STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 24-____-PET

Petition of Vermont Transco LLC, and Vermont	)
Electric Power Company, Inc. (collectively,	)
"VELCO"), for a certificate of public good pursuant	)
to 30 V.S.A. § 248 authorizing upgrades to VELCO's	)
existing Windsor Substation, located in Windsor,	)
Vermont	)

PREFILED TESTIMONY AND EXHIBITS OF JACOB T. REED
FOR VERMONT ELECTRIC POWER COMPANY, INC. AND VERMONT TRANSCO LLC

Summary of testimony: Mr. Reed's testimony explains how the Project will not have an undue adverse impact on the natural environment, historic sites, and outstanding resource waters under 30 V.S.A. § 248(b)(5) and (8). He sponsors the Natural Resource Assessment prepared for the Project by Arrowwood Environmental and addresses each of the Act 250 natural resource criteria incorporated into 30 V.S.A. § 248(b)(5) and outstanding resource waters under 30 V.S.A. § 248(b)(8) & 10 V.S.A. § 1424a(d).

EXHIBIT LIST

Introduction and Qualifications

Q1. Please state your name, occupation, and business address.

A1. My name is Jacob T. Reed. I serve as Senior Environmental Specialist for Vermont Electric Power Company, Inc. My business address is 366 Pinnacle Ridge Road, Rutland, Vermont.

Q2. Please describe your educational background and professional experience.

A2. I received a Bachelor of Science degree in Architectural Engineering Technology from Vermont Technical College, and a Master of Science in Environmental Studies and Sustainability from Unity College. I have been employed full-time by VELCO since November 2012. I have worked on a variety of environmental projects at VELCO.

Q3. What is your role in Project planning and execution?

A3. As Senior Environmental Specialist assigned to the Windsor Substation Project, I am responsible for gathering natural resource and archeological data that are necessary to inform VELCO's plans to upgrade the existing Windsor Substation. My role includes selecting qualified consultants and supervising their work; familiarizing myself with the Project location and immediately surrounding area to determine the appropriate Project Assessment Area; and identifying and obtaining all other permits necessary to execute VELCO's construction plans.

Purpose of Testimony

Q4. What is the purpose of your testimony?

A4. My testimony explains how the Project satisfies the environmental and historic sites criteria applicable to electric transmission projects under 30 V.S.A. § 248. Specifically, I address the Project's potential impacts on primary agricultural soils; air and water purity and pollution; the natural environment and use of natural resources; greenhouse gas emissions; headwaters; waste disposal; water conservation, water sufficiency, and burden on existing water supply; floodways; streams; shorelines; wetlands; soil erosion; historic sites; rare and irreplaceable natural areas; necessary wildlife habitat; rare, threatened and endangered species; and outstanding resource waters. I also present the Natural Resources Assessment Report prepared for VELCO by Arrowood Environmental under my supervision.

Q5. Please identify Exhibit PET-JTR-2.

A5. Exhibit PET-JTR-2 is the Natural Resource Assessment Report mentioned above that identifies potential natural resource impacts arising from the Project. The report informs my judgment about the Project's compliance with the environmental criteria applicable to electric transmission projects under Section 248. The report was prepared for VELCO under my supervision, and I have reviewed it, and I agree with the facts and conclusions presented in it.

Description of Project Assessment Area and Natural Resource Features

Q6. Please describe the Project Assessment Area and its natural resource features.

A6. The Project Assessment Area (PAA) includes approximately 20.8 acres around the substation footprint, all on VELCO's property. Please see Exhibit PET-JTR-2, Figure 2. The PAA sits approximately 200 feet above mean sea level and is comprised of a mixture of forest and open field vegetation. The forested areas consist of Northern Hardwood, White Pine-Northern Hardwood, and Hemlock-Northern Hardwood. Soils within the PAA are characterized by the NCRS Survey as very rocky. The eastern portion of the PAA includes soils mapped as Statewide agricultural soils. Two wetlands, one of which includes a vernal pool, are located within the PAA. Existing development within the PAA consists of the existing substation, access road, and a Green Mountain Power 46kV transmission line. Previous development within the PAA includes a former homestead that is no longer present and a laydown area used in connection with a rebuild of a Green Mountain Power transmission line from Taftsville to Windsor. VELCO will use the laydown area to support the construction of the Windsor Substation Project.

Section 248(b)(5): Impact on Historic Sites, Air and Water Purity, the Natural Environment, the Use of Natural Resources, and the Public Health and Safety, With Due Consideration Having Been Given to the Criteria Specified in 10 V.S.A. §§ 1424a(D) and 6086(A)(1) Through (8) and (9)(K), Impacts to Primary Agricultural Soils as Defined in 10 V.S.A. § 6001, and Greenhouse Gas Impacts

Q7. Will the Project have an undue adverse impact on historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and

safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(k), impacts to primary agricultural soils as defined in 10 V.S.A. § 6001, and greenhouse gas impacts?

A7. No, it will not. VELCO develops and refines its project designs as natural and cultural resource information is collected and analyzed during project planning. Site-specific substation upgrades and facility layout are finalized after the collected information is considered. This iterative process allows VELCO to give due consideration to natural and cultural resource impacts and to develop avoidance and minimization strategies where necessary to ensure compliance with the applicable environmental review criteria. With respect to the use of natural resources, the Project's construction will use fossil fuels for certain equipment and vehicles; stone/gravel for the access drive, construction staging, and the temporary substation configuration; and mulch and seed on disturbed areas in accordance with ANR's Standards and Specifications for Erosion Prevention and Sediment Control (EPSC) and the VELCO Environmental Guidance Manual (VEGM). The VEGM is offered with my testimony as Exhibit PET-JTR-3. The use of these natural resources will not be undue and are typical of construction projects of this type.

As I mentioned, VELCO engaged Arrowood Environmental to perform a comprehensive natural resource assessment for the Project to ensure the Project design would not have an undue adverse impact on the natural environment or use of natural resources, with due consideration being given to primary agricultural

soils, greenhouse gas emissions and the Act 250 criteria that are incorporated into Section 248(b)(5). While the PAA consists of approximately 20.8 acres, the Project Area itself is smaller and includes the planned substation improvement areas (e.g. yard expansion and associated grading), the temporary substation configuration and associated access route, distribution and transmission line structures, as well as a temporary construction support (laydown) area. These areas are shown on the Overall Site Plan with Grading Details presented by Edward McGann in Exhibit PET-EJM-5. Vegetation clearing will total approximately 1.99 acres to accommodate the substation yard expansion, temporary access road, new wastewater system, and the new access drive off Hunt Road. Please refer to Exhibit PET-WJA-9 for the Vegetation Clearing Plan. Trees cleared for the Project will be chipped onsite and removed for reuse elsewhere. VELCO will follow best management practices (BMPs) as described in the VEGM and will obtain all other environmental permits necessary to execute the construction plans. These additional permits are an Individual Vermont Wetland Permit, a Construction Stormwater Discharge Permit, and a Wastewater System and Potable Water Supply Permit from the Agency of Natural Resources, Division of Fire Safety Permit from the VT Department of Public Safety, and a Section 1111 Permit from VT Agency of Transportation.

Q8. When does VELCO expect to apply for these additional permits?

A8. VELCO will apply for the necessary ancillary permits in the spring and summer of 2025, allowing sufficient time for processing before construction is scheduled to begin in 2026.

Primary Agricultural Soils

Q9. How were impacts to primary agricultural soils given due consideration in developing plans for the Windsor Substation Project?

A9. The Project is an upgrade of an existing facility, parts of which were constructed on soils that are currently mapped as Statewide agricultural soils. The soil map is overlaid on the existing substation development footprint in Exhibit PET-JTR-2, Figure 6, and is reproduced below.

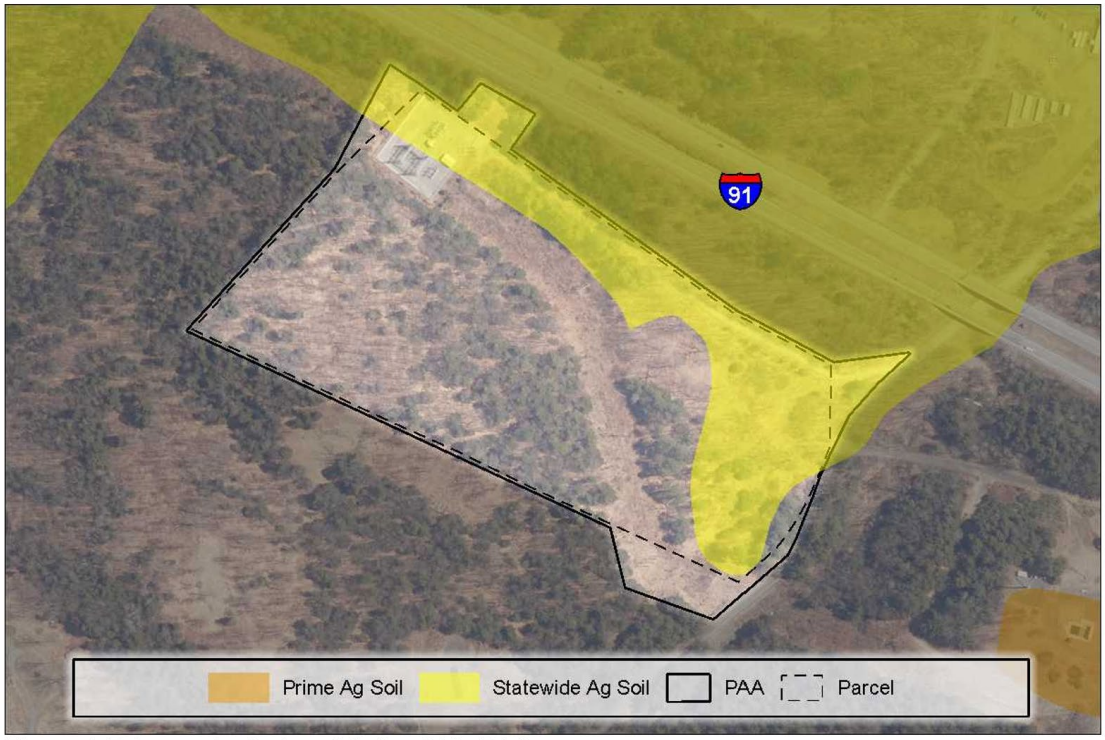

Figure 6. Primary Agricultural Soils within PAA

A total of 3.9± acres of mapped PAS are located within the Project Area of which 2.1 acres is impacted by previous development and 0.4 acres are wetland and wetland buffers.[1] Approximately 1.54± acres of mapped PAS will be impacted by the Project. None of the mapped PAS areas within the PAA are currently used, or could be used, for agriculture. The remaining soils with the PAA are characterized as very rocky and fairly shallow with low agricultural potential. See Exhibit PET-JTR-2 at 8, 19-20 and Exhibit PET-JTR-5 at 4. As explained in Exhibit PET-JTR-2, agricultural use of the PAS is largely precluded by existing development, the surrounding slope, and proximity to dense utility and transportation infrastructure. The construction support area in the southern portion of the property is the general location of a former homestead and was used by Green Mountain Power to support a transmission line project. Photos of the areas within mapped PAS shown in Figure 6 can be found in Exhibit PET-JTR-5 at 8-16.

Of the approximately 3.9 acres of mapped PAS within the Project area, 1.54± acres of permanent impacts will result from the Project's construction. Please refer to Exhibit PET-JTR-6, which shows the areas where the Project will impact mapped PAS. Exhibit PET-JTR-6 was prepared by Enman Kesselring Consulting Engineers for VELCO under my supervision. Given the context of the site, which is constrained by steep slopes, shallow and rocky soils, historic development, and existing

[1] Approximately 0.13 acres of the 0.4 acres of wetland/wetland buffer overlap the previously developed areas.

transportation and utility infrastructure, the impacts to any mapped soil unit are both consistent with historic use and will not cause significant impact to primary agricultural soils.

Q10. Please explain why the construction support area that Green Mountain Power previously used is shown in Exhibit PET-JTR-6 as not impacting PAS despite that Figure 6 above shows mapped PAS in that location.

A10. It is shown that way because the Project will not impact PAS in that area. The area was improved for use as a laydown area in connection with Green Mountain Power's transmission line rebuild. Consistent with typical best construction practices, topsoil from the area was removed and stockpiled before fabric and stone were laid for stabilization. After construction, the area and the soil stockpile were reseeded and mulched (the stockpile currently remains in place). VELCO does not expect to undertake any additional improvements to use the construction support area for this Project because it is ready for reuse; it is compacted and stabilized with gravel underneath grass. Because the area is already developed and was used to support Green Mountain Power's construction activities, the Project will not have an impact on mapped PAS in that area. This is consistent with other areas of the site that have been previously impacted by development and are not classified as proposed impacts.

Q11. Will the Project have an undue adverse impact on the natural environment or use of natural resources due to impacts to mapped PAS within the Project area?

A11. No, it will not. The Project's permanent impacts on 1.5± acres of mapped PAS that are not amenable for agricultural use for the reasons explained above are necessary and appropriate without any special CPG conditions to ensure the safe and reliable operation of the State's high-voltage electric transmission system.

Air and Water Purity and Pollution

Q12. Will the Project result in air pollution or undue adverse impacts on air purity?

A12. No, it will not. Any air emissions associated with installation will be primarily from any fossil-fueled vehicles and equipment used for deliveries, worker transportation, and installation activities. The emissions will be typical of substation modification projects, will be short-term, and will not be adverse. Construction may generate dust, which VELCO will control in accordance with Vermont Standards and Specifications for Erosion Prevention and Sediment Control (EPSC) and the VEGM. After construction, the improved substation will not produce any regulated air emissions. Please also refer to Exhibit PET-JTR-2.

Q13. Will the Project result in water pollution or undue adverse impacts on water purity?

A13. No, it will not. The Project will obtain a Construction Stormwater Discharge Permit because earth disturbing activities will involve more than one acre; currently estimated at around 6.4 acres of earth disturbance. VELCO will also follow the

requirements of ANR Standards and Specifications for EPSC and the VEGM. The substation's existing secondary transformer oil containment system will be replaced as a maintenance activity, and that improved system will protect water resources from any inadvertent transformer oil leak. In addition, the Windsor Substation is included in a Spill Prevention, Control, and Countermeasure (SPCC) Plan, which addresses the operational oil-filled equipment at the substation to prevent a discharge of oil into navigable waters. VELCO will adhere to its SPCC Plan and conduct compliance oversight inspections during construction. If a release of hazardous material were to occur during the Project's construction phase, VELCO would take appropriate steps to contain it; report the release to the Department of Environmental Conservation (as necessary); remove the contaminated material from the site for proper disposal; and restore the area in accordance with the VEGM and applicable State and Federal Regulations. By taking these measures during construction, the Project will not involve water pollution or have an undue adverse impact on water quality.

Q14. What is the total amount of existing impervious area at the substation property, the total amount of existing impervious area that will be redeveloped, and the total amount of new impervious area resulting from the Project?

A14. There are approximately 0.5 acres of existing impervious surfaces at the Windsor substation. As proposed, the Project will involve an additional 0.15 acres of

impervious surfaces, resulting in a total of approximately 0.65 acres in impervious surfaces at the site.

Q15. Will the Project require an operational stormwater permit?

A15. No, it will not. The expansion of impervious surfaces is limited and will result in less than one acre of impervious surface area when the Project is complete. Additionally, the Project does not involve the construction or redevelopment of more than one-half acre of impervious area.

Greenhouse Gas Emissions

Q16. Will the Project have an undue adverse impact on the natural environment or use of natural resources due to greenhouse gas emissions?

A16. No, it will not. Construction will require the use of vehicles and equipment that are powered by fossil fuels and create greenhouse gas emissions, but those emissions will be limited in nature and duration. Construction will not involve sustained or undue greenhouse gas emissions.

Q17. What greenhouse gas emissions, if any, are expected from the new circuit breaker that is replacing the Substation's existing circuit switcher?

A17. There are no greenhouse gas emissions associated with the vacuum breaker. However, if VELCO is unable to install the vacuum breaker due to procurement delays, defects in the delivered unit, or due to another unanticipated obstacle, a sulfur hexafluoride (SF6) circuit breaker will be used instead. In that case, the SF6

breaker will have a temperature compensated gas pressure gauge similar to those currently installed at other VELCO substations. The unit will be sealed and will not emit SF6 gas during normal operation. The SF6 gas breaker will also be equipped with a real-time monitoring device that measures SF6 density and SF6 moisture dew point, in addition to several other non-SF6 related functions.

VELCO has developed an SF6 Policy that has been reviewed and approved by VT ANR Air Quality and Climate Division to ensure proper handling and recycling of SF6 gas containing equipment. VELCO will follow the SF6 Policy, which is offered with my testimony as Exhibit PET-JTR-4. Further, in compliance with the US Environmental Protection Agency (EPA) Greenhouse Gas Reporting Program, VELCO will annually report any SF6 leakage to the EPA, as well as to ANR.

Headwaters

Q18. Please explain whether the Project will be located on or adjacent to headwaters.

A18. Yes, the Project PAA is located within a headwater area because it is characterized by rocky soils with slopes ranging from 8 to 60% with a watershed area of less than 20 square miles.

Q19. Will the Project have an undue adverse impact on headwaters?

A19. No, it will not because construction will be done in accordance with the practices and standards outlined in the VEGM, VELCO's Transmission Vegetation Management Plan, a Project-specific EPSC Plan that will be developed in

connection with the Construction Stormwater Discharge Permit, and VELCO's site-specific SPCC Plan. By following these practices and standards, the Project will not result in a reduction of the quality of ground or surface waters in the area or have an undue, adverse impact on headwater areas. Please also refer to Exhibit PET-JTR-2.

Waste Disposal

Q20. How will waste resulting from the Project's construction and operations be handled?

A20. The Project will not require nor involve the injection of any waste materials or any harmful or toxic substances into ground water or wells. As outlined in more detail in Exhibit PET-JTR-2, waste generated during construction and decommissioning of existing substation components will be disposed of or recycled in accordance with all applicable Vermont Department of Health and VT DEC regulations. Metal equipment such as structure steel, chain link fence, metal control building materials, and the like will be recycled as scrap metal. Other materials removed in connection with decommissioning the control building will be disposed of as standard construction and demolition debris. Microprocessor, solid state, or electric mechanical relays are e-waste that can be recycled. Instrument voltage transformers and bushings, like other small oil-filled equipment will be handled by a licensed commercial entity, which will test and recycle oil according to federal regulations and will recycle metal components such as scrap metal. The Project

will involve limited hazardous material storage for equipment refueling during construction and will comply with all state and federal regulations regarding the handling and disposal of hazardous materials.

Clean wood products like pallets that are brought onsite during Project construction as part of material deliveries will be stockpiled and disposed of in accordance with Act 148, the Universal Recycling and Composting Law. VELCO and Green Mountain Power will perform utility pole removal and replacement activities in accordance with the Penta BMPs identified in Docket 8310, which will be a component of onsite training for any personnel that handle penta-treated poles, including GMP.

The Project includes sanitary facilities, which will require installation of a private wastewater system since municipal wastewater connections are not available at the Hunt Road location. The new system will conform to the Wastewater System and Potable Water Supply Rules. During construction, VELCO will dispose of sanitary waste by using portable toilets.

Q21. How will pavement from the existing access road be handled?

A21. Portions of the existing access road that will no longer be used once the new access road is constructed will be removed from the site and disposed of in accordance with DEC waste disposal regulations. The affected areas will be reseeded and mulched.

Q22. What steps has VELCO taken to determine whether any hazardous materials are present at the substation, such as PCBs, lead, asbestos, chemicals, penta poles, and the like?

A22. In accordance with previous Substation Condition Assessment Project consultations with the Vermont DEC Waste Management and Prevention Division (WMPD), VELCO evaluated the existing substation soils and concrete to determine the potential for contaminants and, because of site assessments, found that PCB mineral oil contamination was present beneath the transformer drain valve, and within the concrete of the control building. VELCO conducted the necessary environmental assessment work with its qualified environmental consulting firm, Stone Environmental, to delineate the contamination. As part of this testing effort, the results also yielded elevated levels of total petroleum hydrocarbons TPH and cadmium. Due to the nature of the contamination and location proximate to energized electrical equipment, VELCO will mitigate the PCB, cadmium and TPH contaminated media during construction once the substation is safely deenergized. VELCO will sequence the work at the substation in order to minimize work in the contaminated areas until cleanup can be performed.

Q23. Will the Project have an undue adverse impact on the natural environment due to waste?

A23. No, it will not. By following state and federal regulations regarding the disposal of waste, obtaining all necessary permits, and by following BMPs with respect to waste disposal, the Project will not have an undue adverse impact on the natural environment.

Water Conservation, Burden on Existing Water Supply, Sufficiency of Water

Q24. How will the Project use and conserve water?

A24. Water use associated with the overall Project is expected to be minimal. Construction will involve the use of water for dust control and for vegetation establishment. Water used for these purposes will be brought to the site via truck until water supply to the substation is established. Water will be used during operations in connection with the restroom that will be installed in the new control building. VELCO will drill a well and install a wastewater system as there are no available municipal connections for the site. The new restroom facility will use low-flow toilets and fixtures for water conservation. As such, the Project will not have an undue adverse impact on the natural environment, use excessive water, or unduly impact existing water supplies.

Floodways

Q25. Will the Project unduly impact a floodway or floodway fringe by restricting or diverting the flow of flood waters, or significantly increasing the peak discharge of a river or stream within or downstream from the Project?

A25. No, it will not. The Project is not located within a floodway or floodway fringe. The site drainage improvements that are planned for the Project will not significantly alter existing drainage characteristics with respect to drainage area contributions and flows. The Project will not have any undue, adverse impacts on floodways or river corridors, nor will the Project endanger the health, safety, or welfare of the public or riparian owners as it relates to flood events or fluvial erosion. Please also refer to Exhibit PET-JTR-2.

Streams

Q26. Will the Project have an undue adverse impact on streams or their riparian zones?

A26. No, it will not. The closest stream is Kimball Brook, located on the south side of Hunt Road. There are no streams within the PAA. The Project will not impact the Kimball Brook or its riparian zone. Please also refer to Exhibit PET-JTR-2.

Shorelines

Q27. Will the Project have an undue adverse impact on shorelines?

A27. No, it will not. Th Project is not located on or adjacent to a shoreline. The closest shoreline to the PAA is that of Lake Runnemede, several hundred feet distant. Please see Exhibit PET-JTR-2.

Wetlands

Q28. Is the Project located on or near wetlands?

A28. Yes. Two Class II wetlands were identified within the PAA and were given the designation W1-1 and W1-2. A vernal pool was also identified within wetland W1-1. The wetland boundaries and associated 50-foot buffers were located with a GPS unit capable of sub-meter accuracy, flagged, and confirmed with the Vermont Wetland Program and the Army Corps of Engineers. Please refer to Exhibit PET-JTR-2.

Q29. Will the Project impact the wetlands or their 50-foot buffers?

A29. Yes, it will. The Project avoids direct wetland impacts to wetland WI-1 and its associated vernal pool. The Project will have direct wetland impacts to Wetland WI-2 related to the expansion of the substation yard, site drainage improvements, and the realignment and replacement of the existing culvert. The Project will have permanent and temporary impacts on the 50-foot buffers of both wetlands WI-1 and WI-2. Permanent impacts on the 50-foot buffer of wetland WI-2 are related primarily to the new control building expansion, grading, culvert realignment/replacement, and site drainage improvements. Driveway related improvements, and culvert replacement activities will impact the 50-foot buffer of wetland WI-1. The Project will have temporary impacts on the wetland buffers due to temporary trenching, construction workspace, material stockpiling, and erosion control measures, but will be restored with vegetated cover at or near pre-existing grades.

Q30. What avoidance and/or impact mitigation measures has VELCO employed to ensure the Project will not have an undue adverse impact on wetlands?

A30. The Project's design is the chief avoidance/mitigation measure that will ensure no undue adverse impacts to wetlands will result. The Project team conducted a detailed evaluation of the site and identified several constraints. These constraints include the presence of overhead transmission lines, fire code setbacks, adjacent existing infrastructure, necessary vehicle access, and mandatory clearances between energized equipment and substation fencing. Impacts to the 50-foot buffers of wetlands W1-1 and W1-2 were largely unavoidable due to these constraints and the location of the wetlands. VELCO will obtain an Individual Wetland Permit and will adhere to the conditions in that permit. In addition, VELCO will employ project-specific EPSC measures, follow the BMPs laid out in the VEGM, and will comply with the conditions in the Project's Construction Stormwater Discharge Permit. By designing the Project to avoid direct wetland impacts and following permit conditions and best practices, the Project will not have an undue adverse impact on wetlands or the natural environment.

Soil Erosion

Q31. Will the Project cause unreasonable soil erosion or reduce the capacity of the land to hold water so that a dangerous or unhealthy condition may result?

A31. No, it will not. VELCO will perform all earth-disturbing activities in accordance with the site-specific EPSC Plan, the Construction Stormwater Discharge Permit conditions, the Vermont Standards and Specifications for EPSC, and the VEGM. With the adherence to these conditions and BMPs, the proposed construction activities will not cause undue soil erosion or cause a reduction in the capacity of the land to hold water.

Historic Sites

Q32. Will the Project have an undue adverse impact on historic sites?

A32. No. A "historic site" is a site that has been included in the National Register of Historic Places and/or the state register of historic places. There are no registered historic sites within or adjacent to the Project. In addition, VELCO retained Gray and Pape (GP) to perform an Archaeological Resource Assessment (ARA) as well as a Historical Architectural Resource Investigation to determine the proposed Project area's sensitivity for archaeological and historic resources. The report GP prepared was conducted under my supervision and is offered with my testimony as Exhibit PET-JTR-5. GP concluded that the Project will not impact any historic sites, and I concur in that conclusion.

Rare and Irreplaceable Natural Areas

Q33. Will the Project impact rare and irreplaceable natural areas?

A33. No, it will not. None of the upland or wetland natural communities identified during AE's natural resource assessment meet the criteria for state-significant natural communities or rare and irreplaceable natural areas. Please see Exhibit PET-JTR-2.

Necessary Wildlife Habitat

Q34. Will the Project have an undue adverse impact on necessary wildlife habitat?

A34. No, it will not. AE's evaluation of the PAA did not find any necessary habitat for deer, black bear, grassland birds, or threatened or endangered bats. There was no historic or recent evidence of deer wintering activity, and the forested areas do not contain significant enough soft wood canopy closure to be considered a deer wintering area. Forested areas within the PAA do not contain necessary bear habitat, i.e., beech and oak stands, as the areas are comprised of northern hardwood with combinations of white pine and hemlock. The open field areas within the PAA do not provide suitable habitat for grassland birds, which require a minimum of 20 acres of native grasses with little or no woody vegetation. The Project is not in an area that could provide summer roosting habitat for the Indiana bat, and there are no old or abandoned buildings proposed for demolition that potentially provide roosting habitat for little brown bat, and there are no known bat hibernacula or maternity roosts within one mile of the Project site. With respect to the Northern Long Eared Bat (NLEB), which is a federally listed endangered species in Vermont, potentially occurring statewide, the tree clearing area for the Project

constitutes approximately 1.99 acres, significantly less than 1% of the total forested area within a 1 square mile radius of the Project that would trigger conservation measures in accordance with VT Department of Fish and Wildlife Guidance. Nevertheless, VELCO intends to perform tree clearing during winter months as an impact minimization strategy that will help avoid potential impacts on protected bat species.

Q35. How will the Project impact the vernal pool that was identified on site and which provides habitat for amphibian species?

A35. The Project will avoid direct impacts to the vernal pool; however, impacts to the 100' pool envelope are unavoidable. Impacts are primarily related to the driveway improvements and the replacement of a culvert. The vernal pool envelope will be impacted by access drive widening (from 12' to 20') that is necessary for substation construction and equipment access to the site and by replacement and realignment of the existing culvert beneath the substation.

VELCO anticipates clearing vegetation in the winter months when the pool is not active. Once clearing activities are complete, VELCO will avoid construction activities to the west of the pool during the March 1 to April 30 timeframe to allow for amphibian migration from the pool to the forested habitat. Due to the location of the Pool as it relates to the existing substation access drive, VELCO cannot commit to restricting all project activities within the pool envelope for the March 1-April 30

timeframe while the project is under construction. Where appropriate, EPSC measures will be designed to allow for amphibian passage and to prevent sediment transport. EPSC measures will be removed within 30 days following final stabilization. Tree clearing and trimming related activities within the vernal pool envelope will be conducted as quickly as possible under frozen conditions and with as little ground disturbance as is practicable and will leave woody debris in place to the extent possible. The hydrology of the wetland and the associated pool will not be significantly affected by the project, and the replacement culvert invert elevation will remain above the elevation of the pooled area consistent with the existing conditions. These strategies are expected to protect vernal pool hydrology as well as the pool-breeding amphibian species.

Rare, Threatened, or Endangered Species

Q36. Will the Project have an undue adverse impact on rare, threatened, or endangered species?

A36. No, it will not. No occurrences of rare, threatened, or endangered animal or plant species were identified within the PAA. An uncommon species of snake was identified outside the Project limits within the existing powerline corridor, but no construction activities are planned for outside the PAA. The wetland and vernal pool complex may provide feeding habitat for the snake. Consequently, the previously mentioned vernal pool protections will similarly protect the movement of the snake species. See Exhibit PET-JTR-2.

Section 248(b)(8) & 10 V.S.A. § 1424a(d): Outstanding Resource Waters

Q37. Is the Project located in any segment of waters of the state that has been designated as outstanding resource waters by the Agency of Natural Resources?

A37. No, it is not. Therefore, the Project will not have an undue adverse impact on outstanding resource waters.

Conclusion and Declaration

Q38. Does this conclude your testimony?

A38. Yes.

DECLARATION OF JACOB T. REED

I declare that the testimony and exhibits that I have sponsored are true and accurate to the best of my knowledge and belief and were prepared by me or under my direct supervision. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

/s/Jacob T. Reed
Jacob T. Reed