Exh. Petitioner AM-5

Non-Native Invasive Species Monitoring and Control Plan for the St Johnsbury Substation Project

There is continued and increasing concern over the spread of non-native invasive plant species (NNIS) throughout Vermont by the Vermont Agency of Natural Resources (VT ANR[1]) and other stakeholders.[2] As such, Vermont Electric Power Company and VT Transco, LLC (collectively referred to as "VELCO") has volunteered to proactively develop this NNIS Monitoring and Control Plan (NNIS Plan) to be implemented in association with VELCO's proposed St Johnsbury Substation Project (the "Project").

Background

According to the VT ANR Guidance for NNIS Plant Species, "Non-Native Invasive plants have the potential to significantly disrupt habitats and negatively impact the ecological health and diversity of natural systems in Vermont."[3] Noxious weeds are a category of invasive species that are designated as such by regulatory bodies due to their characteristics of being especially "aggressive and difficult to manage, parasitic, a carrier or host of deleterious insects or disease, and [are] non-native to, or not common to [a specific region]".

The Vermont Agency of Agriculture, Food and Markets (AAFM) Quarantine #3 Amended Noxious Weeds Rule (2012) (Quarantine Rule) designates noxious weed species for Vermont State and establishes prohibitions on the movement, sale, possession, cultivation and/or distribution of specific Class A and Class B Noxious Weeds. For the purposes of this NNIS Plan, "NNIS" shall be used for any plant species on the Vermont Noxious Weed List (Appendix A of the Noxious Weeds Rule).

The purpose of this NNIS Plan is to prevent Project-related transport of noxious plant biological material into or out of VELCO Project areas, to increase the opportunity for native plants to establish after soil disturbance, and to protect sensitive environmental resources by minimizing the spread of NNIS species. This voluntary NNIS Plan has been developed in alignment with the goals of Vermont's Noxious Weed Quarantine Rule as well as with The ANR's October 2016 "Guidance for Non-Native Invasive Plant Species Monitoring and Control in Connection with Section 248 Projects."

Pre-existing NNIS Populations

For most of VELCO's projects that undergo natural environment impact review pursuant to 30 VSA Section 248 (b)(5), existing vegetation information is available. Pre-construction baseline NNIS inventories may be completed in some cases as warranted. For purposes of the following sections, VELCO will rely on the best available information that documents the presence and in some cases the locations of NNIS species.

The purpose of inventorying pre-existing NNIS populations is to aid VELCO in avoiding and minimizing their spread during the construction and lifetime of the Project and to define existing NNIS conditions as a baseline for future monitoring. However, VELCO shall not be responsible for the removal and/or control of these pre-existing NNIS populations.

Avoidance and Minimization Measures

Wherever the Project requires earth disturbance, VELCO will proactively implement the following measures during construction to prevent the spread of NNIS populations.

1. VELCO will ensure that all contractors and onsite personnel receive training regarding the conditions set forth in this NNIS Plan. In addition, they shall receive information on the locations and extent of known NNIS populations in the Project area and the general identification of the documented NNIS species.
2. To reduce the introduction of noxious species biological material to VELCO Project areas, all construction equipment (including construction mats) will be cleaned of observable soil and vegetation prior to entering Project areas. Further, previously utilized equipment (including construction mats) on a Project site that is suspected of having encountered NNIS populations shall be cleaned of observable soil and vegetation prior to moving to alternate work locations or leaving the Project area.
3. Topsoil and seed mixes used for temporary or permanent stabilization in disturbed areas shall be free of NNIS species (per The Vermont Standards and Specifications for Erosion Prevention and Sediment Control (2006, amended 2020).
4. Wherever topsoil is salvaged from an area containing a pre-existing NNIS population that cannot be eradicated so as to be considered NNIS-free through chemical, physical or mechanical control, it shall be re-utilized in either the same location or a Project area that already contains that NNIS species and not transported to other Project areas to the extent practicable. If relocation of NNIS containing topsoil into a non-NNIS area is unavoidable, it shall be temporarily stockpiled on and covered with secured tarps or heavy plastic until permanent disposal is possible or buried beneath a 24-inch or greater layer of NNIS-free soil or other select backfill material.
5. These measures will minimize the opportunity for NNIS seed, root stock, and plant fragments from expanding into areas of disturbed soils.
6. When constrained sites restrict onsite disposal as outlined above, offsite disposal of NNIS material and/or NNIS containing topsoil may be a required management control activity. The offsite transport and disposal of NNIS and/or NNIS containing topsoil must be covered during transport and transport vehicles swept clean at the location transported to. In addition, this management control activity must be reviewed and approved by VELCO Environmental prior to its implementation to ensure alignment with the AAFM Quarantine Rule and that it accomplishes the general intent of reducing the overall impact of NNIS weeds on the environment.

Post-Construction Monitoring and Control

Efforts shall be made to minimize the spread of NNIS as a result of construction activities into areas with documented natural resources of special consideration.

Post-construction NNIS monitoring and control of new populations of NNIS species that colonize where earth disturbance occurred during Project construction will occur in the following natural or otherwise Special Consideration Resources (SCRs):

1. Vermont Significant Wetlands and Buffers
2. A 50' riparian buffer of Perennial Streams
3. Vermont Significant Natural Communities
4. RTE Plant Species Populations and 25' buffers
5. Conserved Lands (e.g., State Parks, WMAs, Conservation Areas, Private Conservation Easements)

NNIS monitoring and control in these SCRs shall include only pioneer NNIS populations. VELCO will not assume responsibility for post-construction monitoring and control of pre-existing NNIS populations or for Project areas that overlap lands that are routinely managed by others (e.g., mowed areas). The annual monitoring will inform potential control requirements as detailed below.

VELCO shall conduct annual post-construction NNIS monitoring and control for a period of three years starting with the first full growing season following construction in the resource areas and buffers defined above. In VT State Significant (Class II) Wetlands, 50' Riparian Buffers of Perennial Streams, and any Conserved Lands, if the area is stabilized with well-established vegetation and the annual monitoring determines that no NNIS plants are present during the first 2 consecutive growing seasons of the 3 year monitoring period (years 1 and 2), excluding pre-existing populations of NNIS, VELCO may, at its sole discretion, discontinue annual monitoring efforts.

VELCO shall conduct annual post-construction NNIS monitoring and control for a period of five years where work occurs within RTE Species Populations, their 25' Buffers, and Significant Natural Communities. If no NNIS plants are present where work occurs within RTE Species Populations, their 25' Buffers, and Significant Natural Communities after three years of post-construction monitoring, monitoring and reporting may be discontinued in consultation with ANR.

Annual monitoring and control of NNIS shall include:

1. All new NNIS populations identified during monitoring of the SCRs that are a result of the Project shall be documented.
2. The control of pioneer populations of NNIS will consist of manual, mechanical, chemical and/or biological control methods. New individual NNIS and small NNIS populations will be controlled at the time of monitoring, to the extent feasible, while larger populations would be documented along with a recommended control process to be implemented prior to the subsequent year's monitoring effort or as soon as possible with the most efficient control process.
3. When chemical methods are deemed appropriate for NNIS control, VELCO will implement herbicide applications with a targeted approach in accordance with its Transmission Vegetation Management Plan, state and federal regulations, and landowner requirements. The chemical selected for treatment will be suitable for the surrounding environment.
4. NNIS controlled by manual or mechanical method will be disposed of by burning, burial, exposure, refuse container disposal, or in a manner of good practice to avoid spreading of seeds, soil, and/or plant material that may allow spread.

5. Biological control methods, such as introducing insects or fungi to an ecosystem, may be used in rare circumstances.
6. Should it be determined that a particular area has been overspread by populations of NNIS that are beyond the extent or control of VELCO, this information will be reported in the annual report, and no control activities will be undertaken.
7. The results of NNIS monitoring and control activities shall be documented and reported annually to VT ANR. Annual reporting shall be submitted by the end of January following the monitoring year via email and, in addition to the requirements outlined above, include photos and/or maps as necessary to depict/describe the new population's location and extent, management activities taken that year, and future management recommendations, as applicable.
8. Useful information for determining the proper Best Management Practice (BMPs) for NNIS control in Vermont is provided by VTInvasives.org and should be consulted prior to determining the proper control BMPs:

   https://vtinvasives.org/sites/default/files/Forestry%20Best%20Management%20Practices.pdf.

This NNIS Plan, to be implemented as part of VELCO's St Johnsbury Substation Project, will proactively help prevent the spread of NNIS within the Project Area and to off-site locations. This NNIS Plan has been developed in alignment with the goals of Vermont's Noxious Weed Quarantine Rule, VT ANR Guidance for NNIS monitoring and control, as well as with VELCO's close consultation with ANR on prior Section 248 projects.

[1] ANR. 2010. Report on Invasive Species. Prepared for the Vermont House Committee on Fish, Wildlife and Water Resources, the House and Senate Committees on Agriculture and the House and Senate Committees on Natural Resources and Energy. 189pp
[2] NRCS. Amended 2010. National NRCS General Manual, Title 190 - Ecological Sciences, Part 414 - Invasive Species. Accessed online April 22, 2015 at: http://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=17018.
[3] VT ANR. 2016. Vermont Agency of natural Resources, Guidance for Non-Native Invasive Plant Species Monitoring and Control in Connection with Section 248 Projects. Accessed online August 10, 2022 at: https://anr.vermont.gov/planning/act250-section248-info/guidance-docs