

Via Hand Delivery

December 7, 2021

Emma Rodvien, Coordinator
Energy Facility Siting Board
89 Jefferson Boulevard
Warwick, RI 02888

**Re: The Narragansett Electric Company
K-189 115 kV Line Thermal Upgrade and
G-185N 115 kV Line Reconductoring Project
Warwick, Rhode Island**

Dear Emma:

I am enclosing for filing on behalf of The Narragansett Electric Company (“TNEC”) an original and five (5) copies of an Application (Exhibit TNEC-1) pursuant to Rule 1.6(F) of the Energy Facility Siting Board’s Rules of Practice and Procedure for the reconductoring of an existing major energy facility as described in the Application.

The Application includes a Siting Report dated February 2021 (Exhibit TNEC-1a) which includes Figures and Current Status of Research on Extremely Low Frequency Electric and Magnetic Fields and Health – February 22, 2019.

Also enclosed are two (2) thumb drives with electronic copies of the Application and Environmental Report. If you need additional copies of the above, please advise and we will provide them.

Robinson+Cole

Emma Rodvien, Coordinator
Energy Facility Siting Board
December 7, 2021
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Sincerely,



George W. Watson, III

Enclosures

Copy to: Patricia S. Lucarelli, Esq. (*w/o enclosures*)
Mark R. Rielly, Esq., Assistant General Counsel & Director, National Grid
(*w/ enclosure*)
Lynn D'Abrosca, Warwick City Clerk (*via hand delivery*)
Michael Ursillo, Esq., Warwick City Solicitor (*via hand delivery*)
William Walsh, Esq., Warwick City Council Solicitor (*via hand delivery*)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

In re: The Narragansett Electric Company :
(K-189 115kV Transmission Line : Docket No. SB-
Thermal Upgrade and G-185N 115 kV :
Line Reconductoring Project :
Warwick, Rhode Island) :

Notice of Intent Application of
The Narragansett Electric Company

Counsel:

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December 7, 2021

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INTRODUCTION

The Narragansett Electric Company (“TNEC”), with a principal place of business at 280 Melrose Street, Providence, Rhode Island 02907, hereby submits this Notice of Intent Application to the Energy Facility Siting Board (the “Board” or “EFSB”) for approval of the thermal upgrading and the reconductoring of existing transmission lines within the State of Rhode Island, pursuant to the applicable provisions of Rhode Island General Laws §§ 42-98-1, et seq. and the Board’s Rules of Practice and Procedure, as amended (the “EFSB Rules”).

This Application is filed by TNEC pursuant to Rule 1.6(F) of the EFSB Rules which provides an abbreviated review for (i) the construction of power lines of more than 1,000 feet but less than 6,000 feet or (ii) the modification or relocation of power lines. Rule 1.6(F) provides for an abbreviated application, a public hearing “in one or more of the cities or towns affected by [the] application,” and a determination within sixty (60) days of the filing as to “whether the project may result in a significant impact on the environment or the public health, safety and welfare,” thereby requiring a full EFSB review. (See EFSB Rules 1.6(F), (G), and (H)). If the Board does not find that the project may result in a significant impact on the environment or the public health, safety and welfare, the project does not constitute an “alteration” and the project may proceed without further review. (See EFSB Rules 1.2(D) and 1.6(F)).

TNEC is proposing to increase the thermal rating of the existing K-189 115 kV transmission line (“K-189 Line”) from Drumrock Substation to Kent County Substation and reconductor the G-185N 115 kV transmission line (“G-185N Line”, and together with the K-189 Line, the “Lines”) from Drumrock Substation to Kent County Substation (the “Project”). Both Lines are in the same approximately 1-mile long right of way (“ROW”) which is in the City of Warwick, Rhode Island. On the K-189 Line, the conductor insulator assemblies will be replaced

on two structures. The K-189 Line work will also include the replacement of all identified splices. The G-185N Line will be reconductored, and new insulator assemblies will be installed on all structures. The Project will not require the replacement or raising of any structures. In this Application, TNEC requests the Board's approval of the thermal upgrade of the existing K-189 Line and the reconductoring of the G-185N Line.

TNEC is filing herewith and incorporates herein a Siting Report entitled "K-189 115kV Line Thermal Upgrade and G-185N 115 kV Line Reconductoring Project" (the "Siting Report"). This application follows the organization of Rule 1.6(F) and identifies the sections of the Siting Report where the issues identified in the EFSB Rules are discussed.

1. Identification of the owner(s) of the facility.¹

a. The owner of the facility is The Narragansett Electric Company, a Rhode Island chartered public utility, with its principal place of business at:

280 Melrose Street
Providence, RI 02907

b. The affiliates of The Narragansett Electric Company include its parent, National Grid USA and the National Grid (US) Holdings Ltd companies. The corporate relationships among the National Grid (US) Holdings Ltd companies are shown on Exhibit 1, attached. A listing of non-US affiliates is available upon request.

2. Detailed description of the proposed facility.²

The K-189 Line is a one-mile 115 kV transmission line in Warwick, Rhode Island located between Drumrock Substation and Kent County Substation in Warwick, Rhode Island.

¹ EFSB Rule 1.6(F)(1) requires the applicant to provide identification of the owner(s) of the facility, including identification of all affiliates of the proposed owners, as such term is defined in R.I.G.L. §39-3-27.

² EFSB Rule 1.6(F)(2) requires the applicant to provide a detailed description of the proposed facility, including its length, route, function and operating characteristics, and complete plans as to all structures associated with the proposed facilities.

The purpose of the K-189 scope of work for this Project is to increase the thermal rating of the K-189 Line from 100 degrees Celsius (°C) to 140°C. The K-189 Line upgrade will require the replacement of all existing single die compression dead ends and all single die compression splices. Analysis was performed to determine if the increased maximum operating temperature of the conductor caused any clearance shortfalls using the National Electrical Safety Code (NESC) minimum required ground clearance of 20.1 feet. Utilizing this methodology, three out of 14 spans were deemed substandard which will require replacement of the insulator assemblies on two structures.

The G-185N Line is a one-mile 115 kV transmission line in Warwick, Rhode Island located between Drumrock Substation and Kent County Substation. The G-185N Line is in the same ROW as the K-189 Line. The reconductoring will require the replacement of one circuit-mile of existing conductor with 1,590 kcmil 54/19 “Falcon” aluminum conductor steel supported (ACSS). The shield wires were recently replaced as a part of the New England East-West Solutions Project and will not be included in this Project. Analysis was performed to evaluate the amount of structure work required if the proposed conductor is sagged to match the existing conductor tensions. No substandard spans were identified on this line; therefore, no additional structure work is required.

The Project is described in more detail in Section 3.0 of the Siting Report.

3. Detailed description and analysis of the impact of the Project on the physical and social environment.³

The environmental characteristics of the Project area are described in Section 5.0 of the Siting Report and the affected social environment is discussed in Section 6.0. The impact of the Project on the natural and social environments is described in Section 7.0 of the Siting Report. A review of current health research pertaining to electric and magnetic fields is contained in Appendix A of the Siting Report. The existing and projected levels of electric and magnetic fields at the edges of the ROW are provided in §§6.6, 7.15.2, and 7.15.3 of the Siting Report.

4. All studies and forecasts which demonstrate the need for the proposed facility.⁴

The need for the Project is described in Section 2 of the Siting Report.

5. The reasons why the Project does not constitute the alteration of a major energy facility.

Transmission lines of 69 kV and above are included in the definition of “major energy facility” in Rule 1.3(A)(16) of the EFSB Rules. However, Rule 1.3(A)(4) states that

the modification⁵ or relocation of an existing power line shall not be an alteration unless the Board determines that the project may result in a significant impact on the environment or the public health, safety and welfare. [Emphasis supplied.]

Thus, the Project would constitute the alteration of a major energy facility and be subject to the full EFSB permitting process only if the Board determines that it “may result in a significant impact on the environment or the public health, safety and welfare.”

³ EFSB Rule 1.6(F)(3) requires the applicant to provide a “[d]etailed description and analysis of the impact of the Project on the physical and social environment. The applicant shall also provide a review of the current independent scientific research pertaining to electromagnetic fields (“EMF”) and shall provide data on the anticipated levels of EMF exposure and potential health risks associated with this exposure. To the extent the proposed Project will have only negligible impact on any particular resource in the natural and social the applicant may so state and need not provide a detailed analysis of the baseline conditions for that resource.”

⁴ EFSB Rule 1.6(F)(4) requires the applicant to provide all studies and forecasts which demonstrate the need for the proposed facility under the statewide master construction plan submitted annually.

⁵ Per EFSB Rule 1.2(D), modification “includes reconductoring and rebuilding an existing power line.”

As explained in Section 3 of the Siting Report, the Project involves reconductoring a portion of the existing k-189 and G-185N Lines between Drumrock Substation to Kent County Substation.

The impacts of the Project are discussed in Section 7.0 of the Siting Report and summarized in Sections 7.1 and 7.2. The mitigation measures are discussed in Section 8.0 of the Siting Report. In summary, any impact to environmental resources and the social environment will be negligible. Consequently, because the Project does not significantly impact the environment or the public health, safety and welfare, the Board should determine that the Project does not constitute an alteration and is not subject to the full EFSB permitting process.

CONCLUSION

This Application and the Siting Report, which is filed herewith and incorporated herein, and the other supporting material clearly demonstrate that the proposal to increase the thermal rating of the K-189 Line and reconductoring of the existing G-185N 115 kV Transmission Lines will not result in a significant impact on the environment or the public health, safety and welfare.

For the reasons stated herein, The Narragansett Electric Company requests that the Energy Facility Siting Board approve the Project as described herein pursuant to EFSB Rule 1.6(F).

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY

By its Attorney,



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The Narragansett Electric Company – Structure Chart

Exhibit 1

