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

# **Environmental** ENF Notification Form

For Office Use Only Executive Office of Environmental Affairs
EOEA No.: 14335 MEPA Analyst: Aisling Eglington Phone: 617-626-1024

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: Read Street Substation Upgrade and 9L6 Feeder Installation Project					
Street: Read Street to Route 1A					
Municipality: Attleboro, MA	Watershed: Te	n Mile River			
Universal Tranverse Mercator Coordinates:	Latitude: 41°54	l'50.85"			
305632m E/4643060m N	Longitude: 71°2	Longitude: 71°20'31.52"			
Estimated commencement date: 01/01/09	Estimated com	Estimated completion date:08/01/09			
Approximate cost: \$1.2 million	Status of project	Status of project design: <b>75</b> %complete			
Proponent: Massachusetts Electric Comp	any (dba Nationa	al Grid)			
Street:25 Research Drive					
Municipality: Westborough	State: MA	Zip Code: <b>01582</b>			
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Samuel Haines					
Firm/Agency: ENSR	Street: 95 Stat	e Road			
Municipality: Sagamore Beach	State: MA	Zip Code: <b>02562</b>			
	508) 888-6689	E-mail: shaines@ensr.aecom.com			
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  Yes					
a Phase I Waiver? (see 301 CMR 11.11)  If yes  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): Not Applicable  Are you requesting coordinated review with any other federal, state, regional, or local agency?  If yes(Specify					
List Local or Federal Permits and Approvals: <u>V</u> and MA DEP 401 WQC.  Which ENF or EIR review threshold(s) does the 11.03 (3)(b)(1)	VPA Order of Condi	itions, ACOE Section 404 Cat II,			

∐ Land ☐ Water [	Rare Speci ☐ Wastewate		Wetlands, W Transportat	Vaterways, & Tidelands		
☐ Energy [	Air	·		ardous Waste		
☐ ACEC [	Regulations	s 🗌		Archaeological		
Summary of Project Size	Existing	Change	Resources Total	State Permits &		
& Environmental Impacts	LXISTING	Onlange	I Otal	Approvals		
	_AND			Order of Conditions		
Total site acreage				Superseding Order of		
New acres of land altered		0		Conditions  Chapter 91 License		
Acres of impervious area	0	0	0	🛛 401 Water Quality		
Square feet of new bordering vegetated wetlands alteration		0.30 (temporary)		Certification  MHD or MDC Access  Permit		
Square feet of new other wetland alteration		0		☐ Water Management Act Permit		
Acres of new non-water dependent use of tidelands or waterways		0		☐ New Source Approval ☐ DEP or MWRA Sewer Connection/ Extension Permit		
STRU	JCTURES			Other Permits		
Gross square footage	NA	NA	NA	(including Legislative Approvals) - Specify:		
Number of housing units	NA	NA	NA	, Approvais, Specify.		
Maximum height (in feet)	NA	NA	NA			
TRANS	PORTATION			f.		
Vehicle trips per day	NA	NA	NA			
Parking spaces	NA	NA	NA	1		
WATER/WASTEWATER						
Gallons/day (GPD) of water use	NA	NA	NA			
GPD water withdrawal	NA	NA	NA	]		
GPD wastewater generation/ treatment	NA	NA	NA	]		
Length of water/sewer mains (in miles)	NA	NA	NA			
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						
RARE SPECIES: Does the project si Rare Species, or Exemplary Natural  Yes (Specify	Communities?		of Rare Specie ⊠No	es, Vernal Pools, Priority Sites of		

<u>HISTORICAL /ARCHAEOLOGICAL RESOURCES</u> : Do	oes the proje	ect site include any structure, site or district listed
in the State Register of Historic Place or the inventory of	of Historic an	d Archaeological Assets of the Commonwealth?
☐Yes (Specify		⊠No
If yes, does the project involve any demolition or destruresources?	iction of any	listed or inventoried historic or archaeological
☐Yes (Specify	)	⊠No
AREAS OF CRITICAL ENVIRONMENTAL CONCERN	I: Is the proje	ect 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.*)

#### **Project Description**

Massachusetts Electric Company (MEC) dba National Grid proposes the Read Street Substation Upgrade and 9L6 Feeder Project, in conjunction with other projects in the area, to provide load relief to the southern Attleboro area, support voltage stability in the transmission system and increase the reliability and efficiency of the present system. The project involves the installation of equipment at the existing Read Street Substation yard, and the installation of the 13.2kV circuit (9L6 feeder) on approximately 1 mile of existing right-of-way in Attleboro, Massachusetts. The proposed route of the 9L6 feeder involves the attachment of the circuit to existing utility poles between the Read Street Substation and Newport Avenue (Route 1A).

The Read Street Substation is located west of Read Street between Ed Ledger Drive and Morse Avenue. The substation is set in a wooded area off Read Street and is surrounded by wetlands. The 9L6 feeder will be constructed within an existing right-of-way to the west of the substation. The right-of-way contains two distribution lines and one transmission line over the whole section between the Read Street Substation and Route 1A. A second transmission line also shares the right-of-way for approximately half of the route. This section of right-of-way crosses numerous pastures, a number of wetland areas, a sand pit, and a golf course. MEC expects the project will take approximately 6 to 9 months to complete. Work at the Read Street Substation and the 9L6 feeder is scheduled to commence during early 2009.

#### Read Street Substation Upgrade

This proposed work involves the installation of various pieces of substation equipment, relays, and controls required to support the new 9L6 feeder. All work will be confined within the existing footprint of the existing fenceline of the Read Street Substation. All equipment will enter the substation through the existing paved driveway of Read Street. No work at the substation will be conducted within the boundaries of any wetland resource area. Work is proposed within the substation fence that falls within the 100 foot buffer zone to BVW and inland bank.

### 9L6 Feeder Installation

The 9L6 feeder is a new cable that will be installed along the existing poles of the 24 line. The structures are typical wooden utility poles and are approximately 30-50 feet in height. MEC will replace these structures at their current location with new 40-55 foot high wooden poles. The 24 line will remain of the top of the newly installed structures, and the 9L6 feeder will be suspended approximately 10 feet below the 24 line. The added structure height is required to maintain the clearances between the 9L6 conductor and the ground as mandated by National Electric Safety Code and in accordance with National Grid Overhead Construction Standards.

#### **Temporary Wetland and Resource Area Alteration**

Existing wooden utility poles to be replaced (#38, #39, and #40) are located within delineated wetlands. Temporary swamp matting will be utilized when crossing any wetland resource area and will be put in place immediately following the cutting activities to allow for equipment traffic within the BVW areas. The swamp matting will be constructed of wooden timbers approximately 16 feet in length. The proposed work will require approximately 12,800 square feet of swamp matting to be temporarily placed within the BVW and/or BLSF. Several of the other existing poles are located within Bordering Land Subject to Flooding, Riverfront Area, and/or buffer zones. These poles are accessible from upland areas, and erosion controls will be established between the work areas and the wetland.

#### **Cutting Activities**

Where required, trees and shrubs will be removed within the right-of-way to allow equipment access and replacement of the existing structures ant to provide clearance between vegetation and conductors as mandated by National Electric Safety Code. MEC does not propose to increase the cleared width of the right-of -way. Stumps will not be removed since many are stabilizing slopes and help to prevent erosion. Larger limbs and trunks will be removed from the site and disposed of.

#### **Equipment Access**

Vehicles and equipment will access the right-of-way from existing access points along Read Street, Jody Way, and Lockwood Avenue.

#### Restoration

The work proposed to install the 9L6 feeder will result in temporary disturbances in the right-of-way. Conventional equipment (line trucks, backhoes, etc.) will be used to install each structure. The temporarily disturbed areas around each structure will be approximately 10' X 10' (100 square feet). MEC intends to fully restore any areas of project related ground disturbance in accordance with applicable regulations and MEC internal environmental guidelines. This would include re-establishing grades, repairing vehicle ruts, ground stabilization, and seeding of disturbed areas.

#### **Project Alternatives**

MEC is continually evaluating their transmission and distributions systems to identify areas of need and alternative means of meeting that need. A number of potential on-site and off-site alternatives were evaluated before choosing the proposed project. The following alternatives were studied prior to the decision to proceed with this project.

#### **Proposed 9L6 Route**

Based on the current and projected growth in the service area, it was determined that this route would be the most easily constructed and most cost effective way to meet the electrical requirements of the area. The Read Street Substation currently has the capacity and some of the infrastructure to support the 9L6 feeder. The selected route utilizes an existing right-of-way and existing structure locations to minimize environmental impacts. The right-of-way is also the most direct route between the Read Street Substation and the area of electrical need.

#### **9L6 Routed on Public Ways**

MEC evaluated a number of variations of 9L6 routes along various public ways between Read Street Substation and the area of need along the Route 1/1A corridor. This alternative was considered more costly and presented more logistical issues than the proposed route. The structures along many of these public streets carry multiple distribution circuits, telephone, cable TV, etc. Adding an additional circuit along this route would require the replacement of numerous structures and would involve coordination between the multiple utilities. The route is much longer than the proposed right-of-way route and more structures would need to be replaced. An additional consideration involves the length of the feeder efficiency decreases the further the line is from the source. For these reasons, public way routes were not selected.

#### **Pine Street Alternative (off-site)**

As an alternative to the recommended 9L6, a new 115/13.2 substation and two feeders on Pine Street in Seekonk was considered. Land would need to be acquired near the 115kV ROW in Seekonk. A 115kV tap line connected to the existing P11 line would need to be built. Distribution lines would be installed to connect to Read St and Mink St feeders. The total cost for this plan is estimated at \$7,600,000. This plan is more expensive, requires a longer execution (estimated three years) and will not be on time to meet the area load schedule. For these reasons, this off-site alternative was not selected.

#### No Action

The existing feeders at the Read Street Substation will be overloaded in summer 2009 and also will not be support the area load growth. For this reason, no action is not an acceptable alternative.

