

The Narragansett Electric Company
d/b/a National Grid (Aquidneck Island Reliability Project)
RIPUC Dkt. No. 4614

Rebuttal Testimony of
Susan Moberg, PWS, CFM

August 24, 2016

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 with 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 with the
14 Society of Wetland Scientists, a Professional Soil Scientist with the Society of Soil
15 Scientists of Southern New England, a Rhode Island Department of Environmental
16 Management Licensed Soil Evaluator, a Coastal Resources Management Council-
17 certified Invasives Manager, and a certified Floodplain Manager from the Association of
18 State Floodplain Managers. I have twenty-three years of experience performing
19 environmental evaluation, investigation and permitting for various public and private
20 sector projects. A copy of my vitae is attached as Attachment SM-1.

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

1 A. Yes, I contributed to the Environmental Report (“ER”) submitted by National Grid for
2 the Project and am supervising the preparation of the Rhode Island Department of
3 Environmental Management (“DEM”) Freshwater Wetlands permit application and the
4 Army Corps of Engineers (“ACOE”) permit application for the Project.

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

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

11 SCOPE OF TESTIMONY

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

13 A. In my testimony, I will respond to the prefiled testimony of Steven Cabral that was filed
14 on behalf of the Town of Middletown.

15 Q. Do you agree with Mr. Cabral’s assertion that common construction measures that can
16 mitigate potential impacts, mainly associated with stormwater runoff and spill prevention,
17 are the only requirement for building in the Watershed Protection Area?

18 A. No. Any new or significantly improved substation, regardless of its location in Rhode
19 Island, would be subject to Spill Prevention Control and Countermeasures (SPCC)
20 requirements established by the Environmental Protection Agency in accordance with the
21 Oil Pollution Prevention Regulation (40 CFR part 112), and stormwater runoff
22 management and water quality mitigation requirements in accordance with the Rhode

1 Island Stormwater Design and Installation Standards Manual (RISDISM)(RIDEM 2010,
2 as amended). The SPCC regulations require certain types of facilities, such as electric
3 substations with oil filled equipment, to develop SPCC Plans that describe equipment,
4 workforce, procedures, and training to prevent, control, and provide adequate
5 countermeasures to a release of oil. The RISDISM requires that any facility creating new
6 impervious surfaces or modifying 10,000 or more square feet of existing impervious
7 surfaces must comply with the manual. The RISDISM requires mitigation of increases in
8 peak runoff discharge rates and water quality renovation through the implementation of
9 one or more approved structural stormwater treatment practices for meeting water quality
10 criteria (e.g. best management practices or BMPs).

11 As noted in the Environmental Report Section 5-4 and Figure 6-4, the existing Jepson
12 Substation site in Portsmouth is located within Zone A of the Portsmouth Watershed
13 Protection District. Zone A encompasses any areas within 500 feet of Lawton Valley
14 Reservoir, St. Mary's Pond, and Sisson Pond or contiguous wetland as well as areas of
15 Stissing silt loam and Mansfield mucky silt loam (Portsmouth Zoning Ordinance Article
16 III, Section H.3). Permitted uses in Zone A, as defined by the Portsmouth Zoning
17 Ordinance, include conservation and management of natural resources, public water lines
18 and related facilities, public or private parks, single family houses and accessory uses,
19 agriculture and outdoor recreation areas and Historic Monuments. Electrical substations
20 are not a permitted use in Zone A.

21 For the reasons noted above, Mr. Cabral's assertion that common construction measures
22 can mitigate any potential impact is wrong.

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1 Q. Does this conclude your testimony?

2 A. Yes, it does.

Susan Moberg, PWS, CFM

Principal/Director of Energy and Environmental Sciences



Susan leads VHB's Environmental Sciences Group in Rhode Island. She has expertise in environmental site assessments, wetland delineation, and soil analysis, with a particular emphasis on the energy sector and the coastal environment. Susan has expertise in managing large complex projects requiring diverse skill sets.

23 years of professional experience

Education

BS, Soil and Water Science,
University of Rhode Island,
1993

Registrations/ Certifications

Professional Wetland
Scientist (Wetland Science),
2003

Professional Soil Scientist
(Soil Science), 1997

Licensed Soil Evaluator (Soil
Science) RI, 2000

Certified Floodplain
Manager, 2015

RI Invasive Manager (IM)
(Coastal Buffer Zone
Management) RI, 2009

Affiliations/ Memberships

Society of Wetland Scientists

Society of Soil Scientists of
Southern New England

Association of State
Floodplain Managers, 2013

National Grid Aquidneck Island Reliability Project, Rhode Island

Susan is VHB's Project Manager for the National Grid Aquidneck Island Reliability Project (AIRP). The purpose of the project is to improve electric reliability on Aquidneck Island which routinely experiences brown-outs and black-outs in the summer time. The project involves the reconstruction of 4 miles of 69 kV transmission line and upgrading the voltage to 115 kV, construction of a new substation in Newport, reconstruction of a substation in Middletown, modifications to a substation in Portsmouth, improvement of approximately 30 miles of distribution line, and retirement of 5 existing substations in Middletown and Newport. VHB is providing environmental, engineering and aviation permitting support. VHB prepared and filed the Environmental Report with the RI Energy Facility Siting Board in December 2015, and is preparing federal, state and local environmental permits for filing in the spring of 2016.

National Grid, Rhode Island Reliability Project, Rhode Island

Susan managed VHB's licensing, permitting, and engineering contract with National Grid on the Rhode Island Reliability Project, which is a 24-mile transmission line improvement project. The project spans six Rhode Island municipalities and involves reconstruction of existing facilities within the right-of-way, which includes an existing 345 kV line and two 115 kV transmission lines, and construction of a new 345 kV transmission line. Improvements to West Farnum Substation, Hartford Avenue, Drumrock and Kent County Substation were also planned. Susan oversaw the preparation of the Energy Facility Siting Board (EFSB) Environmental Report, state and federal wetland permit applications, various plans and graphics to support local planning and zoning applications, state and local traffic permit applications, and local stormwater/erosion control applications. She provided expert testimony regarding the project impacts during the EFSB evidentiary hearings, and was cross-examined by counsel from the RI Attorney General's office and project interveners. Construction was completed in 2013.

Chase Hill Substation, Hopkinton, RI

Susan managed VHB's survey, design and permitting contract with National Grid for the proposed substation in Hopkinton, Rhode Island. National Grid owned a site that was preferred for the development. Because the site was surrounded by residential abutters, the project quickly became a source of contention abutters and subsequently, the Town Council. As directed by the Public Utility Commission in response to an Appeal filed by National Grid, National Grid and VHB conducted an analysis of more than 20 sites within Hopkinton and Westerly to assess suitability for a new substation. Several of these sites were analyzed in detail and tasks included wetland delineation, surveying, review of



environmental assessments and conceptual design layout. Following the identification of a new preferred site in 2012, National Grid requested VHB to perform wetland delineation, land survey, environmental licensing & permitting, and traffic permitting for the new site. Permits were issued in 2014 and construction commenced in 2015. VHB is providing environmental compliance monitoring during construction.

Southern Rhode Island Transmission Project, Rhode Island

For the Narragansett Electric Company d/b/a National Grid, Susan managed a project that included eight component projects, including rehabilitation of 12 miles of existing transmission line through Warwick, South Kingstown, and Charlestown; construction of 12.5 miles of new transmission line through East Greenwich, North Kingstown, Exeter, and South Kingstown; and development of a new electrical substation in North Kingstown. Significant tasks included wetland delineation along the entire project corridor, coordination with the Rhode Island Natural Heritage Program (RINHP) regarding rare species, preparation of permit applications including Army Corps of Engineers (ACOE), Rhode Island Department of Environmental Management (RIDEM), and Rhode Island Energy Facility Siting Board (EFSB) applications. The presence of osprey along many segments of the right of way necessitated coordination with the RIDEM Division of Fish and Wildlife prior to relocation of the nests sites. Extensive public outreach and local negotiation was necessary due to the objections of many abutters. Consultation with the Narragansett Indian Tribal Historic Preservation Officer over possible impacts to significant tribal sites was required. The project received required approvals in September 2007, and was completed in 2008.

E-183 Transmission Line Relocation Project

Relocation of 6,200 linear feet of 115 kV transmission line through Providence and East Providence. Permitting efforts included the Rhode Island Coastal Resources Management Council (CRMC), U.S. Army Corps of Engineers (ACOE), Rhode Island Department of Environmental Management (RIDEM) and EFSB applications. This highly controversial project included expert testimony at a series of EFSB hearings spanning a 12-month timeframe. Susan was cross-examined by RI Attorney General's representatives objecting to the project.