

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
ENERGY FACILITY SITING BOARD

In re: The Narragansett Electric Company :  
(H17 and G-185N Transmission Line : Docket No. SB-2001-1  
Reconductoring Project) :

DECISION AND ORDER

**I. Introduction.**

On January 25, 2001, The Narragansett Electric Company (“Narragansett” or the “Company”) filed a Notice of Intent Application with the Energy Facility Siting Board (“EFSB” or “Board”) pursuant to the Board’s Rule 1.6(f). Narragansett proposes to reconductor sections of two 115 kV transmission lines (collectively, the “Project”). The first is 1.2 miles of the H17 transmission line between Riverside Substation and Tower #154, south of State Route 122 in Woonsocket and the second is one mile of the G-185N transmission line between the Drumrock Substation on Route 117 and the Kent County Substation on Cowesett Road in Warwick.

**II. Travel of the Case.**

This case is the second filed with the EFSB under Rules 1.6(f) through 1.6(h)<sup>1</sup> which provide an expedited review process for (i) the construction of a power line of more than 1,000 feet, but less than 6,000 feet in length or (ii) the modification or relocation of a power line.<sup>2</sup> Our Rules provide for an abbreviated application (Rule 1.6(f)) followed by a public hearing “in one

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<sup>1</sup> The first was Narragansett’s S-171S and T-172S Transmission Line Reconductoring Project, Docket No. SB-99-2

<sup>2</sup> Under the Energy Facility Siting Act (Rhode Island General Laws § 42-98-1 et seq.), our jurisdiction over power lines is limited to those of 69 kV and above. Rhode Island General Laws § 42-98-3(d).

or more of the cities or towns affected by [the] application” (Rule 1.6(g)) 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 full EFSB review. Rule 1.6(h). If the Board determines that the project will not 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. Rule 1.2(d) and Rule 1.6(f).

The “modification” of a transmission line includes “reconductoring and rebuilding an existing power line.” Rule 1.2(d). However, “the modification 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.” Rule 1.2(d).

As required by Rule 1.6(g), the Board convened hearings on March 21, 2001 at 2:00 PM in Warwick at the Public Utilities Commission offices and at 7:00 PM in the Woonsocket City Hall. Narragansett presented four witnesses: David J. Beron, Senior Engineer at National Grid USA Service Company and Project Engineer for the Project, who provided an overview and described the G-185N project; John Martin, Principal Engineer in the Transmission Planning Group for New England Power Company, who explained the study process that lead to the conclusion that the Project was needed; Robert Harvey, Project Engineer for the H17 project and Susan Moberg, Senior Environmental Scientist at Vanasse Hangen Brustlin, Inc., who had prepared the environmental analysis of the Project. The Chairman of the Board solicited public comment at each hearing, but none was offered.

### **III. Statutory Standard.**

As noted previously, the Board must determine whether the Project “may result in a significant impact on the environment or the public health, safety and welfare.” If the Board

determines that it may have such an impact, it will determine that the Project would constitute the alteration of a major energy facility and be subject to the full EFSB permitting process. Rule 1.6(h). If it determines that the Project will not have such an impact, the applicant is authorized to proceed with the Project.

#### **IV. Impact of the Project upon the Environment and Public Health, Safety and Welfare.**

The Project consists of reconductoring sections of two 115 kV transmission lines. Narragansett must reductor the lines in order to reliably interconnect the FPL Energy generating plant, presently under construction in Johnston, Rhode Island,<sup>3</sup> with the existing transmission system while avoiding overload of the transmission system during certain contingency operating conditions. (Exhibit Narragansett 2, § 1.1; Tr. 3/21/01, pp. 12-15.)

The first line that will be reducted is 1.2 miles of the H17 transmission line between Riverside Substation and Tower #154, south of State Route 122 in Woonsocket and the second is one mile of the G-185N transmission line between the Drumrock Substation on Route 117 and the Kent County Substation on Cowesett Road in Warwick. The proposed modification consists, in the case of the H17 line, of replacing three (3) wood poles within the 125 foot wide right-of-way at the Riverside Substation termination and replacing the existing 477 kcmil All Aluminum Conductors (AAC) conductors (wires) with 477 kcmil Steel Supported Aluminum Conductors (SSAC).

Reconductoring of the G-185N line will involve replacing seven (7) wood pole structures within the 190 foot wide right-of-way (ROW) between the I-95 off ramp and Cowesett Road and replacing the existing 795 kcmil AAC wires with higher capacity 795 kcmil Aluminum

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<sup>3</sup> The FPL Energy generating plant project (formerly RI Hope Energy Limited Partnership) was approved by the Board on May 24, 1999 (Docket No. SB-98-1.)

Conductor Steel Reinforced (ACSR) wires. These transmission lines were constructed in the early 1960's (Tr. 3/21/01, p. 9). The Project is described in greater detail in Chapter 1.2 of the Report prepared by Vanasse Hangen Brustlin, Inc. (the "Report"), which accompanied Narragansett's application and was admitted as Exhibit Narragansett 2 in these proceedings.

After describing the natural and social environments that will be affected by the Project (Report, Sections 2.1, 3.1, 2.2 and 3.2), the Report analyzed the potential impact of the Project on soils, surface waters, ground water, vegetation, wetlands, wildlife, land use and recreation, visual resources, noise, transportation, safety and public health, and electric and magnetic fields. (Report, Sections 2.3 and 3.3.) As permitted by Rule 1.6(f)(3), Narragansett has omitted a detailed analysis of certain environmental and social resources such as geology, climate, weather, air quality, regional population trends, employment conditions, and potential historic or ecological features (Report, Sections 2.1, 2.2, 3.1 and 3.2).<sup>4</sup>

Narragansett states that the transmission lines will be reconducted in accordance with the National Electrical Safety Code, guidelines established by the Institute of Electrical and Electronic Engineers ("IEEE"), the American National Standards Institute ("ANSI"), the Rhode Island Soil Erosion and Sediment Control Handbook, and Narragansett's Right-of-Way Vegetation Management Policies and Procedures. Report, Sections 1.2.4, 2.3.2, 2.3.5, 3.3.2 and 3.3.5.

Narragansett has committed to incorporating practices routinely used to minimize disturbances to vegetation and soil (i.e. haybales, access mats, seeding, and mulching.) There

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<sup>4</sup> Rule 1.6(f)(3) requires the applicant to provide a "detailed description and analysis of the impact of the project on the physical and social environment." This Rule continues: "to the extent the proposed project will have only negligible impact on any particular resource in the natural and social environment (e.g. geology, air quality or population) the applicant may so state and need not provide a detailed analysis of the baseline conditions for that resource."

also will be no additional tree clearing within the right-of-way, and existing maintenance roads will be used. Report, Sections 1.2.2, 2.3.2 and 3.3.2. Similarly, the use of erosion control measures in accordance with “Best Management Practices” that will be overseen by an “Environmental Monitor” will ensure that, as Ms. Moberg testified, the surface waters, groundwater, vegetation, wetlands, and wildlife will not be significantly impacted by the construction. Report, Sections 1.2.2.5, 2.3.3 to 2.3.7 and 3.3.3 to 3.3.7; Tr. 3/21/01, pp. 31-32.

From the edge of the right-of-way the improved transmission lines will not look any different than the existing transmission lines once the proposed reconductoring is completed. Report, Sections 2.3.9 and 3.3.9. Additionally, all noise and transportation impacts will be minimal, and will only exist during the construction phase which is common for any construction project. Report, Sections 2.3.10, 2.3.11, 3.3.10 and 3.3.11.

Finally, Narragansett has represented in the Report that electric field levels will not change from the existing levels and magnetic field levels at the edges of the ROW will only increase minimally. See §§ 2.3.13 and 3.3.13 and Bailey Report (Appendix A to the Report.). This issue was the subject of examination by Board counsel at the hearing. Data provided in the Report indicates that the magnetic field levels will increase from their existing levels upon this interconnection of FPL Energy plant. Report, Tables 1 and 2. By 2010 the fields will have dropped somewhat. Id.

We find that these levels, while higher than the existing levels, are below the levels reflected in the Tiverton Power Associates March 1997 filing with the Board (pp. 9-22 and 9-23 and Appendix J, p. 4), in the Hope Energy Project which this Board approved on May 24, 1999 (Docket SB-98-1) and in Narragansett’s S-171S and T-172S Reconductoring Project (Order 35).

V. Conclusion.

The testimony and exhibits presented by the Narragansett witnesses demonstrate that the proposal to reconductor the H17S and G-185N transmission lines will not result in a significant impact on the environment or on the public health, safety and welfare. Furthermore, the Board finds that Narragansett has taken appropriate steps to mitigate construction and other impacts of the Project.

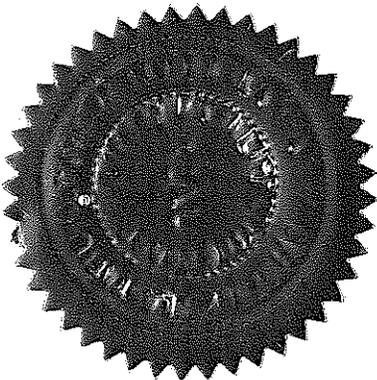
Accordingly, it is:

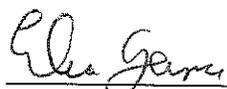
**(Order # 45) ORDERED:**

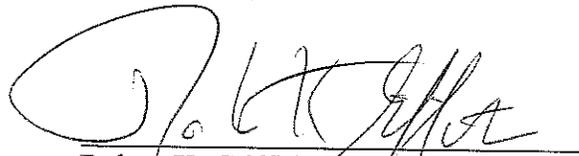
For the reasons discussed above, the Energy Facility Siting Board hereby grants Narragansett a license under Chapter 98 of Title 42 to authorize it to reconductor the H17 and G-185N 115 kV transmission lines as previously described.

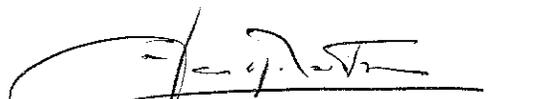
DATED AND EFFECTIVE at Warwick, Rhode Island on April 27<sup>th</sup>, 2001 pursuant to an open meeting decision. Written Order issued May 7, 2001.

ENERGY FACILITY SITING BOARD



  
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Elia Germani, Chairman

  
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Robert K. Griffith, Jr.

  
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Jan H. Reitsma