STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition of BNE Energy Inc. for a Declaratory Ruling for the Location, Construction and Operation of a 4.8 MW Wind Renewable Generating Project on Flagg Hill Road in Colebrook, Connecticut ("Wind Colebrook South")

Petition No. 983

March 15, 2011

PRE-FILED TESTIMONY OF MATTHEW DAVISON

Q1. Please state your name and profession.

A1. Matthew Davison and I am a registered soil scientist and Connecticut certified forester (#193) with Vanasse Hangen Brustlin, Inc. ("VHB"). VHB is located at 54 Tuttle Place in Middletown, Connecticut.

Q2. Please summarize your professional background and experience.

A2. I have a B.S. in forestry from the University of Massachusetts. I have 13 years of experience as a natural resource professional. My experience includes various activities related to wetlands delineation, evaluation, forest management and permitting before local, state and federal bodies. In addition, I have worked on a number of utility projects including substations and transmission corridor studies, conducting state and federal wetlands delineation, wetland functions and values assessments, habitat assessments and consultations with the Department of Environmental Protection (CTDEP) regarding state listed species. My resume is attached hereto as Exhibit 1, which details my qualifications and experience.

Q3. What did you do to determine the existence of wetlands on the proposed wind energy project site?

A3. I performed an on-site inspection of the approximate 79.74 acre parcel located at 17 and 29 Flagg Hill Road in Colebrook, Connecticut (the "Property"). The Property was inspected in its entirety in order to properly evaluate potential turbine locations and access options. This inspection was generally conducted over two dates, January 29 and March 16, 2010. Additional inspections were conducted on June 18 & 22, 2010 to review proposed turbine locations and access road configurations and October 24, 2010 to continue wetland lines that were found, following the A-2 boundary survey, to fall short of the Property boundaries. A Wetlands Delineation Report, dated March 30, 2010 was prepared and provided in the Petition, Volume 3, Exhibit I, Attachment A.

Q4. Based upon your inspection are there any wetlands located on the Property, and if so, please describe these wetlands?

A4. Yes. There are three wetland systems on the Property. The Wetland Delineation Report

identifies five wetland areas on the Property; however, it was found subsequent to the wetland delineation work and following the Property boundary survey that Wetlands 3 and 4 were located off-site to the south. Wetland 1 is a large wetland complex that is dominated by a beaver pond. Forested wetland lobes extend to the north and west of the beaver pond that drain into this system. Within the western lobe, an intermittent watercourse generally having a diffuse meandering flow pattern drains into the beaver pond from the west property boundary. While soil characteristics within this wetland complex are consistent, the vegetation and hydrology vary. Open water areas are permanently inundated and generally unvegetated. The forested wetland lobe extending north of the beaver pond is seasonally saturated and dominated by hardwood tree species such as red maple, yellow birch and American beech. The wetland lobe extending west of the beaver pond is a seasonally saturated hemlock wetland.

Wetland 2 is a small wetland finger extending onto the site from a wetland on the adjacent property to the north. While the narrow interior of this wetland feature is generally void of woody vegetation, the fringes are dominated by American beech and eastern hemlock.

Wetland 5 is a forested hillside seep wetland draining northeast along the east property boundary. An intermittent watercourse feature, having diffuse flows and intermittent channel, flows within the wetland interior. Flows are conveyed beneath an existing gravel driveway through a 36" corrugated metal pipe. An additional intermittent watercourse feature was delineated along the west side of the existing driveway. This feature is characterized as a dug drainage ditch that intercepts seasonal high groundwater providing seasonal base flow into the ditch. This drainage feature flows into Wetland 5 north of the existing driveway.

Q5. Based upon your investigation, are there any vernal pools located on the Property?

A5. Based on guidance provided by the CTDEP, to meet the definition of a vernal pool, four criteria must be met:

- It contains water for approximately two months during the growing season;
- It occurs within a confined depression or basin that lacks a permanent outlet stream;
- It lacks any fish population; and,
- It dries out most years, usually by late summer.

None of the delineated wetland areas are characterized as a confined depression or basin and as such do not meet the traditional or "classic" definition of a vernal pool. However, the potential may exist within portions of the interior of the delineated wetland areas, particularly where each of the two forested wetland lobes transitions to the beaver pond, for "cryptic" vernal pool habitat to exist. Cryptic vernal pools are areas within wetlands that provide the appropriate hydrology to support breeding habitat for obligate vernal pool species. BNE Energy has retained the services of herpetologist Michael W. Klemens, PhD to evaluate the on-site wetlands for the presence of obligate vernal pool species. The evaluation will be undertaken in March and April, 2011.

Q6. Were efforts made during the design phase of this project to avoid or minimize impacts to wetland resources?

A. Yes. Following an evaluation of wind data, General Electric (GE) provided BNE Energy its recommended turbine locations. These locations would effectively maximize the turbine

outputs based solely on wind speed, direction and elevation. One turbine location, in the southwest portion of the Property, would have required a significant wetland and watercourse crossing within an undisturbed portion of Wetland 1. The project team, which including myself, BNE and GE, worked to re-configure the turbine location to avoid crossing Wetland 1 at this undisturbed portion of Wetland 1. The currently proposed turbine location resulting from this alternatives evaluation requires one wetland crossing over a forested portion of Wetland 1 in proximity to a disturbed area that had been used previously as a logging road crossing. In addition, the proposedwetland crossing is at a narrow point in the wetland and no watercourse feature is associated with this portion of the wetland. The proposed wetland crossing would require permanent direct wetland impacts associated with the construction of a gravel access road totaling approximately 4,722 square feet. These wetland impacts are unavoidable in order to access Turbine Location 3. To try and minimize these unavoidable impacts, BNE Energy, Inc has agreed to utilize a narrow track crane which will reduce the necessary width of the access road crossing from 35 feet to 20 feet thereby reducing permanent wetland impacts. In addition, an alternate crossing design that includes a subsurface drainage structure known as a "French Mattress" will eliminate the need for culvert crossings, thereby reducing the necessary road height and as such, wetland filling. The French Mattress will also allow for conveyance of surface and subsurface hydraulic flow from either side of the wetland crossing resulting in minimal impact to the wetland's hydrology (e.g., no impediment of surface or subsurface flows or concentration of flows). Efforts were made during the design phase of this Project by BNE Energy, Inc. and VHB to determine if a suitable alternate access road could be constructed from the Northwest Connecticut Sportsman property to the north that might avoid or minimize wetland impacts. It was determined that this alternate access would not avoid or reduce wetland impacts as such an access would require direct wetland impacts as well as a watercourse crossing.

Q7. Where direct wetland impacts are unavoidable, what measures were taken to evaluate the potential affect of these impacts on the wetland.

A. As detailed within the Petition, Volume 3, Exhibit I, a wetland evaluation was conducted to determine the principal and secondary functions and values supported by Wetland 1 with focus on the wetland area in proximity to the location of the proposed wetland crossing. This evaluation was conducted with the anticipation that the information derived would be utilized to promote a mitigation strategy that would adequately compensate for the wetland functions and values impared and/or lost as a result of the proposed wetland filling.

There are many methods of evaluating wetlands and these methods have often chosen different parameters to evaluate. *The Highway Methodology Workbook Supplement, Wetland Functions and Values: A descriptive Approach* issued by the US Army Corps of Engineers New England District (COE NED), September 1999 was used to evaluate the proposed wetland impacts. This evaluation provides a qualitative approach in which wetland functions can be considered primary, secondary, or unlikely to be provided at a significant level. Functions and values can be principal if they are an important physical component of a wetland ecosystem (function only), and/or are considered of special value to society, from a local, regional, and/or national perspective. The COE NED recommends that wetland values and functions be determined through "best professional judgment" based on a qualitative description of the physical attributes of wetlands and the functions and values exhibited.

The Highway Methodology recognizes 13 separate wetland functions and values, similar to those identified in *Method for the Evaluation of Inland Wetlands in Connecticut*, CTDEP Bulletin No. 9, October 1986, revised March 1991. These functions and values include: Fish and Shellfish Habitat; Wildlife Habitat; Production Export (Nutrient); Floodflow Alteration (Storage & Desynchronization); Groundwater Recharge/Discharge; Sediment/Toxicant/Pathogen Retention; Nutrient Removal/Retention/Transformation; Sediment/Shoreline Stabilization; Recreation; Educational/Scientific Value; Uniqueness/Heritage; Visual Quality/Aesthetics; Threatened or Endangered Species Habitat. It should be noted that while the functions and values evaluation was specific to areas of Wetland 1 in proximity to the proposed direct wetland impacts, Wildlife Habitat, Uniqueness/Heritage and Visual Quality/Aesthetics considered the attributes of Wetland 1 in its entirety. Impacts to Wetland 1 have the potential to alter these functions and values irrespective of their location within the wetland system.

The results of the wetland evaluation determined that, while Wetland 1 in its entirety provides numerous functions and values at a principal level, the area of the proposed crossing provides a different set of functions. The proposed crossing is located within an area characterized as a seasonally saturated forested headwater wetland. It lacks many of the attributes that are present within the main body of Wetland 1 to the south. Headwater wetland systems are considered particularly important in water quality management as they are the first step in treating water moving from uplands to stream systems. The location of the proposed crossing within Wetland 1 and the method of crossing to be used (e.g., French Mattress) will not result in a likely adverse impact to these functions.

Q8. Describe the potential short and long term impacts to the wetland resource directly affected by the access road crossing including measures that could be adopted to mitigate for these impacts.

A. The fundamental concept of wetland impact analysis is based on the precept that wetland impacts should first be avoided where possible. Secondly, if practicable alternatives do not exist to avoid wetland impacts, then impacts should be minimized. Thirdly, unavoidable wetland impacts should be mitigated and more specifically compensation for lost or impared wetland functions should be included in the mitigation. The Petioner has largely been successful through thoughtful design modifications that have minimized permanent wetland impacts associated with the access road crossing. Potential short term wetland impacts are primarily associated with the construction of the wetland crossing and subsequent erosion and sedimentation resulting from failed or inadequate erosion control features. Potential long term wetland impacts associated with the proposed wetland crossing are related to a loss or imparment of functions and values associated with Wetland 1 at the location of the crossing.

In order to avoid erosion and sedimentation of wetland resources during construction of the access road crossing, the Erosion and Sediment Control Plan will be consistent with the Connecticut Department of Environmental Protection (CTDEP), *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. A construction sequence detailing the proposed wetland crossing will be submitted during the Development and Management phase of the project. The construction sequence will include a more detailed erosion and sedimentation control plan specific to this area, geotechnical data acquired at this location and measures such as dewatering that may be necessary to construct this crossing.

Long term wetland impacts are related to permanent impacts associated with the wetland crossing and the potential loss/imparment of functions and values associated with Wetland 1. While the portion of Wetland 1 that would be subject to filling may not provide Wildlife Habitat at a principal level, it is a portion of a larger intact wetland corridor that, in its entirety provides this function at a principal level. Impacts associated with the proposed access road crossing will not have a significant adverse effect on this function. In addition, the proposed crossing of this portion of Wetland 1 and the method of crossing to be used (e.g., French Mattress) will not result in a likely adverse impact to other functions supported by this wetland further to the south. The access road width and associated tree clearing have been minimized to the greatest extent possible. Additionally, the surface of the proposed gravel access road will be located approximately one foot above the existing wetland surface grade and will not be curbed. As such, it will not impede movement of herpitofauna and other smaller wildlife species that may exist within this corridor. Additional design consideration will include a geocell or equivalent structure on the gravel road surface at the completion of turbine construction (and crane access). Geocells are fexible mats that include a honeycombed structure that is spread and pinned, then filled with gravel. The geocell confines the fill material, adding structural support and preventing migration of the gravel to the adjacent wetlands.

Appropriate wetland mitigation strategies are necessary where direct wetland impacts are proposed. Typically, these strategies are targeted to compensate for the functions and values lost/impared as a result of wetland filling. In the case of Wetland 1, the proposed impacts are not likely to have a significant adverse effect on functions supported by this wetland, either at the crossing location or further south. Despite this finding, wetland mitigation should be provided to compensate for wetland area loss. Absent the need to compensate for wetland functions and values, a variety of wetland mitigation strategies should be considered. On site wetland creation is not recommended due to the limited opportunities to expand existing wetlands or reclaim or restore historically disturbed wetlands. Off site mitigation strategies such as in-lieu-fee (ILF) programs are gaining in popularity and have been proven to be a very effective means of mitigating for impacts where on-site availability is limited. These programs provide a mechanism by which fees can be paid in lieu of mitigation. The District Engineer of the New England District, Corps of Engineers ("Corps") is currently considering an ILF prospectus from Audobon Connecticut. This program would utilize funds to target larger, ecologically valuable parcels that are prioritized based on landscape and watershed. Additional ILF program opportunities may be available through local conservation groups or property owners. A potentially more intriguing and feasible mitigation opportunity should be explored immediately north of the Property. The Northwestern Connecticut Sportsman's Association, who owns the abutting property to the north, has created an early successional habitat area to the north of Turbine Location 3. This area was created with a grant from the U.S. Fish and Wildlife Service to promote habitat diversity. Early successional habitat types and the wildlife that utilize these habitats are in decline in Connecticut.

Q9. Describe the efforts that were undertaken to determine whether or not the proposed wind project could impact any state listed Endangered, Threatened and Special Concern species?

A. I performed a review of the CTDEP's Natural Diversity Data Base (NDDB) which identifies general areas of concern with regards to state and federally listed Endangered, Threatened, and Special Concern species and significant natural communities. I found that the most recent (updated August 2010) digitally available NDDB map depicted an area of concern

on the eastern portion of the Property in the vicinity of Flagg Hill Road. As such, I completed and submitted a NDDB Review Request Form and supporting materials to the CTDEP Bureau of Natural Resources to determine if a potential conflict exists between the proposed development and a species or natural community of concern. Correspondence from the Bureau of Natural Resources revealed that Great St. John's-wort *(Hypericum ascyron)*, a state species of special concern plant, occurs in a wetland to the east of the Property, across Flagg Hill Road. CTDEP recommended that if any direct or indirect activities are proposed for this area, that a description of work is provided to CTDEP in order to avoid negative effects to the species and its habitat. A letter and plans were submitted to CTDEP to confirm that the proposed development will not adversely affect this species. Great St. John's-wort prefers streambanks, wet meadows and thickets (Connecticut Botanical Society). Direct wetland impacts associated with the Project are limited to a historically disturbed forested wetland not associated with a watercourse and as such are not likely to affect this species. The CTDEP agreed with VHB's findings in a letter dated January 13, 2011.

In addition, VHB environmental scientists Linda Vanderveer and Jeffrey Peterson conducted a site visit to document vegetative and structural habitat features on the Property. Copies of their resumes are attached hereto as Exhibit 2. Using this field collected information, as well as information I collected during various site visits, Ms. Vanderveer used DeGraaf and Yamasaki's *New England Wildlife: Habitat, Natural History, and Distribution* (2001) as a reference and general predictive tool to identify potential terrestrial mammals and herpetofauna (of note, VHB did not evaluate the Property with respect to birds and bats) that may be occupying the Property. Potential species that may be utilizing the Property are described in the Terrestrial Wildlife Habitat and Wetland Impact Analysis report (Exhibit I), Mammal and Herpetofauna Evaluation section.

Due to the diversity of wetland habitat types found on the Property as well as the proximity of these resource areas to the proposed Project area, BNE Energy, Inc. has retained the services of Michael W. Klemens PhD to perform an assessment of the site for obligate vernal pool amphibians and northern spring salamander.

The statements above are true and accurate to the best of my knowledge.

3-15-2011
Date

Matthew E. Davison

EXHIBIT 1

Matthew E. Davison

Soil Scientist

Mr. Davison provides natural resource permitting support including wetland delineation (including state of Connecticut and Federal methods), soil mapping and classification, wetland evaluation, wetland impact assessments, local, state and federal permitting, habitat surveys and components of NEPA documentation. Mr. Davison has expertise in a variety of activities related to forest management including forest mensuration, management planning, forest products harvesting and marketing.

Representative projects are summarized below.

On Call Environmental Services, Northeast Utilities Transmission Group
Supported various Connecticut projects, including assessment and permitting of bulk power substations, transmission lines/structures, underground utility installations, and environmental investigations of existing and proposed facilities. Provided natural resources inventories of existing flora and fauna, habitat evaluations, wetland delineations, wetland evaluations, site layout and design impact assessments, preparation of technical documents, coordination with State and local agencies, and permitting support.

Northeast Utilities, Central Connecticut Reliability Project
Managed and performed field efforts for natural resource and constructability evaluation along 35 miles of transmission lines in Central Connecticut. Natural resource evaluation included Connecticut and Federal wetland delineation, Army Corps of Engineers data plots, wetland functions and values assessment, inventory of State and Federal Threatened and Endangered species and cover type mapping. Constructability evaluation included documenting and mapping potential construction and maintenance access routes and transmission tower locations with respect to wetland and natural resource impacts and constructability constraints.

Northeast Utilities, Greater Springfield Reliability Project
Performed data collection, documentation and evaluation of constructability issues along 57 miles of transmission lines in Connecticut and Massachusetts. Evaluated potential construction and maintenance access routes and transmission tower locations with respect to wetland and natural resource impacts and constructability constraints.

Due Diligence Site Assessment, Utility Client, Connecticut
Provided technical support for due diligence site assessment regarding a proposed utility substation in Waterford, Connecticut. Tasks included habitat assessment, wildlife survey, wetland delineation, coordination of field work and documents necessary to show zoning compliance.

East Hartford Multi-Use Trail, East Hartford, CT
Provided wetland and permitting support services for a proposed 2.75-mile extension of the Charter Oak Greenway multi-use trail. Wetland services included Connecticut and Federal wetland delineations and wetland evaluation. Prepared CTDEP Stream Channel Encroachment Line (SCEL) Permit and Flood Management Certification Applications for activities conducted within the SCEL and 100-year floodplain of the Connecticut River. Coordinated proposed design within these resources with CTDEP and ConnDOT Environmental Planning regarding permitting implications of the proposed design of the trail and alterations that would minimize impact to floodplain resources to facilitate permitting effort.

Mr. Davison is a Registered Soil Scientist and Connecticut Certified Forester working in VHB's Middletown, Connecticut office. His areas of expertise include state and federal wetland delineation and evaluation, public testimony, federal, state and local permit preparation and a variety of activities related to forest management including forest mensuration, management planning, harvesting and forest products marketing.

13 years professional experience

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Waterford High School Expansion, Waterford, CT
Responsible for wetland delineations, wetland functions and values assessment, site layout and design impact assessments, preparation of technical documents, coordination with State and local agencies and permitting support. Responsible for wetland environmental permitting, as well as attending public meetings.

Verizon Wireless Permitting Support
Provide technical support including wetland delineation and site assessments for Verizon Wireless' wetland program. Responsible for wetland delineation, assessment, USFWS compliance documentation, design review for permit feasibility of telecommunications facilities in Connecticut and Massachusetts.

CVS/Pharmacy
Responsible for wetland delineations, wetland evaluations, site layout and design impact assessments, preparation of technical documents, coordination with State and local agencies and permitting support. Responsible for wetland environmental permitting, as well as attending public meetings.

Price Chopper, Oxford, CT
Responsible for wetland delineations, wetland evaluations, site layout and design impact assessments, preparation of technical documents, coordination with State and local agencies and permitting support.

Education	B.S., Forestry, University of Massachusetts, 1997
	New England Regional Soil Science Certificate, UMass and University of Connecticut, 2000
Registration	Member, Society of Soil Scientists of Southern New England , since 2001
Certifications	Connecticut Certified Forester #193, since 1999

EXHIBIT 2

Linda D. Vanderveer

Wildlife Biologist

Ms. Vanderveer is a biologist working in the Environmental Services Group at the Vanasse Hangen Brustlin Inc. Providence, Rhode Island office. Her skills include avian and vegetation surveys, wildlife habitat assessments, and environmental permitting.

Ms. Vanderveer is a biologist whose skills include avian and vegetation surveys, wildlife habitat assessments, and environmental permitting. Ms. Vanderveer has a Master's Degree in Environmental Science and Management with a specialization in Avian Ecology from the University of Rhode Island. Representative projects include:

National Grid 24-mile Rhode Island Reliability Project, North Smithfield to Warwick, RI
VHB was retained by National Grid to provide environmental services for proposed improvements to a 24-mile transmission line corridor through northern Rhode Island. As part of this effort, Ms. Vanderveer surveyed plants and wildlife along the corridor and conducted multiple natural resource surveys to identify existing conditions and state-listed rare plants and animals within the corridor. Linda also delineated state and federal Freshwater Wetland Resources along the corridor and identified vernal pool habitat in accordance with U.S. Army Corps of Engineers (ACOE) regulations. Ms. Vanderveer was part of the team responsible for preparing and filing all federal, state, and local permit applications for the project. She contributed chapters to comprehensive reports written for the Energy Facility Siting Board, Rhode Island Department of Environmental Management, and local building and planning departments. The project was successfully permitted and is now under construction.

National Grid Transmission Line Refurbishment, Saugus, MA
VHB was retained by National Grid to provide environmental consulting services during the Q-169 Transmission Line Reconductoring Project in Saugus, Revere, and Lynn, Massachusetts. A portion of the line runs through the Rumney Marshes, a state designated Area of Critical Environmental Concern in Saugus. VHB developed a five-year vegetation monitoring plan to document impacts resulting from construction activities. Linda assisted with the collection of baseline salt marsh vegetation data along the transmission line route as well as data collection in Year 1 post construction. As part of her work she identified plant species, conducted stem counts, and analyzed changes in vegetative dominance within designated survey plots. She then compared the baseline data with post-construction data and summarized her findings in a report that was subsequently submitted to the Massachusetts Executive Office of Environmental Affairs.

NSTAR Access Road Maintenance Program, Various Locations, MA
Ms. Vanderveer was one of seven field crews that delineated and located wetland areas along approximately 200 miles of existing Right-of-Way throughout Massachusetts to support NSTAR's comprehensive Access Road Maintenance Program in 2010. As part of her work, Ms. Vanderveer used a Trimble Geo XH handheld GPS unit to collect data for natural and cultural resource assessment, as well as environmental constraint data for use in identifying access roads that could be maintained.

Northeast Utilities Transmission Line Environmental Assessment, Watertown to Bloomfield, CT
As part of the regional New England East-West Solution project, VHB was retained by NU to perform environmental and constructability assessments on an existing 35-mile transmission corridor in Connecticut. Linda identified and assessed vernal pool habitat along the right-of-way, surveyed for rare plant and wildlife species, and conducted both field and desktop analyses of potential wildlife habitat. She prepared required documentation to support permit applications to the Connecticut Siting Council. Linda also conducted a field survey of 10 alternative route segments for the project, which involved identifying and mapping potential constraints such as statutory facilities, wetlands, and accessibility issues.

Calais LNG Wildlife Habitat Assessment, Calais, ME
Calais LNG retained VHB to document wildlife and vegetation necessary for a proposal to the Federal Energy Regulatory Committee to construct a liquefied natural gas receiving terminal and gas transmission pipeline. Ms. Vanderveer conducted a wildlife habitat assessment at the terminal site in Calais and throughout the 21-mile pipeline route. Her work included bird and wildlife field surveys, and synthesis of existing data gathered from local, state, and federal agencies.

Northeast Utilities Transmission Line Constructability Assessment, CT and MA
Linda was responsible for collecting data on accessibility and constructability issues along the 50-mile transmission line corridor of the Greater Springfield Reliability Project which spans parts of Massachusetts and Connecticut. She used a Trimble Geo XH handheld GPS unit in the field to gather data, such as impacts to wetlands and cultural features, and then helped prepare a written analysis and map set compiled from the data using GIS software.

National Grid Project Insulator Fitting and Replacement Project, Pawtucket, RI to Swansea, MA
Ms. Vanderveer was part of a two-person field crew that delineated wetlands and waterbodies along a 24-mile transmission corridor primarily located in southeastern Massachusetts. Linda used a Trimble Geo XH handheld GPS unit to collect wetland and other natural resource data along the proposed access routes to structures scheduled to be repaired After field work for the project was completed she helped prepare maps that depicted environmental and cultural constraints as well as preferred access routes to the structures.

National Grid Construction Monitoring, North Smithfield to Warwick, RI
National Grid retained VHB to conduct environmental monitoring for the Rhode Island Reliability Project. As an environmental monitor on the project, Ms. Vanderveer conducts weekly substation inspections to ensure compliance with federal, state, and local permit requirements. She is also part of a team of environmental monitors that conducts daily inspections of foundation drilling sites along this 24-mile corridor.

National Grid Distribution Line Coastal Permits, Various Locations, RI
VHB has been retained by National Grid to handle coastal permitting for electric and gas line maintenance and improvement projects. Ms. Vanderveer conducts site assessments and prepares permit applications for submission to Rhode Island's Coastal Resources Management Council.

Education	Master of Environmental Science and Management, University of Rhode Island, Kingston, RI, 2007 B.A., Communications, James Madison University, Harrisonburg, VA, 1996
Affiliations	Rhode Island Natural History Survey (RINHS) The Wildlife Society (TWS)

EXHIBIT 3

Jeffrey C. Peterson, CPSS, CPESC

Environmental

Mr. Peterson is a Soil and Wetland Scientist with VHB specializing in soil classification and mapping, soil chemistry, plant taxonomy, and delineation and evaluation of wetland resources. As a senior member of the Environmental Staff, his responsibilities include delineation and documentation of wetland resources by state and federal criteria, wetland functional assessments and wetland and wildlife monitoring studies.

Jeffrey Peterson is a Senior Soil and Wetland Scientist at VHB with 25 years experience. He has worked for VHB the last 17 years. His academic and professional background in soil science and ecology includes skills in wetland delineation, soil description, soil classification, erosion and sediment control planning, plant identification, environmental permitting and project impact evaluation. He holds ARCPACS certification as a Certified Professional Soil Scientist, CPESC certification as a professional in erosion and sediment control, and is certified by the Baltimore District of the Army Corps of Engineers as a Wetland Delineator. He has served on the New England Hydric Soils Technical Committee, responsible for establishing criteria for identifying wetland soils, since 1999.

As VHB's principal soil scientist, he is consulted on projects which involve soils related issues such as wetland delineation, soil stabilization, storm water management site selection and design, soil/chemical interactions, wetland mitigation site selection and design, wetland functional assessments, and monitoring studies. Jeffrey also is skilled in field ecology and botany and has conducted pool breeding amphibian and rare plant surveys for projects in Connecticut, Rhode Island, and Massachusetts. He has authored studies of breeding birds along recreational trails and power line corridors and used in successful state and federal permit applications. Representative projects include:

National Grid Reconductoring Projects, Various Location MA and RI
Jeffrey completed wetland delineations along more than 40 miles of transmission line ROW during the spring and summer of 2010. This delineation work was used to prepare applications to the Army Corps of Engineers required to replace conductors on existing transmission lines. Jeffrey assisted in the identification of access roads for use during this work.

National Grid Rhode Island Reliability Project, North Smithfield to Warwick, RI
Jeffrey completed vernal pool and rare, threatened and endangered species surveys along the 24-mile long project corridor that passes through six Rhode Island municipalities Data collected were used to complete the successful RIDEM Application to Alter a Freshwater Wetland and USACE Category II Programmatic General Permit application. Jeffrey responded to requests by the RIDEM for field locations of rare taxa in the northern portion of the project and produced figures included in the approval documents issued by the RIDEM.

Narragansett Electric Company Transmission Line Extension Project, Southern, RI
VHB was retained by the Narragansett Electric Company (TNEC) to delineate and inventory wetlands and prepare an Application to Alter Freshwater Wetlands for the RI Department of Environmental Management Office of Water Resources and an Individual Permit Application from the Army Corps of Engineers for a 12 mile long 115-kV transmission construction project. Jeffrey directed an effort to inventory breeding bird and wildlife habitat associated with the corridor and coordinate with the RI Natural Heritage Program. Jeffrey worked with TNEC staff to develop access plans and methods for clearing the corridor that would minimize habitat impacts. He authored portions of the permit applications dealing with wetland functions and values, existing wildlife habitat, and assessments of project impacts to existing resources.

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NSTAR Access Road Maintenance Program, Various Locations, MA
Jeffrey led one of seven field crews that delineated wetland areas along approximately 200 miles of existing Right-of-Way throughout Massachusetts in 2010 to support NSTAR's comprehensive Access Road Maintenance Program in 2010. Mr. Peterson used his knowledge of New England landforms to direct the efficient and accurate delineation of wetlands within the transmission line ROW. .

Northeast Utilities Transmission Line Environmental Assessment, Watertown to Bloomfield, CT
As part of the regional New England East-West Solution project, VHB was retained to perform environmental and constructability assessments on an existing 35-mile transmission corridor in Connecticut. Jeffrey led an effort to identify and evaluate vernal pool habitat along the right-of-way and produced a report classifying the sixty vernal pools encountered. He also coordinate with CTDEP staff to obtain information and conduct field surveys for rare plant and wildlife species. Element occurrence forms were completed to document the rare taxa encountered in the field. These forms were forwarded to the client and subsequently the Connecticut Natural Diversity Data Base to update records. Jeffrey also conducted field surveys of 10 alternative route segments for the project, which involved identifying and mapping potential constraints such as RTE species, cold water fisheries, wetlands, public water supply aquifers, and erosion hazards.

Calais LNG Wildlife Habitat Assessment, Calais, ME
Calais LNG retained VHB to document wildlife and vegetation necessary for a proposal to the Federal Energy Regulatory Committee to construct a liquefied natural gas receiving terminal and gas transmission pipeline. Jeffrey conducted habitat assessments along portions of the 21-mile alignment, focusing on the vegetation in umbrotrophic bogs. He also assisted in the collection of bird survey data use in the preparation of state and federal applications.

Education	Graduate Level Studies in Soil Science, University of Massachusetts Graduate Research in Soil Science, University of Connecticut B.S., Biology, University of Connecticut, 1977
Certifications	ARCPACS Certified Professional Soil Scientist No. 25010 CPESC Certified Professional in Erosion and Sediment Control No. 2696 CRMC Master Design Certificate in Low Impact Development No. 1106034 RIDEM Class IV Soil Evaluator D4039 USACOE Certified Wetland Delineator No. DCP93MD0919983B