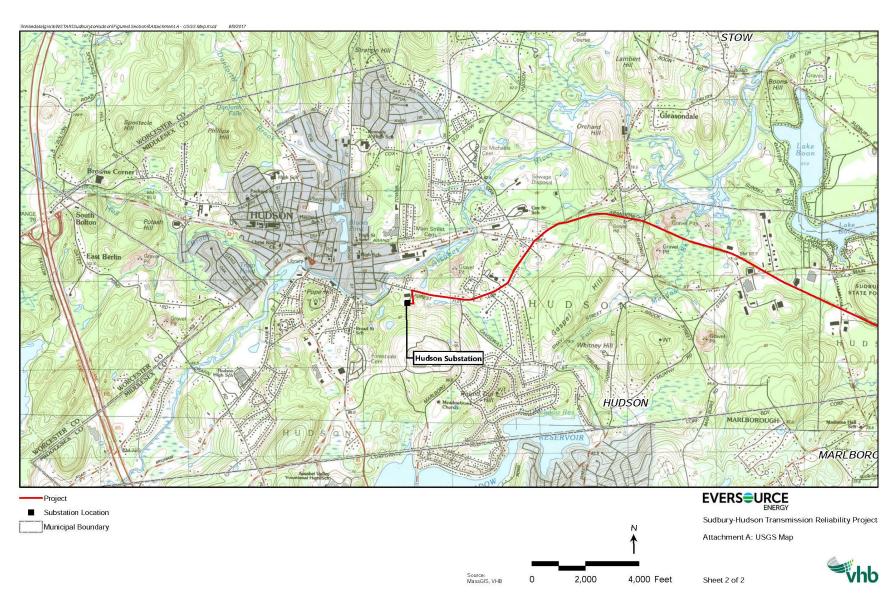
#### **Project Overview**





#### **Project Overview**





#### Project Overview /MEPA Thresholds



#### **Proposed Project:**

- Requires the filing of an ENF because the following review thresholds were met:
  - Over 5,000 square feet of alteration of Bordering Vegetated Wetland (13,794 sf)\*
  - Over 25 acres of land alteration (26.7 acres)
  - Construction of a new transmission line over 69kV over a mile in length along an unused ROW (9.01 miles)
  - Over ½ acre alteration of any other wetlands (242,482 sf)\*
- The proposed Project does not meet or exceed MEPA thresholds for the filing of a mandatory Environmental Impact Report ("EIR")
  - Although submission of an EIR is not mandatory for the Project, Eversource understands and appreciates that the local communities and other stakeholders have a vested interest in the potential environmental impacts of the Project and would like to continue to be open and transparent about those impacts. As such, Eversource is voluntarily seeking MEPA's review of the Project through the EIR process.

<sup>\*</sup>Please note: calculations were corrected and/or clarified on June 12, 2017.

#### **Project Routing Alternatives Analysis**



- To date, the Company has considered a total of 30 project options (including design options) along 22 different routes between the Sudbury and Hudson substations.
- Two routing options and one design variation presented for final consideration
  - Project 9.01 miles; underground on MBTA corridor and public roadways
  - Alternative Design on Project Route 9.01 miles; overhead on MBTA corridor and underground in public roadways ("Noticed Variation")
  - Alternative Project Route 10.30 miles; underground within public roadways ("Noticed Alternative")
- Eversource selected the Project because it balances the EFSB statutory mandates to present a project that provides a reliable energy supply with a minimum impact on the environment at the lowest possible cost.
- In addition, the Project offers the opportunity for a unique partnership between Eversource and the Massachusetts Department of Conservation and Recreation by combining construction of the Project with the development of the planned regional Mass Central Rail Trail.

#### MEPA Threshold Comparison of Alternatives



#### **Alternative Design on Project Route ("Noticed Variation"):**

- Requires the filing of a Mandatory EIR
  - Over one acre of alteration of Bordering Vegetated Wetland (3.54 acres)
  - Over 10 acres of alteration of other wetlands
  - Over 50 acres of land alteration (70.05 acres)
  - Construction of a new transmission line over 69kV over a mile in length along an unused ROW (9.01 miles)

#### **Alternative Project Route ("Noticed Alternative"):**

Would not meet any MEPA-related thresholds; no ENF required

#### **Construction Details (MBTA Corridor)**



#### **Overview of Construction Steps for MBTA Corridor**

- Removal of vegetation
  - 30-foot-wide limits of clearing, with expanded areas of clearing at manhole locations measuring about 40 to 50 feet wide and 50 feet long
- Installation of all appropriate and required erosion and sediment control barriers and other construction best management features
  - vithin clearing limits and rehabilitate

- Removal of rails and wooden ties
- Develop a 22-foot-wide construction platform within clearing limits and rehabilitate existing railroad bridges
  - The construction platform will include a 14-foot-wide access road, a 4-foot-wide duct bank, and splice vaults spaced every 1,500 to 1,800 feet
- Cable pulling and splicing, testing, and commissioning
- Final Project restorations completed per applicable agreements, regulatory standards, and permit conditions

#### **Construction Details (Public Roadways)**



#### **Overview of Construction Steps for Public Roadway Segments**

- Street tree trimming as necessary for safe operation of equipment
- Installation of all appropriate and required erosion and sediment control barriers and other best management features
- Sawcut pavement and install splice vaults
- Trench excavation, conduit installation, backfill and temporary paving
- Cable pulling, splicing, and testing at splice vault locations
- Final Project restorations completed per applicable agreements, regulatory standards, and permit conditions



#### **Environmental Permitting To Be Completed\***



#### Including, but not limited to:

- Local Review and Permitting:
  - Conservation Commissions (local wetland bylaws)
  - Historic Commissions
- State Review and Permitting:
  - Massachusetts Environmental Policy Act (MEPA)
  - Energy Facilities Siting Board (EFSB)
  - Mass Historical Commission
  - Natural Heritage & Endangered Species Program
  - Mass DEP Individual Water Quality Certificate
  - Mass DEP Chapter 91 Minor Modification
  - Massachusetts Wetlands Protection Act
- Federal Review and Permitting:
  - US Army Corps of Engineers (Section 404 Federal Clean Water Act)
  - US Fish and Wildlife Service (Section 7 Consultation)
  - US Environmental Protection Agency (NPDES Construction General Permit)

#### **Engineering and Environmental Studies**



#### **Engineering and Environmental Studies Completed To Date:**

- Preliminary Engineering Analysis
- Preliminary Bridge Assessment
- Preliminary Constructability Assessment
- Culvert Structure Assessment
- Right-of-Way Land Survey
- Wetland Delineation
- Vernal Pool Surveys
- Initial Rare Species Habitat Assessment
- Groundwater Hydrology Assessment
- Initial Traffic Assessments

#### **Engineering and Environmental Studies**



#### **Engineering and Environmental Studies To Be Completed:**

- Detailed Land Survey
- Detailed Rare Species Studies and Related Habitat Assessments
- Geotechnical Investigations
- Civil Engineering Final Design
- Bridge and Structural Design
- Detailed Wildlife Habitat Assessments
- Wetland Functions and Values Assessments
- Detailed Cultural Resource Investigations

#### **Project Contact Information**



- Project Hotline: 1-800-793-2202
- E-Mail: TransmissionInfo@Eversource.com
- Project webpage: www.Eversource.com