

Commonwealth of Massachusetts
Executive Office of Environmental
Affairs ■ MEPA Office

ENF Environmental
Notification Form

<i>For Office Use Only</i> Executive Office of Environmental Affairs
EOEA No.: / 3 2 3 5
MEPA Analyst: B. J. GAGE
Phone: 617-626- 1025

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Relocation of 115kV Line 433-507 in Framingham, Natick and Sherborn (within existing ROW)		
Street: NA		
Municipality: Framingham, Natick, Sherborn	Watershed: Concord River	
Universal Tranverse Mercator Coordinates: 302708.12 Northing, 4685860.53 Easting, to 303134.92 Northing, 4686114.83 Easting; and 303536.97 Northing, 4684012.73 Easting, to 303187.50 Northing, 4682930.20 Easting	Latitude/Longitude: 42 18 00.0185N, 71 23 36.4344W to 42 18 08.6450N, 71 23 18.1218W; and 42 18 00.0185N, 71 23 36.4344W, to 42 16 25.5293N, 71 23 11.9298W	
Estimated commencement date: 3/05	Estimated completion date: 9/05	
Approximate cost: \$1,760,000	Status of project design: 20 %complete	
Proponent: Boston Edison Company d/b/a NSTAR Electric (NSTAR)		
Street: One NSTAR Way, Mailstop NE250		
Municipality: Westwood	State: MA	Zip Code: 02090
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Colin Duncan		
Firm/Agency: TRC Environmental Corp.	Street: Foot of John Street, Boott Mills South	
Municipality: Lowell	State: MA	Zip Code: 01852
Phone: 978-656-3615	Fax: 978-453-1593	E-mail: cduncan@trcsolutions.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- | | | |
|--|------------------------------|--|
| a Single EIR? (see 301 CMR 11.06(8)) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Special Review Procedure? (see 301CMR 11.09) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Phase I Waiver? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): None

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals: Orders of Conditions from local Conservation Commissions – Framingham, Natick, and Sherborn; review by local planning/zoning to be determined in consultation with local Planning Board; ACOE Category II Programmatic General Permit

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input checked="" type="checkbox"/> MHD or MDC Access Permit* <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	106			
New acres of land altered		0		
Acres of impervious area	13±	0	13±	
Square feet of new bordering vegetated wetlands alteration		Perm - 140 Temp-21,200 ¹		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				<u>MA DTE Section 72 Filing</u> * MHD street crossing approval (Routes 9 & 135) <u>MBTA crossing approval</u>
Gross square footage	9,817 ²	245	10,062	
Number of housing units	0	0	0	
Maximum height (in feet)	162'	75' new	162'	
TRANSPORTATION				
Vehicle trips per day	0 ³	0	0	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

¹ Temporary impacts associated with existing dirt roads in wetlands to be accessed for construction; areas to be restored.

² Existing structures include steel lattice towers, steel tubular poles and wood poles associated with existing transmission and distribution lines.

³ Temporary construction trips only; no permanent vehicle trips associated with project.

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify: Potential vernal pools only; to be confirmed through field investigation/Conservation Commission review.) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify: Two prehistoric archaeological sites (19-MD-224 and 19-MD-598) are located in or immediately adjacent to the project area, and one National Register listed property (the Henry Wilson Shoe Shop, listed 2000) is located in the project vicinity.) No;

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify _____) No

[None anticipated at this time, pending further investigation.]

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

Boston Edison Company d/b/a NSTAR Electric ("NSTAR" or the "Company") has identified the need to relocate an existing 115 kilovolt (kV) transmission line along an approximately 3.5 mile section of the existing NSTAR right-of-way (ROW) 8-1 located in Framingham, Natick and Sherborn, Massachusetts (Figure 1, USGS Site Locus). The Project will be located entirely within the existing cleared ROW. The relocation will entail construction of a new set of steel poles within the ROW, installation of the 115 kV circuit on the new poles and removal of the 115 kV circuit from an existing set of double circuit steel lattice towers on the ROW. The existing steel lattice towers (constructed in 1968) will remain in place and continue to carry an existing 230 kV circuit. Three distribution circuits are also located on the ROW on three separate sets of wood poles. These distribution circuits will remain in place and are not impacted by the proposed project. The project is needed to ensure continued system reliability under specific planning contingencies. NSTAR initiated Project planning activities early in the first quarter of 2004 to support construction in March 2005.

The segment of ROW 8-1 proposed for line replacement is located within the southeastern portion of the Concord River Watershed (see Figure 2). The 250 foot wide ROW extends through well-developed residential areas as well as commercial and industrial areas. These areas include the densely developed commercial area north of Route 9 in Framingham, commercial and residential portions of Natick, and residential and small agricultural (non-cropland) areas in Sherborn. The ROW is accessible from side streets and parking areas, and an existing dirt access road traverses the length of the ROW. Where not developed, the ROW is thickly vegetated in most areas with shrubs, vines and herbaceous plants, which are cleared edge to edge as part of the routine right of way maintenance. Several streams and wetlands cross the ROW, including Beaverdam Brook in Natick, Course Brook in Sherborn, and other unnamed perennial and intermittent streams. The ROW also crosses the MWRA water supply aqueduct located in northern Sherborn. Although the ROW does not cross any designated Estimated Habitats for Rare Wetlands Wildlife according to the Massachusetts Natural Heritage and Endangered Species Program

(MNHESP), several vernal pools and potential vernal pools are located within 300 feet of the ROW. All construction activities will take place entirely within the existing ROW. Wetland resources within the ROW have been flagged and surveyed. The placement of new poles and the use of existing access routes will be planned to minimize impacts and avoid wetland areas whenever possible. In locations where placement of poles in wetlands or traversing wetlands via the existing dirt access road will be unavoidable, swamp mats will be used to distribute the loads of heavy equipment and minimize long-term impacts. Detailed plans showing wetland boundaries, erosion control measures, access routes and new structure locations will be submitted as part of the Notices of Intent to be filed under the Massachusetts Wetlands Protection Act with the Conservation Commissions of Framingham, Natick and Sherborn later this year.

Areas of potential concern with regard to interruption of traffic and transportation routes during Project construction include Route 9 and the Shopper's World shopping center in Framingham, the Conrail (CSX) and Massachusetts Bay Transportation Authority (MBTA) rail lines in Natick, Route 135 in Natick, and a second Conrail rail line in Sherborn. NSTAR will coordinate with all applicable local and state authorities with regard to planning and implementation of work at street crossings or in commercial/public parking areas to ensure public safety and minimize impact to traffic flow.

NSTAR has conducted a systematic study of practical project alternatives to address the identified need. Three alternatives to the Project were identified. These include (a) the construction of a new 115 kV transmission line along the ROW, while retaining the existing 115 kV and 230 kV transmission lines on the existing double circuit steel lattice towers on the ROW; (b) the reinforcement of the Greater Boston 115 kV transmission system by installing a new underground 115 kV transmission line approximately 7.5 miles in length, and (c) the reinforcement of the Greater Boston 115 kV transmission system by upgrading approximately 15 circuit miles of 115 kV transmission lines.

Construction of a new 115 kV transmission line alongside the two existing 115 kV and 230 kV transmission lines would resolve the specific planning contingencies that give rise to the need for the Project. However, in addition to the installation of a new set of steel poles within the ROW and the installation of a new 115 kV circuit on those poles, two 115 kV circuit breakers would be required to be installed at each of the terminating substations for the transmission line. These substations are located on Leland Street in Sherborn and Speen Street in Framingham. Further, the Speen Street substation does not have the space required for the addition of such facilities. As such, existing equipment at that substation would need to be converted to compact gas-insulated substation (GIS) equipment. The addition of two 115 kV circuit breakers at each of the Leland Street and Speen Street substations, and the conversion of the Speen Street substation equipment to GIS, would result in (1) more construction time to resolve the planning contingency than the proposed Project, (2) a greater amount of time that system facilities would be out of service, putting load at risk should specific contingencies occur during construction, and (3) potentially greater environmental impacts than the proposed Project. Should the Company pursue this alternative, the placement of new poles along the ROW, installation of new electrical equipment at the Leland Street and Speen Street substations, and access routes to the construction sites will be planned to minimize impacts and avoid wetland areas wherever possible. Detailed plans would also be developed showing wetland boundaries, erosion control measures, access routes and new structure locations and submitted as part of the Notices of Intent to be filed under the Massachusetts Wetlands Protection Act with the Conservation Commissions of Framingham, Natick and Sherborn.

The Company also considered distinctive alternatives to the Project that could satisfy the identified need to ensure continued system reliability under specific planning contingencies, but that would not include construction activity along ROW 8-1. NSTAR considered the installation of a new 115 kV underground pipe-type cable from an NSTAR substation in Brighton to an NSTAR substation in Waltham. This project alternative would eventually provide the required reinforcement to the area transmission system to enable the Company to continue to serve all customers under the specific planning contingencies identified by NSTAR. However, the extensive permitting and construction time associated with this alternative would leave load in the area at risk until the alternative could be implemented. Furthermore, a new route for a new transmission line could be required, resulting in potentially much greater construction-associated environmental impacts than the proposed Project. Should the Company pursue this alternative, the trenching and other construction activity associated with the installation of a new underground transmission line and access routes to the construction sites would be planned to minimize environmental impacts and avoid wetland areas wherever possible. Detailed plans would also be developed showing wetland boundaries, erosion control measures, access routes and new facility locations and submitted as

part of the Notices of Intent to be filed under the Massachusetts Wetlands Protection Act with the Conservation Commissions of towns affected by such construction activities, including Waltham, Watertown and Brighton. NSTAR would also coordinate with all applicable local and state authorities with regard to planning and implementation of work at street crossings or in commercial/public parking areas to ensure public safety and minimize impact to traffic flow.

The final project alternative would include reconductoring the two existing 115 kV underground transmission lines between the NSTAR substations in Brighton and Waltham mentioned above to higher capacity conductors. This project alternative would also provide the required reinforcement to the area transmission system to enable the Company to continue to serve all customers under the specific planning contingencies identified by NSTAR. Further, construction and long-term environmental impacts would be minimized due to the replacement of the transmission lines within an underground conduit system that is already in place. However, because this alternative would require an outage of each of the existing 115 kV transmission lines up to several months at a time to complete the upgrade, load in the area would be at considerable risk until the alternative could be implemented. Should the Company pursue this alternative, the construction activity associated with the reconductoring of the underground transmission lines and access to the manholes to complete the work would be planned to minimize environmental impacts wherever possible. NSTAR would coordinate with all applicable local and state authorities with regard to planning and implementation of work at street crossings or in commercial/public parking areas to ensure public safety and minimize impact to traffic flow.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to land (see 301 CMR 11.03(1))
 Yes No; if yes, specify each threshold:

II. Impacts and Permits

- A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings*	<u>0.22</u>	<u>0.01</u>	<u>0.23</u>
Roadways, parking, and other paved areas	<u>13</u>	<u>0</u>	<u>13</u>
Other altered areas (describe)	<u>106</u>	<u>0</u>	<u>106</u>
Undeveloped areas	<u>0</u>	<u>0</u>	<u>0</u>

* Includes utility structures only: 0.22 ac. utility tower and pole structures in ROW

Altered areas include entire 250' wide, 3.5 mile long maintained electric utility right-of-way

- B. Has any part of the project site been in active agricultural use in the last three years?
 Yes No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?
ROW crosses 1.5 acres of agricultural land. No impact will result from construction of replacement 115kV line.
- C. Is any part of the project site currently or proposed to be in active forestry use?
 Yes No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:
- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? Yes No; if yes, describe:
- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? Yes No; if yes, does the project involve the release or modification of such restriction? Yes No; if yes, describe:
- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? Yes No; if yes, describe: