

**Commonwealth of Massachusetts**  
**Executive Office of Environmental Affairs ■ MEPA Office**

**ENF**

**Environmental  
Notification Form**

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	13900
MEPA Analyst:	BILL GAZE
Phone: 617-626-	X 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: Q-169 Transmission Line Refurbishment Project		
Street: Golden Hills Substation in Saugus, through Revere to Lynn Substation #21 in Lynn		
Municipality: Saugus, Revere and Lynn	Watershed: Saugus River	
Universal Tranverse Mercator Coordinates:	Latitude: 42-28-18 to 42-27-17	Longitude: 071-02-45 to 070-57-07
Estimated commencement date: Winter 2006	Estimated completion date: June 2007	
Approximate cost:	Status of project design: 100 %complete	
Proponent: National Grid		
Street: 25 Research Drive		
Municipality: Westborough	State: MA	Zip Code: 01582
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Paul M. Knapik		
Firm/Agency: Vanasse Hangen Brustlin, Inc.	Street: 530 Broadway	
Municipality: Providence	State: RI	Zip Code: 02909
Phone: (401) 272-8100	Fax: (401) 273-9694	E-mail: pknapi@vh.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. 5139)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
  - a Special Review Procedure? (see 301CMR 11.09)  Yes  No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
  - a Phase I Waiver? (see 301 CMR 11.11)  Yes  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:  
**ACOE Category II PGP; possible Notice of Intent with Saugus Conservation Commission**

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

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

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" 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>  <b>BWP SW 36 Post-closure Use – Major</b>
Total site acreage	Approx. 160			
New acres of land altered		Approx. 8.6		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		11,505 sf (swamp mats temp.)		
Square feet of new other wetland alteration		800 sf salt marsh fill; 880 sf salt marsh replacement; 97,445 sf (swamp mats temp.)		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
<b>TRANSPORTATION</b>				
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
<b>WATER/WASTEWATER</b>				
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	

**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 Spotted turtle and common tern (see correspondence))  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 \_\_\_\_\_ (see correspondence))  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_ )  No

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

Yes (Specify The line crosses the Rumney Marshes ACEC )  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.*)

This project consists of the refurbishment and reconductoring of the termed Q-169 115 kilovolt (kV) electric transmission line along an existing power line right-of-way (ROW). The line was constructed in 1970. The refurbishment and reconductoring of the line is needed to maintain the reliability of the electric supply servicing the City of Lynn and surrounding areas. The Q-169 line will be reconstructed between National Grid's Golden Hills Substation in Saugus and the Lynn Substation #21 in Lynn, a distance of approximately 6.5 miles (Figure 1). The line is primarily composed of wood pole H-frame structures, with 6 steel towers at the Saugus River crossing, 2 steel pole H-frame structures at the Route 107 crossing, 3 single pole steel davit arm structures at the Route 1 crossing and 1 single pole davit arm structure at Salem Street.

Following a detailed inspection of the line and structures, National Grid has determined that certain structures and equipment are deteriorated and nearing the ends of their useful service lives. In addition, the power wires (conductors) are proposed for replacement in order to continue to provide reliable electric service. Wood pole structures would be replaced at select locations, and crossarms and hardware would be replaced as needed. All existing steel poles and towers would be reused with no modifications.

A portion of the proposed work occurs within the Rumney Marshes Area of Critical Environmental Concern (ACEC). The MEPA review threshold (at 301 CMR 11.03[11]b) that pertains to work within a state-defined ACEC stipulates that a Project is subject, at a minimum, to the filing of an Environmental Notification Form (ENF) with the MEPA Office for "Any Project within a designated ACEC, unless the Project consists solely of one single-family dwelling."

With respect to M.G.L. c 91, all of the waterways crossings along the ROW have been previously licensed: Bride's Brook (License No. 5467), Bear Creek (License No. 5464), Saugus River (License No. 5347 as modified by License No. 6114) and RESCO Tap (License No. 1147). National Grid will request that the Department of Environmental Protection's Waterways Regulation Program ("DEP") authorize the proposed work as Minor Project Modifications to the existing licenses in accordance with 310 CMR 9.22(3). In one instance, with respect to the RESCO Tap (License No. 1147), the proposed project will result in the removal of the licensed structures and National Grid will therefore request the approval from DEP pursuant to 310 CMR 9.22(1)(d) for the removal of unused structures that are no longer suitable for the uses authorized by License No. 1147.

In accordance with the Massachusetts Wetlands Protection Act (MGL Ch. 131 s. 40), “no person shall remove, fill, dredge or alter any bank, riverfront area, fresh water wetland, coastal wetland, beach, dune, flat, marsh, meadow or swamp bordering on the ocean or on any estuary, creek, river, stream, pond, or lake, or any land under said waters or any land subject to tidal action, coastal storm flowage, or flooding, other than in the course of maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, telephone, telegraph and other telecommunication services, without filing written notice of his intention to so remove, fill, dredge or alter”. As noted, the project involves replacing transmission line structures, crossarms, insulators, and conductors that are nearing the end of their useful service lives with no substantial changes or enlargement. The reconductoring project, therefore, would qualify as exempt from filing a Notice of Intent with the respective Conservation Commissions and Department of Environmental Protection (DEP). The portion of the project that proposes to remove two structures from the salt marsh and one at the edge of the marsh and replace them with a new 3-way loadbreak switch structure at the adjacent RESCO landfill site may require filing a Notice of Intent with the Saugus Conservation Commission if the work associated with installing the new structure is within 200-foot Riverfront Area associated with the Saugus River.

The project requires the extensive use of timber mats (i.e. swamp mats) to support the construction equipment used to replace structures in order to protect the salt marsh substrate in Rumney Marsh and other wetland areas along the ROW during construction. Because greater than 5,000 square feet of temporary fill (i.e. swamp mats) and approximately 800 square feet of permanent fill (i.e. the footprint of new wood-pole structures in wetlands) are proposed, the project requires filing an application to the Army Corps of Engineers (Corps) for Category II eligibility under the Massachusetts Programmatic General Permit (MAPGP). An application has been submitted to the Corps and is reviewed by state and federal agencies through a joint review process as Category II activities. The general requirements of the PGP state that swamp or timber mats are considered temporary fill when they are removed immediately upon work completion.

Additionally, a portion of the project is within Massachusetts Water Quality Standards (314 CMR 4.00) designated Outstanding Resource Waters (ORW) and salt marsh. The regulations (314 CMR 9.04) require any activity resulting in any discharge of dredged or fill material to any ORW or salt marsh to file an application for Water Quality Certification. A comprehensive marsh access plan has been developed to avoid or minimize impacts to salt marsh and tidal creeks by accessing the ROW from upland locations and utilizing previously disturbed portions of the marsh (i.e. the former Saugus racetrack footprint) as an access route. A Water Quality Certification application, describing alternatives and mitigation measures, has been filed with the DEP.

A Post-Closure Use Permit Application will be submitted to the Department of Environmental Protection Bureau of Waste Prevention – Solid Waste Management for the portion of the project within the limits of the RESCO landfill. Work within the limits of the landfill includes installing a new 3-way loadbreak switch structure and new side guy anchors at an existing structure. The new loadbreak switch structure will result in the removing loadbreak structures from salt marsh will greatly increase accessibility to the loadbreak switch while avoiding impacts to salt marsh in the event of a line outage.

The refurbishment and reconductoring of the Q-169 transmission line will result in the temporary alteration of approximately 11,505 square feet of bordering vegetated wetland and 97,445 square feet of salt marsh due to the placement of swamp mats to access and replace transmission line structures. This activity is not expected to cause any long-term adverse impacts to wetland resources, as swamp mats effectively distribute the load of construction equipment and minimize ground disturbance. Approximately 800 square feet square feet of salt marsh will be permanently filled due to structure replacement. After new structures are installed the old structures will be removed and the restoration of the areas occupied by the replaced wood pole structures is proposed for all fill impacts in salt marsh to provide approximately 1:1 restoration of lost salt marsh area..