

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

In re The Narragansett Electric Company	:	
d/b/a National Grid	:	Docket No. SB-2016-01
(Aquidneck Island Reliability Project)	:	

Testimony of

Susan Moberg, PWS, CFM

March 3, 2017

1 Q. Please state your full name and business address.

2 A. Susan Moberg, Vanasse Hangen Brustlin, Inc. (VHB), 1 Cedar Street, Suite 400,
3 Providence, Rhode Island.

4 Q. By whom are you employed and in what position?

5 A. I am employed by VHB as a Director of Energy and Environmental Services for the
6 Providence office.

7 Q. What are your responsibilities as Director of Energy and Environmental Services?

8 A. As Director of Energy and Environmental Services I am responsible for the management
9 of various environmental investigation and permitting projects within the VHB Rhode
10 Island market area.

11 Q. Please describe your education, training and experience.

12 A. I received a Bachelor of Science Degree in Soil and Water Resource Science from the
13 University of Rhode Island. I am a certified Professional Wetland Scientist, a
14 Professional Soil Scientist, a Rhode Island Department of Environmental Management
15 Licensed Soil Evaluator, a Coastal Resources Management Council-Certified Invasives
16 Manager, and a Certified Floodplain Manager. I have twenty-four years of experience
17 performing environmental evaluation, investigation and permitting for various public and
18 private sector projects. A copy of my curriculum vitae is attached as Attachment SM-1.

19 Q. Are you familiar with National Grid's Aquidneck Island Reliability Project (the
20 "Project")?

21 A. Yes, I contributed to the Environmental Report ("ER") submitted by National Grid for
22 the Project, and supervised the preparation of the Rhode Island Department of

1 Environmental Management (“DEM”) Freshwater Wetlands permit application and the
2 Army Corps of Engineers (“ACOE”) permit application for the Project.

3 Q. Are you familiar with the environmental conditions of the site of the Project?

4 A. Yes, I have studied the transmission line right-of-way (“ROW”) between the Dexter
5 Substation and the existing Jepson Substation as well as the proposed site for the new
6 Jepson Substation (collectively the “Project Site”). In addition, I supervised the field data
7 collection, wetland delineation, and monitoring activities performed by VHB for the
8 Project.

9 Q. What is the scope of your testimony in this proceeding?

10 A. I will provide an overview of the environmental conditions, describe potential Project
11 impacts, and respond to the Middletown Building Inspector’s advisory opinion on the soil
12 erosion sediment control plan and the Project’s consistency with the Town of
13 Middletown Comprehensive Plan (the “Comprehensive Plan”). Finally, I will explain my
14 opinion as to whether the Project will cause significant harm to the environment.

15 Q. Please summarize the environmental conditions in the area.

16 A. The Project spans 4.5 miles of variable terrain between the Dexter Substation on
17 Freeborn Street in Portsmouth and the site of the proposed new Jepson Substation on the
18 west side of Jepson Lane in Middletown, Rhode Island. The project ROW crosses
19 through areas of industrial development, areas of residential development, agricultural
20 lands, a golf course and many areas of wetland including several streams and two
21 drinking water reservoirs. The cleared ROW presently contains two existing
22 transmission lines supported by wood poles. The ROW is maintained in a managed

1 condition meaning that vegetation within the ROW is periodically mowed to maintain
2 safety clearances and access along the ROW for maintenance activities. The two
3 reservoirs noted previously are part of the City of Newport Water Department drinking
4 water supply system. Activities in and within the watershed of these reservoirs are
5 regulated by the Towns of Portsmouth and Middletown. Water quality in the ponds has
6 been determined to be “impaired” by the DEM, largely due to development and land use
7 activity within the watersheds. DEM is developing a Total Maximum Daily Load
8 (TMDL) study aimed at improving water quality in all nine of the Newport Water Supply
9 Reservoirs.

10 Q. Please evaluate the potential impact of the Project on the Project Site.

11 A. Potential impacts to the environment were evaluated as part of National Grid’s Project
12 design and development, and plans to avoid and/or mitigate these impacts have been
13 developed. National Grid assessed a range of environmental and social factors including
14 geology and soils, surface water, wetlands, water quality, hydrology, groundwater,
15 vegetation, wildlife, rare species, land use, visual resources, noise, transportation, cultural
16 resources, air quality, safety and public health, and electric and magnetic fields. National
17 Grid and their consultants, including VHB, assessed the range of possible impacts using
18 standard industry methodologies and practices, and concluded that there would be no
19 impact or minimal impact to geology, hydrology, groundwater, vegetation, wildlife, rare
20 species, land use, visual resources, noise, transportation, air quality, safety and public
21 health, and electric and magnetic fields. The results of these studies are documented in
22 the ER.

1 The construction phase of the Project has the potential to impact Project Site soils and
2 wetlands. Consequently, VHB worked with National Grid to develop a robust
3 construction access plan, and soil erosion and sediment control plan for the project to
4 mitigate these potential impacts. The soil erosion and sediment control plan was
5 designed in accordance with the Rhode Island Soil Erosion and Sediment Control
6 Handbook, and was prepared by individuals having a “Certified Professional in Erosion
7 and Sediment Control” (CPESC) registration and more than 40 years of experience
8 developing such plans. Impacts to Project area wetlands are largely temporary and are
9 predominately related to the placement of temporary wooden mats utilized to access the
10 structure work areas.

11 An Application to Alter Freshwater Wetlands has been filed with the DEM. Similarly, an
12 application for a Department of the Army Permit has been submitted to the ACOE.

13 Freshwater wetland alterations proposed as part of the Project include 1,819 square feet
14 of fill in palustrine wetland and 1,210 square feet of impact to perimeter and riverbank
15 wetland buffers for structure installation, and 21 acres of temporary impact in wetlands
16 for construction access to these structure sites. At the proposed Jepson Substation
17 permanent impacts to palustrine wetland are 7 square feet for a proposed new
18 transmission structure west of the substation, and 8,578 square feet of perimeter wetland
19 buffer impact for the substation construction. Preliminary review by these agencies
20 indicates that the proposed alterations of freshwater wetlands described above are not
21 significant.

1 Q. Have you reviewed the advisory opinion from the Town of Middletown Building
2 Inspector regarding the soil erosion and sediment plan?

3 A. Yes.

4 Q. Please respond to the comments in the advisory opinion regarding the soil erosion and
5 sediment control plan.

6 A. The advisory opinion provided by the Middletown Building Inspector details the Town's
7 findings regarding the Project's compliance with the Town's Code of Ordinances and
8 Comprehensive Plan. In general, the advisory opinion states that the Project does not
9 comply with certain provisions of Chapter 151 and Chapter 153 of the Code Ordinances
10 which deal with Construction Site Runoff Control and Stormwater Management.
11 National Grid has filed its Stormwater Management Plan and Soil Erosion and Sediment
12 Control Plan with the DEM as part of the Application to Alter Freshwater Wetlands
13 submitted in December 2016. DEM, in its role as the State's enforcement authority on
14 stormwater management and soil erosion and sediment control, is reviewing these plans.
15 National Grid anticipates coordinating with the DEM during the application review
16 process and providing supplemental engineering as needed to satisfy the concerns of
17 DEM engineers reviewing the application. National Grid understands that the Project is
18 subject to receipt of approval from DEM.

19 Q. Are you familiar with the Middletown Comprehensive Plan?

20 A. Yes.

21 Q. Please respond to the comments in the advisory opinion regarding the Middletown
22 Comprehensive Plan.

1 A. VHB reviewed the 2014 Middletown Comprehensive Plan during the preparation of the
2 ER. Chapter V. Economic Development of the Comprehensive Plan identifies the need
3 for investments in critical infrastructure to promote economic vitality within the Town.
4 The importance of electrical capacity is specifically called out in the Comprehensive Plan
5 Chapter V. Economic Development Goal E.I.E.1. Page V-19. The Project, which is
6 being undertaken to support the long-term reliability of electric service on the Island,
7 explicitly supports this Comprehensive Plan goal.

8 The Building Inspector's advisory opinion concludes that the Project is not consistent
9 with several Comprehensive Plan goals regarding ecologically sound development;
10 preservation and restoration of environmentally sensitive land including flora, fauna and
11 water quality; preservation of existing forested areas; protection and enhancement of the
12 scenic qualities and heritage of the Town; and appropriately siting commercial and
13 industrial uses.

14 The design of the proposed substation took into account the protection of sensitive
15 ecological and natural areas, and applied ecologically sound development practices. The
16 Project design relocates the substation out of the watershed area of Sisson Pond,
17 increasing the protection and enhancement of public drinking water supplies.

18 The design of the proposed substation preserves environmentally sensitive areas by the
19 selection of the proposed site, which has historically been cleared, filled, graded, paved
20 and manipulated up until the time that National Grid purchased the property. Based on a
21 review of available historic aerial photographs. the most significant land disturbance
22 appears to have taken place in the 1980's. The on-site wetlands were subjected to a

1 similar history of clearing, grading, draining and filling. The proposed substation
2 substantially avoids wetland alterations and is sited predominately within the previously
3 disturbed, upland portions of the property, in a manner that avoids clearing mature trees.
4 Site clearing is proposed, but is limited to areas lately colonized by shrubs and saplings,
5 and some grassy areas.

6 The proposed substation design includes several elements intended to protect and
7 enhance the scenic quality on the site. These elements include a robust landscaping plan
8 including 35 shade trees with an average mature height of roughly 30 feet, 151 evergreen
9 trees with a variable mature height ranging from 15 to 60 feet, and 160 shrubs with a
10 mature height ranging from 8 to 15 feet. At the time of planting, the trees will range in
11 size from 5 to 10 feet in height, and the shrubs 2 to 5 feet. The species selected include
12 many native species, as well as naturalized species consistent with the horticultural
13 character of the area.

14 The proposed substation site was selected with great care and deliberation. Prior to filing
15 the ER, National Grid conducted an evaluation of several potential sites for the new
16 substation including the existing site, two locations within the property west of Jepson
17 Lane, and two other properties that National Grid would need to purchase that were
18 suggested by the Town. These alternatives were evaluated on the basis of proximity to
19 the existing transmission and distribution systems, availability of the site and legality of
20 using it for the proposed substation, presence of sensitive environmental receptors, and
21 access from public rights of way. Of the five alternatives evaluated, the proposed site
22 met the Project purpose and presented the least environmentally damaging, feasible

1 alternative.

2 Q. In conclusion, based upon your knowledge of the Project as proposed by National Grid,
3 do you have an opinion as to whether the Project will cause unacceptable harm to
4 environment?

5 A. Yes, I do.

6 Q. What is that opinion?

7 A. In my opinion, the Project will not result in significant or unacceptable harm to the
8 natural environment. Impacts to the Project Site during construction will be avoided and
9 mitigated through the implementation of a robust soil erosion and sediment control plan
10 as noted above. National Grid will deploy erosion and sediment control best
11 management practices (“BMPs”) such as compost filter sock or straw wattle perimeter
12 sedimentation controls, swamp mat roads and work pads over wetlands and sensitive or
13 saturated soil areas to avoid soil disturbance, and post construction restoration work
14 including removal of the above described BMPs, smoothing rutted areas, and spreading
15 straw mulch and native seed to promote soil stabilization. All of these activities will be
16 overseen by a qualified environmental monitor with experience on similar types of
17 construction projects. The environmental monitor will be National Grid’s eyes and ears
18 on the work site and will have authority to stop work if field conditions warrant it. The
19 monitor will provide daily reports to National Grid and would also periodically report to
20 the DEM if required by permit conditions.

21 Q. Does this conclude your testimony?

22 A. Yes, it does.

The Narragansett Electric Company
d/b/a National Grid
Aquidneck Island Reliability Project
EFSB Docket No. SB-2016-01
Witness: Susan Moberg, PWS, CFM

ATTACHMENT

SM-1 Curriculum Vitae of Susan Moberg, PWS, CFM