

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
RHODE ISLAND ENERGY FACILITY SITING BOARD**

In re: The Narragansett Electric	:	
Company d/b/a National Grid	:	Docket No. SB-2008-02
Rhode Island Reliability Project	:	

**NATIONAL GRID’S RESPONSES TO
THE TOWN OF JOHNSTON’S FIRST SET OF DATA REQUESTS**

REQUEST 1-5:

Any and all documents regarding, relating to, provided to and/or created pursuant to the contract by and between National Grid and Vanasse Hagen Brustlin, Inc. regarding potentially affected natural and social environments and impact analyses regarding the new, relocated and/or reconstructed transmission lines proposed to be constructed through the Town of Johnston.

RESPONSE:

Notwithstanding National Grid’s previous objections, and without waiving same, National Grid states that the information developed by VHB is reflected in the Environmental Report and Figures which were filed in this matter. This information will also be reflected in the RIDEM Freshwater Wetlands Permit application and the Town of Johnston Soil Erosion and Sediment Control application for the Project. A copy of these latter documents will be provided to the Town of Johnston when they are filed.

Response prepared by or under the supervision of David J. Beron, P.E., P.M.P.

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REQUEST 1-6:

Any and all documents regarding, relating to, provided to and/or created pursuant to the contract by and between National Grid and Exponent, Inc. regarding an analysis of health affects of electric magnetic fields and related calculations regarding the new, relocated and/or reconstructed transmission lines to be constructed through the Town of Johnston.

RESPONSE:

Notwithstanding National Grid's previous objections, and without waiving same, the analysis of health effects of electric and magnetic fields and calculations regarding the fields that will result from the new and relocated transmission lines are contained in Appendix B and in §§7.8 and 8.16 of the Environmental Report. In addition, Exponent is preparing a more detailed report of the EMF modeling results which will be provided when it is completed.

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REQUEST 1-7:

Any and all documents regarding, relating to, provided to and/or created pursuant to the contract by and between National Grid and Power Engineers, Inc. regarding an analysis of the engineering and design of new, relocated and/or reconstructed electric transmission lines to be constructed through the Town of Johnston.

RESPONSE:

Notwithstanding National Grid's previous objections and without waiving the same, the information developed by Power Engineers, Inc. is included in general terms in the ER, Figures and freshwater wetlands application.

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REQUEST 1-8:

Please provide a site plan or other engineering plan which demonstrates and specifies the distance between the edge of the existing right-of-way ("Existing ROW") and any new, relocated and/or reconstructed 115 KV transmission lines as those lines proceed through the Town of Johnston.

RESPONSE:

Figure 4-2, Sheet 2 of 5 in the ER is a general representation of the ROW in Johnston. There are variations at certain locations in Johnston, including the following:

- Changed configuration of the 23 kV line that attaches to the T-172 structures
- Varying locations of the TGP pipeline (from the east to west side of the ROW)
- Varying locations of the 23 kV line (from east to west side of the ROW)
- Absence of the S171/T172 lines in the vicinity of Hartford Ave. Substation

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REQUEST 1-9:

Please identify any and all applicable building, construction, electrical and/or safety codes that were referenced and/or relied upon in laying out, new, relocated and/or reconstructed 115 KV transmission lines within the Existing ROW.

RESPONSE:

The applicable codes are referenced in §4.6 (page 4-15) of the ER.

See also the following codes dealing with line layout (clearance requirements) and structural design:

- National Electrical Safety Code 2007 (NESC), ANSI C2
- ANSI/ASCE 10, Design of Latticed Steel Transmission Structures
- ASCE 91, Design of Guyed Electrical Transmission Structures
- ASCE 48-05 (Manual 72), Design of Steel Transmission Pole Structures
- ACI 318, Building Code Requirements for Structural Concrete

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REQUEST 1-10:

Please specify the recommended distance between any new, relocated and/or reconstructed 115 KV electric transmission lines and any new construction of improvements on abutting lots in the Town of Johnston.

RESPONSE:

Line design and structure layout for the new, relocated, and/or reconstructed 115 kV lines as for the Project provide, at a minimum, the horizontal and/or vertical clearances to buildings and structures for lines operating at a voltage of 115kV phase to phase as required by the National Electric Safety Code 2007 Edition. The 115 kV line layouts assume the future construction of a building or structure immediately adjacent to the edge of the existing transmission right-of-way or easement, for the entire length of the ROW. Required clearances are provided to these assumed structures.

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REQUEST 1-11:

With regard to stated "alternatives" in the Environmental Report Volume I, please produce any and all documents regarding alternatives using the Existing ROW and "alternative overhead routes".

RESPONSE:

All information related to alternatives using the existing ROW and alternative overhead routes has been incorporated in the ER.

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REQUEST 1-12:

Please produce any and all applicable documents which set forth and/or identify National Grid's existing requirements for a right-of-way or easement for the construction and maintenance of electrical transmission lines (both 115 KV and 345 KV).

RESPONSE:

Attached is the National Grid "Circuit and Right-of-Way Configuration" Transmission Line Engineering Guideline (the Guideline). This document provides guidance for determination of required ROW width for a new transmission line in New England or New York. To minimize environmental, aesthetic and social impacts, National Grid would, however, typically opt to maximize use of existing ROWs for a new transmission line before consideration would be given to acquisition of a new ROW. This is the case with the Project.

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REQUEST 1-13:

Any and all documents that pertain to, regard and/or discuss the potential impact on abutting properties from locating electrical transmission lines within the proposed distances from the boundary of the Existing ROW.

RESPONSE:

See the Environmental Report and the Visibility and Visual Impact Assessment which was filed with the ER.

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REQUEST 1-14:

Any and all documents that pertain to, regard and/or refer to the electro magnetic fields resulting from relocating the 115 KV transmission lines to the proposed distances from the edge of the Existing ROW in the Town of Johnston.

RESPONSE:

See the response to Johnston Data Request 1-6.

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REQUEST 1-15:

Any and all documents that pertain to, regard and/or refer to the impact on values of property and/or improvements owned by abutters resulting from the relocation of the 115 KV transmission lines within the proposed distances to the edge of the Existing ROW and building structures at increased height over existing structures.

RESPONSE:

Notwithstanding National Grid's previous objections, and without waiving same, National Grid has performed no analysis of the "impact on values of property and/or improvements owned by abutters resulting from the relocation of the 115 kV transmission lines within the proposed distances to the edge of the existing ROW and building structures at increased height over existing structures."

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REQUEST 1-16:

Please provide documents showing all proposed right-of-way vegetation maintenance and clearing within the Town of Johnston.

RESPONSE:

Right-of-way vegetation maintenance, clearing and management are addressed in §§4.4.1 and 4.5 of the ER. As noted in §4.4.1, tree clearing is only required in one segment of the ROW in Warwick. Prior to construction at each proposed structure site and along designated access routes, vegetation will be mowed to allow for equipment access and deployment of erosion control Best Management Practices in accordance with applicable environmental regulations. Following construction, vegetation within the ROW will be maintained in accordance with National Grid's standard vegetation management practices as described in National Grid Transmission Group Procedure 25 entitled "Right-of-Way Vegetation Management Plan," which is attached.

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REQUEST 1-17:

Please provide documents showing all proposed access road and construction maintenance and clearing within the Town of Johnston.

RESPONSE:

Access road clearing and maintenance is addressed in § 4.4 of the ER and in the figures filed therewith. Additional detail was provided in the plan set filed with the zoning application to the Johnston Zoning Board of Review. Further detail will also be provided in the filing for a Freshwater Wetlands application which will be provided to Johnston when filed.

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REQUEST 1-18:

Please provide any and all documents regarding, relied upon and/or, referenced in developing and/or considering overhead alternatives using the Existing ROW.

RESPONSE:

Overhead alternatives which utilized the existing right-of-way, were required to meet the applicable clearance requirements as defined by the National Electric Safety Code 2007 Edition. As per this code, the overhead alternatives would have to comply with required clearances between energized conductors and other energized conductors, supporting structures of other energized conductors, buildings, structures, ground, and water.

CERTIFICATE OF SERVICE

I hereby certify that a copy of National Grid's Responses to the Town of Johnston's First Set of Data Requests was delivered to the Service List associated with the Docket via electronic mail this 8th day of May, 2009.
