

**NATURAL RESOURCES REPORT – NEW HAVEN OPERATIONS FACILITY**

Appendix D USFWS Correspondence  
November 14, 2019

**Appendix D USFWS CORRESPONDENCE**



Stantec Consulting Services Inc.  
30 Park Drive, Topsham ME 04086-1737

November 14, 2019  
File: 195601391

**Attention: Ecological Services**  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial St., Suite 300  
Concord, NH 03301

To Whom It May Concern,

**Reference: Project Review Request, VELCO New Haven Operations Facility, Addison County, Vermont, Consultation Code: 05E1NE00-2020-SLI-0108**

Stantec Consulting Services Inc. (Stantec) is submitting this letter to the U.S. Fish and Wildlife Service (USFWS) to request review of the proposed New Haven Operations Facility (Project) for Vermont Transco LLC/Vermont Electric Power Company (VELCO) in accordance with the USFWS New England Field Office's online endangered species project review process. Stantec completed the review on October 15, 2019, and is submitting the following project package in accordance with the online instructions for further review.

The proposed Project, located in New Haven, Addison County, Vermont, off Route 17 (VT 17; Maine Street), would serve as VELCO's backup control and data center, consisting of a two-story building and supporting services (wastewater and potable water systems), power transforms, backup emergency generators, chillers, a chain link security fence, driveway, parking lot, and permanent stormwater management system. The proposed action, or Project, will consist of clearing and grading, expansion of the existing wastewater mound system (to be located to the west of an old substation), construction of the two-story New Haven Operations Facility building, parking areas (to be located within the old substation footprint), and installation of an operational-phase stormwater management system. The Project and the action area is identified in the attached IPaC official species list (Attachment 1) and Natural Resources Map (Attachment 2) as the Study Area. Representative site photographs (Attachment 3) are included with this submittal to provide further details regarding existing conditions and proposed construction activities. Assuming regulatory approval is obtained, the Project construction is expected to start in August 2020, with a targeted completion date of December 2022.

For the purposes of Vermont Public Utility Commission (VT PUC) Section 248 and U.S. Army Corps of Engineers authorizations, an approximately 72-acre area (Study Area) that encompasses the Project was assessed for natural resources, soils, and cultural resources (Attachment 2 – Natural Resources Map). The Study Area is generally located within the Champlain Valley biophysical region and subwatershed (HU12) Headwaters Little Otter Creek 041504080401. The Study Area soils are predominated by clay (Vergennes clay, 2% to 6% slopes) and loam soils (Nellis loam, 3% to 8% slopes; Melrose fine sandy loam, 0% to 3% slopes). Surrounding land use consists predominantly of agriculture (cropland and pastures), with narrow forested corridors along borders that extend through the Study Area. Land use within the Study Area is a combination of developed and undeveloped areas. Previously developed areas consist of an existing substation, an old substation being utilized as a laydown yard (to be relocated prior to construction of the Project), and access driveways and parking areas. Land cover within the undeveloped portions of the Study Area is predominantly comprised of open meadow with a few tree rows extending through the center and along the western, southern, and southeastern boundaries (Attachment 3 – Representative Site

**Reference:** Project Review Request, VELCO New Haven Operations Facility, Addison County, Vermont, Consultation Code: 05E1NE00-2020-SLI-0108

Photographs). The dominant tree species within the tree rows and adjacent forested areas consist of eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), and poplar species (*Populus sp.*), primarily with diameter-at-breast-heights (DBH) of less than 8 inches. Additionally, the tree rows and edge habitat comprise a high density of non-native invasive species (NNIS) occurrences consisting of Morrow’s honeysuckle (*Lonicera morrowii*) and common buckthorn (*Rhamnus cathartica*).

The limits of disturbance (LOD) and forested areas to be cleared for construction of the Project area shown in Attachment 2 Natural Resources Map and Attachment 4 New Haven Operation Facility Location Map. Tree clearing associated with the proposed action is expected to occur in the tree hedgerows north and south of the proposed New Haven Operations Facility and total no more than approximately 1.66 acres (Attachment 4). Stantec used the Indiana Bat Habitat Assessment (Attachment 5) to investigate the suitability of the forest habitat on-site for listed bat species. Within the LOD (specifically, the northern tree hedgerow), there was one standing dead eastern white pine tree, (i.e., snag) noted (Attachment 3 – Photo 2). Otherwise, there are very few trees with evident cavities, crevices, or exfoliating bark located within the tree hedgerows.

Our review considered rare species occurrence information available from the Vermont Natural Heritage Inventory (NHI) records through the Vermont Agency of Natural Resources (VTANR) online Atlas<sup>1</sup> and the New York State Department of Environmental Conservation (NYSDEC) Environmental Mapper<sup>2</sup>. The species conclusions table (Table 1) identifies our determinations for the two bat species that may be affected by the Project. We request that you concur with our determination(s) of “may affect, not likely to adversely affect” for Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*).

**Table 1. USFWS New England Field Office: Species Summary Table for Endangered Species Project Review**

Step 1: Define Action Area – Project name on IPaC Website: VELCO New Haven Operations Facility					
Step 2A (IPaC Official Species List)	Step 2B (Critical Habitat Present?) <sup>1</sup>	Step 3A (Suitable Habitat Present?)	Step 3B (Species Occurrence within Action Area?)	Step 4 (Determinations)	Notes
Indiana Bat ( <i>Myotis sodalis</i> , Federally Endangered)	NO	Suitable habitat present, low quality	Known summer habitat based on VTANR Atlas	May Affect/Not likely to adversely affect	See Project Review Package
Northern Long-Eared Bat ( <i>Myotis septentrionalis</i> , Federally Threatened)	NO	Suitable habitat present, low quality	Potential summer habitat based on VTANR Atlas	May Affect/Not likely to adversely affect	Applicable USFWS Northern Long-Eared Bat 4(d) rule

<sup>1</sup> Critical Habitat refers to officially designated areas, but species may occur anywhere that there is suitable habitat.

Within 1 mile<sup>3</sup>, there are no known northern long-eared bat maternity roost trees or hibernaculum. Therefore, we assume the proposed action falls under the USFWS northern long-eared bat 4(d) rule and northern long-eared bats are not discussed further.

<sup>1</sup> VTANR. 2019. Vermont Agency of Natural Resources Atlas. Available online at: <http://anr.vermont.gov/maps/nr-atlas>. Accessed October 2019.

<sup>2</sup> NYSDEC. 2019. New York State Department of Environmental Conservation Environmental Mapper. Available online at: <http://www.dec.ny.gov/gis/erm/>. Accessed October 2019.

<sup>3</sup> The USFWS 4(d) rule indicates a distance of 150 feet from known occupied roost trees and a 0.25-mile distance from hibernacula, while the VTFWD guidance indicates a distance of 0.25 mile in the Special Management Zone 1 and a 1-mile distance in the Special Management Zone 2 from known roost trees or hibernacula.

**Reference:** Project Review Request, VELCO New Haven Operations Facility, Addison County, Vermont, Consultation Code: 05E1NE00-2020-SLI-0108

Indiana bats are a Vermont state and federally listed endangered species. According to the IPaC database query (Attachment 1) and a query of NHI records through the VTANR online Atlas, there is documented summer habitat but no designated critical habitat within the proposed action area. The closest known Indiana bat hibernacula in Vermont is located over 19 miles to the south in the Town of Brandon and at least 13 miles to the west in the County of Essex, New York. Since only the county-level location was available for known hibernacula in the NYSDEC Environmental Mapper database, the closest point of Essex County to the Project Site was used. For the purposes of the proposed action, we assume summer presence of Indiana bat in the area surrounding the proposed action. The Project's *Best Management Practices for the Avoidance of Listed Threatened and Endangered Species Integrated Vegetation Management and O&M Activities* (TRC 2013<sup>4</sup>), developed in consultation with VTANR, indicates that in the event that clearing must be conducted outside of the October 15 to April 15 window, the area to be cleared will be assessed for potential roost trees. The on-site habitat survey conducted in August 2018 indicated the site contains low quality habitat for Indiana bat with tree DBHs of generally less than 8 inches. Further, a minimal amount of forest habitat is to be cleared: the total acreage of forest habitat to be cleared will be approximately 1.66 acres. There are 347.2 acres of forest habitat within a 1-mile radius of the Project location; therefore, the amount of forest habitat to be cleared represents less than 1.0% (0.5%) of the forest habitat available within a 1-mile radius (Attachment 4).

Tree clearing timing restrictions are not proposed for the Project because suitable habitat for Indiana bat is not available: the tree hedgerows represent low quality habitat with tree DBHs generally less than 8 inches. Further, the hedgerows are relatively isolated within agricultural fields. The amount of tree clearing within the general area is negligible (less than 1.0% of forested habitat within a 1-mile radius of the Project. As required by the VT PUC, a conceptual aesthetic mitigation plan (Attachment 6) has been developed that will result in additional tree plantings on the periphery of the Project Site, thereby replacing portions of the forested hedgerow that are to be cleared during Project construction. Open areas adjacent to the proposed Project would continue to provide foraging habitat for Indiana bats after completion of construction.

For additional information, please don't hesitate to contact us using the information listed below.

Regards,

**Stantec Consulting Services Inc.**



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Project Scientist  
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**Jess Costa** CWB  
Associate, Environmental Services  
Phone: 207 406-5479  
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Attachment: Attachment 1 – Project IPaC Official Species List  
Attachment 2 – Project Natural Resources Map  
Attachment 3 – Representative Site Photographs  
Attachment 4 – New Haven Operations Facility Location Map  
Attachment 5 – Indiana Bat Habitat Assessment  
Attachment 6 – Conceptual Aesthetic Mitigation Plan

<sup>4</sup> TRC. 2013. Best Management Practices for the Avoidance of Listed Threatened and Endangered Species Integrated Vegetation Management and O&M Activities. Prepared for Vermont Electric Power Company (VELCO) & Green Mountain Power.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

In Reply Refer To:

October 11, 2019

Consultation Code: 05E1NE00-2020-SLI-0108

Event Code: 05E1NE00-2020-E-00316

Project Name: VELCO New Haven Operations Facility

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

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## Project Summary

Consultation Code: 05E1NE00-2020-SLI-0108

Event Code: 05E1NE00-2020-E-00316

Project Name: VELCO New Haven Operations Facility

Project Type: DEVELOPMENT

Project Description: The New Haven Operations Facility (Project) consists of the following primary components:

An 18,000 square foot, two-story building designed to look like a barn and blend in with the rural surroundings of the site. The building design will incorporate energy efficiency and environmental sustainability, and VELCO will seek to receive Leadership in Energy and Environmental Design (LEED) certification from the U.S Green Building Council. The building will serve the following functions:

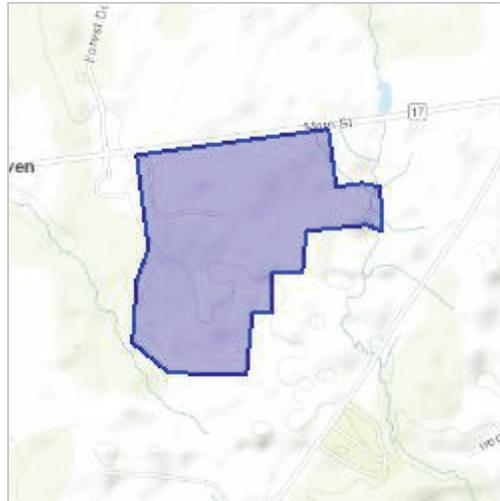
- Backup operations center
- System operator training facility
- Data center
- Incident command center
- Secondary office building to be used in the event of a disaster at Rutland headquarters
- Office space for utility-related meetings

The Project site, approximately 4.2 acres, is predominantly located on an existing laydown area and in pasture/hay field habitat. Tree hedgerows border the northern and southern extent of the Project site and construction would require approximately 1.25 acres of tree clearing or thinning, based on preliminary design drawings. The Project proposes tree clearing, to the extent practicable, take place during the period when bats are not active (i.e., November 1 – March 31).

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/44.120542353960666N73.16390304616763W>

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Counties: Addison, VT

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## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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- Legend**
- Culvert
  - Study Area
  - Project Site (LOD)
  - Proposed New Haven Operation Facility
  - Tax Parcel and Span
  - 20' Contour Line
  - 100' Contour Line
  - Delineated Ephemeral Stream
  - Delineated Wetland Boundary
  - Delineated Wetland Extends
  - Delineated Wetland 50' Wetland Buffer
  - Delineated Wetland



**Project Location**  
New Haven, VT

**Client/Project**  
VELCO  
New Haven Operations Facility

Prepared by KWH on 2019-10-08  
TR by EB on 2019-10-08  
IR Review by KR on 2019-11-07  
195601391

**Figure No.**  
2

**Title**  
Natural Resources Map

**Wetland Notes:**

- Wetland boundaries delineated in accordance with USACE Wetland Delineation Manual (1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Routine Determination Method (USACE 2012) and in accordance with the Vermont Wetland Rules, Section 3.2 Methodology for Identifying Wetlands, as amended 2017.
- Wetland boundaries were located utilizing a Trimble Geo-XH GeoExplorer 6000 Series Receiver. Expected accuracy of GPS data is within 1 meter of actual position.

**Notes**

- Coordinate System: NAD 1983 StatePlane Vermont FIPS 4400 Feet
- Data Sources: VELCO, Stantec, VCGI
- Background: 2016-2017 Color Ortho Imagery provided by VCGI web mapping services

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

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 Review: 2019-11-01 By: KWH



**Photo 1. Representative mowed field, looking south from Vermont Rt. 17, VELCO New Haven Operation Facility, August 9, 2018, Stantec.**



**Photo 2. Typical tree hedge row looking east towards the Study Area edge, VELCO New Haven Operation Facility, August 9, 2018, Stantec. Note potential suitable snag outline in red.**



**Photo 3. Access road to Study Area and adjacent substation from Rt. 17, VELCO New Haven Operation Facility, August 9, 2018, Stantec.**



**Photo 4. Scrub hedge separating existing laydown yard from mowed field, looking west, VELCO New Haven Operation Facility, August 9, 2018, Stantec.**



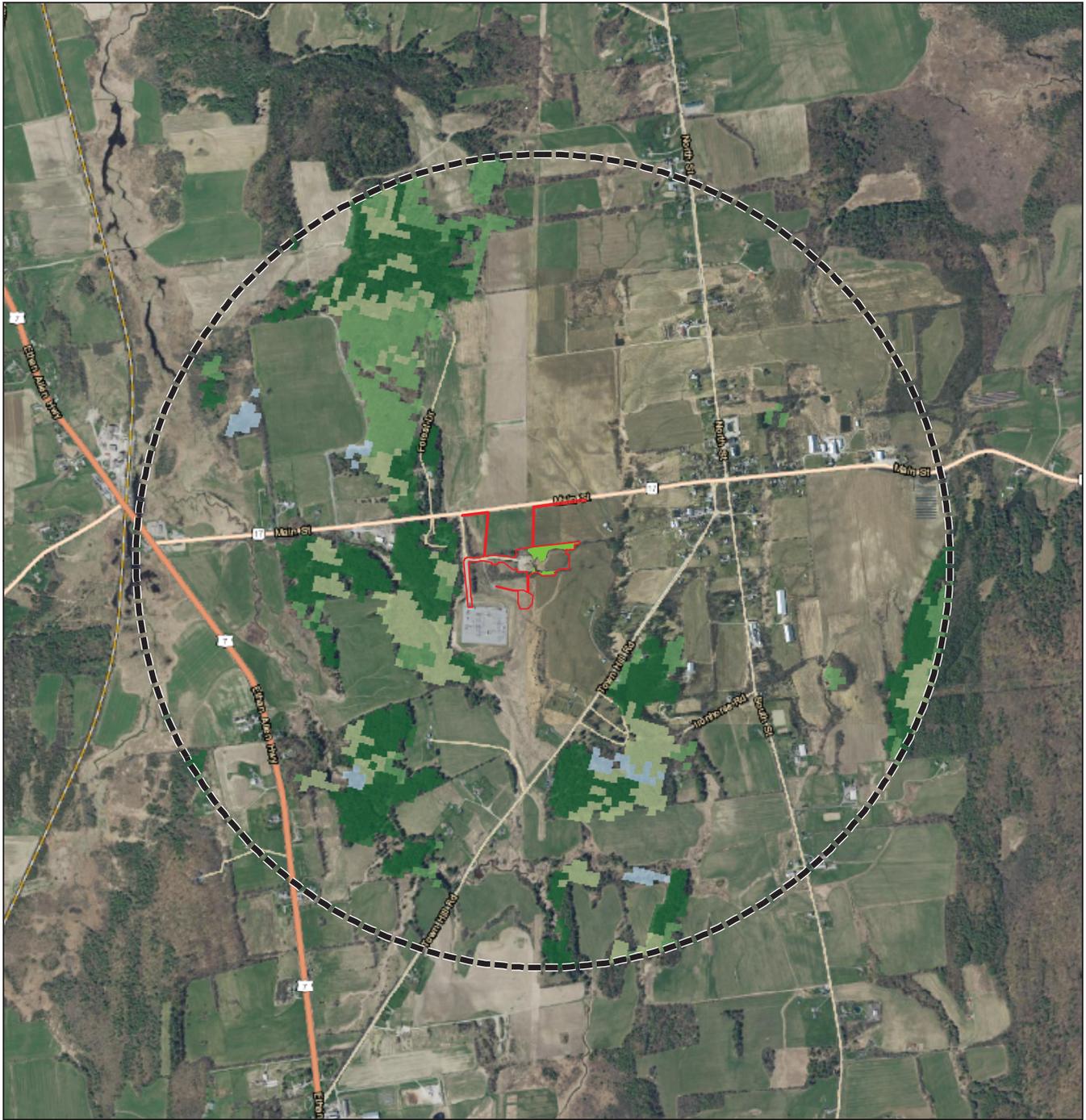
**Photo 5. Mowed field looking northeast, photo taken adjacent to wet meadow NH-203, VELCO New Haven Operation Facility, August 9, 2018, Stantec.**



**Photo 6. Wetland NH-203, VELCO New Haven Operation Facility, November 1, 2017, Stantec.**

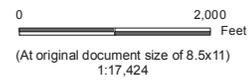


**Photo 7. Ephemeral stream NH-204, VELCO New Haven Operation Facility, November 1, 2017, Stantec.**



**Legend**

- 1 Mile from the New Haven Operations Facility
  - Project Site (LOD)
  - Proposed Forested Area To Be Cleared (1.66 acres)
- 2016 National Land Cover Database  
Forested Land Cover Types
- Deciduous Forest
  - Evergreen Forest
  - Mixed Forest
  - Woody Wetlands



Project Location: New Haven, Vermont  
Prepared by GAC on 2019-10-22  
Reviewed by JLC on 2019-10-23

Client/Project: 195601391

VELCO  
New Haven Operations Facility

Figure No.

**1**

Title

**Location Map**

**Notes**  
 1. Coordinate System: NAD 1983 StatePlane Vermont FIPS 4400 Feet  
 2. Data Sources: VELCO, Vermont Center for Geographic Information (VCGI)  
 3. Background: VCGI Color Imagery Web Mapping Service

APPENDIX A: PHASE 1 HABITAT ASSESSMENTS

INDIANA BAT HABITAT ASSESSMENT DATASHEET

Project Name: Proposed VELCO New Haven \_\_\_\_\_ Date: 8/9/2019 \_\_\_\_\_  
 Township/Range/Section: New Haven, Vermont \_\_\_\_\_  
 Lat Long/UTM/ Zone: 44.121482, -73.163018 - NAD83 \_\_\_\_\_ Surveyor: Eben Baker \_\_\_\_\_

**Brief Project Description**

The proposed Project would serve as VELCO's backup control and data center, consisting of a two-story building and supporting services (wastewater and potable water systems), power transforms, backup emergency generators, chillers, a chain link security fence, driveway, parking lot, and permanent stormwater management system.

**Project Area**

	Total Acres	Forest Acres		Open Acres
<b>Project</b>	<b>4.2</b>	<b>1.25</b>		<b>2.95</b>
<b>Proposed Tree Removal (ac)</b>	Completely cleared	Partially cleared (will leave trees)	Preserve acres- no clearing	
	<b>1.25</b>	<b>0</b>	<b>0</b>	

**Vegetation Cover Types**

Pre-Project	Post-Project
Predominantly comprised of open meadow with a few tree rows extending through the center and along the western, southern, and southeastern boundaries. Mid successional forest with trees predominantly < 9 inches DBH	The post-Project vegetation cover type will be largely the same due to tree plantings to occur around the periphery of the Project following completion of construction.

**Landscape within 5 mile radius**

**Flight corridors to other forested areas?** Flight corridor connectivity is limited as the Project site occurs within open agricultural (pasture/hay) fields.

**Describe Adjacent Properties (e.g. forested, grassland, commercial or residential development, water sources)**  
 The adjacent properties primarily consist of agricultural fields, electrical transmission components (transmission line/substation), residential developments, and Vermont State Route 17.

**Proximity to Public Land**

**What is the distance (mi.) from the project area to forested public lands (e.g., national or state forests, national or state parks, conservation areas, wildlife management areas)?**

Green Mountain National Forest land is located approximately 4.6 miles to the west.

APPENDIX A: PHASE 1 HABITAT ASSESSMENTS

Use additional sheets to assess discrete habitat types at multiple sites in a project area

Include a map depicting locations of sample sites if assessing discrete habitats at multiple sites in a project area

A single sheet can be used for multiple sample sites if habitat is the same

<b>Sample Site Description</b>
Sample Site No.(s): 1 New Haven Operations Facility - approximately 4.2-acres including adjacent tree hedgerows

<b>Water Resources at Sample Site</b>				Describe existing condition of water sources:  Wet meadow between hedgerow with seasonal high water table - no surface water observed
<b>Stream Type (# and length)</b>	Ephemeral 1-71 ft	Intermittent 1	Perennial 0	
<b>Pools/Ponds (# and size)</b>	0 Open and accessible to bats? NA			
<b>Wetlands (approx. ac.)</b>	Permanent	Seasonal		
		0.5		

<b>Forest Resources at Sample Site</b>				
<b>Closure/Density</b>	Canopy (> 50')	Midstory (20-50')	Understory (<20')	1=1-10%, 2=11-20%, 3=21-40%, 4=41-60%, 5=61-80%, 6=81-100%
	0	2	5	
<b>Dominant Species of Mature Trees</b>	Red maple, sugar maple, eastern white pine, poplar species (Populus sp.)			
<b>% Trees w/ Exfoliating Bark</b>	0%			
<b>Size Composition of Live Trees (%)</b>	Small (3-8 in)	Med (9-15 in)	Large (>15 in)	
	75	25	0	
<b>No. of Suitable Snags</b>	1			

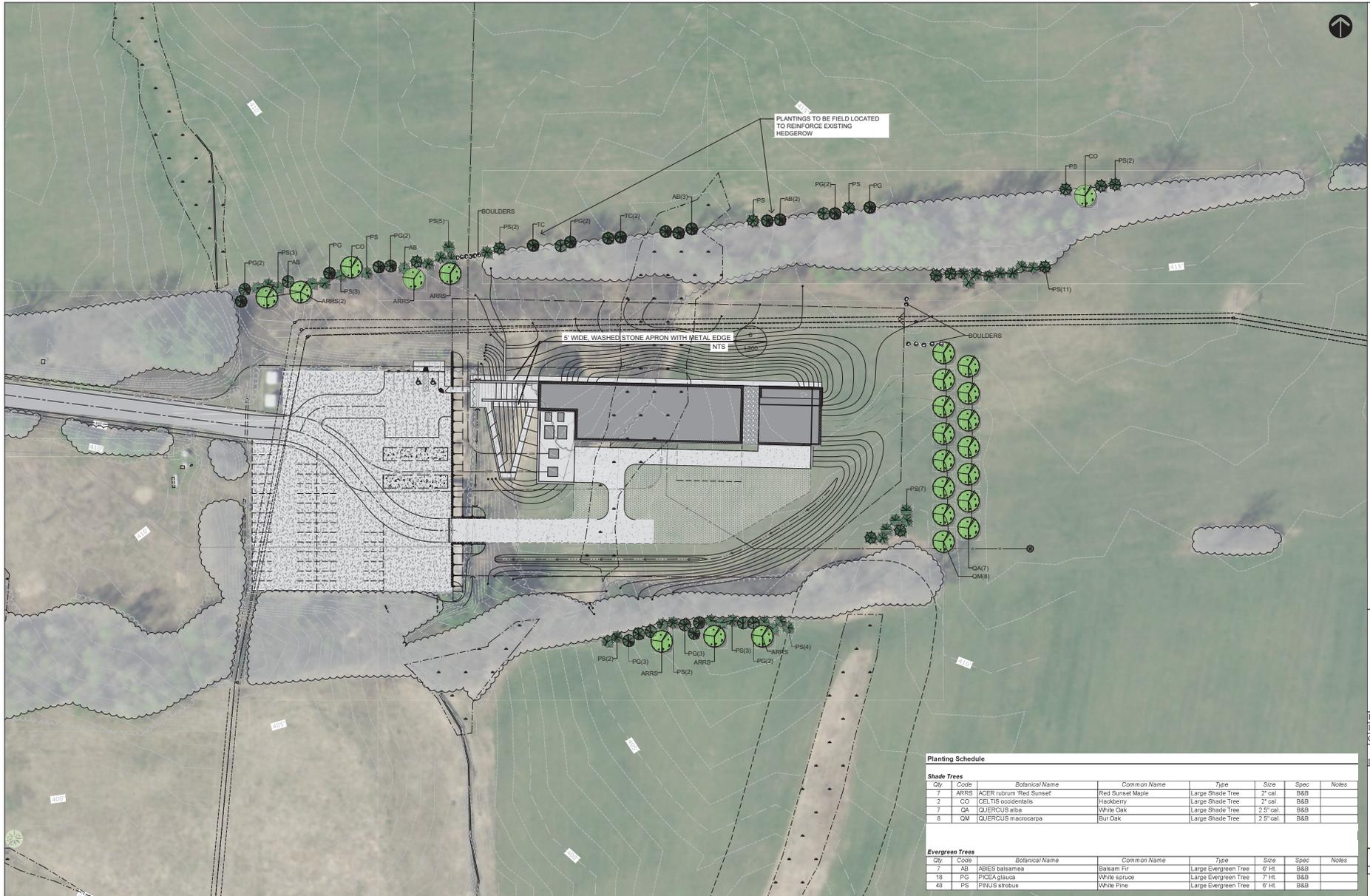
Standing dead trees with exfoliating bark, cracks, crevices, or hollows. Snags without these characteristics are not considered suitable.

IS THE HABITAT SUITABLE FOR INDIANA BATS? Potentially but low suitability \_\_\_\_\_

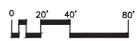
<b>Additional Comments:</b>	Low habitat suitability due to relatively disconnected nature of forested hedge rows within the Project Site, lack of trees with exfoliating bark, and limited number of suitable snags.
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Attach aerial photo of project site with all forested areas labeled and a general description of the habitat

**Photographic Documentation:** habitat shots at edge and interior from multiple locations; understory/midstory/canopy; examples of potential suitable snags and live trees; water sources



LANDSCAPE MITIGATION PLAN



60% PLAN  
REVISED  
11/06/2019

Planting Schedule							
Shade Trees							
Qty	Code	Botanical Name	Common Name	Type	Size	Spec	Notes
7	ARRS	ACER rubrum 'Red Sunset'	Red Sunset Maple	Large Shade Tree	2" cal	B&B	
2	CO	CELTIS occidentalis	Hackberry	Large Shade Tree	2" cal	B&B	
7	QA	QUERCUS alba	White Oak	Large Shade Tree	2.5" cal	B&B	
8	QM	QUERCUS macrocarpa	Bur Oak	Large Shade Tree	2.5" cal	B&B	
Evergreen Trees							
Qty	Code	Botanical Name	Common Name	Type	Size	Spec	Notes
7	AB	ABIES balsamea	Balsam Fir	Large Evergreen Tree	6" ht	B&B	
18	PG	PICEA glauca	White Spruce	Large Evergreen Tree	7" ht	B&B	
48	PS	PNUS strobus	White Pine	Large Evergreen Tree	6" ht	B&B	

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Landscape Architects  
T.J. BOYLE ASSOCIATES

VELCO New Haven  
Operations Facility

New Haven, Vermont 05742

CONFIDENTIAL AND PROPRIETARY  
© 2019 B&W ARCHITECTURE

Project No. 195601783
Drawn By: DA
Checked By: MB
Issue Schedule
Description Date

Revisions		
#	Description	Date

LANDSCAPE MITIGATION PLAN

L-200



Stantec Consulting Services Inc.  
30 Park Drive, Topsham ME 04086-1737

November 14, 2019  
File: 195601391

**Attention: Noel Dodge, Alyssa Bennett**  
Vermont Agency of Natural Resources  
Fish and Wildlife Department  
5 Perry Street, Suite 40  
Barre, VT 05641

**Reference: Project Review Request, VELCO New Haven Operations Facility, Addison County, Vermont, Consultation Code: 05E1NE00-2020-SLI-0108**

Stantec Consulting Services Inc. (Stantec) is providing this letter to the Vermont Agency of Natural Resources (VTANR) as a component of conducting a rare bat species review for the proposed New Haven Operations Facility (Project) for Vermont Transco LLC/Vermont Electric Power Company (VELCO). The proposed Project, located in New Haven, Addison County, Vermont, off Route 17 (VT 17; Maine Street), would serve as VELCO's backup control and data center, consisting of a two-story building and supporting services (wastewater and potable water systems), power transforms, backup emergency generators, chillers, a chain link security fence, driveway, parking lot, and permanent stormwater management system. The proposed action, or Project, will consist of clearing and grading, expansion of the existing wastewater mound system (located to the west of the old substation), construction of the two-story New Haven Operations Facility building, parking areas (to be located within the old substation footprint), and installation of an operational-phase stormwater management system. The Project and the action area (Study Area) is identified in the attached U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) official species list (Attachment 1) and Natural Resources Map (Attachment 2). Representative site photographs (Attachment 3) are included with this submittal to provide further details regarding existing conditions and proposed construction activities. Assuming regulatory approval is obtained, the Project construction is expected to start in August 2020, with a targeted completion date of December 2022.

For the purposes of Vermont Public Utility Commission (VT PUC) Section 248 and U.S. Army Corps of Engineers authorizations, an approximately 72-acre area (Study Area) that encompasses the Project area was assessed for natural resources, soils, and cultural resources (Attachment 2 – Natural Resources Map). The Study Area is generally located within the Champlain Valley biophysical region and subwatershed (HU12) Headwaters Little Otter Creek 041504080401. The Study Area soils are predominated by clay (Vergennes clay, 2% to 6% slopes) and loam soils (Nellis loam, 3% to 8% slopes; Melrose fine sandy loam, 0% to 3% slopes). Surrounding land use consists predominantly of agriculture (cropland and pastures), with narrow forested corridors along borders that extend through the Study Area. Land use within the Study Area is a combination of developed and undeveloped areas. Previously developed areas consist of an existing substation, an existing laydown yard (to be relocated prior to construction of the Project), and access driveways and parking areas. Land cover within the undeveloped portions of the Study Area is predominantly comprised of open meadow with a few tree rows extending through the center and along the western, southern, and southeastern boundaries (Attachment 3 – Representative Site Photographs). The dominant tree species within the tree rows and adjacent forested areas consist of eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), and poplar species (*Populus sp.*), primarily with diameter-at-breast-heights (DBH) of less than 8 inches. Additionally, the tree rows and edge

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habitat comprise a high density of non-native invasive species (NNIS) occurrences consisting of Morrow's honeysuckle (*Lonicera morrowii*) and common buckthorn (*Rhamnus cathartica*).

The limit of disturbance (LOD) and forested area to be cleared during construction are shown on Attachment 2 Natural Resources Map and Attachment 4 New Haven Operation Facility Location Map. Tree clearing associated with the proposed action is expected to occur in the tree hedgerows north and south of the proposed New Haven Operations Facility and total no more than approximately 1.66 acres (Attachment 4).

Stantec's rare bat review has included the following information sources:

- New England USFWS Field Office's online endangered species project review process;
- USFWS IPaC review<sup>1</sup> (Attachment 1);
- VTANR Natural Heritage Inventory online Atlas records<sup>2</sup>;
- New York State Department of Environmental Conservation Environmental Mapper<sup>3</sup>; and
- Indiana Bat Habitat Assessment of suitability of the forest habitat on-site for listed bat species (Attachment 5).

Our review indicates that the proposed action has the potential to affect the federally and state endangered Indiana bat (*Myotis sodalis*) and federally threatened and state endangered northern long-eared bat (*Myotis septentrionalis*). However, there are no known maternity roost trees or hibernacula for either species within 1 mile<sup>4</sup> of the Project, and we recognize the proposed action falls under the USFWS northern long-eared bat 4(d) rule.

There is summer habitat for both species but no designated critical habitat overlapping with the Project area. The Project's *Best Management Practices for the Avoidance of Listed Threatened and Endangered Species Integrated Vegetation Management and O&M Activities* (TRC 2013<sup>5</sup>), developed in consultation with VTANR, indicates that in the event that clearing must be conducted outside of the October 15 to April 15 window, the area to be cleared will be assessed for potential roost trees. The on-site habitat survey conducted in August 2018 indicated the site contains low quality bat habitat. Within the LOD (specifically, the northern tree hedgerow), there was one standing dead eastern white pine tree (i.e., snag) noted (Attachment 3 – Photo 2). Otherwise, there are very few trees with evident cavities, crevices, or exfoliating bark located within the tree hedgerows. The total acreage of forest habitat to be cleared will be approximately 1.66 acres. There are 347.2 acres of forest habitat within a 1-mile radius of the Project

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<sup>1</sup> USFWS. 2019. VELCO New Haven Operations Facility, List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project. Information for Planning and Consultation Code: 05E1NE00-2020-SLI-0108.

<sup>2</sup> VTANR. 2019. Vermont Agency of Natural Resources Atlas. Available online at: <http://anr.vermont.gov/maps/nr-atlas>. Accessed October 2019.

<sup>3</sup> NYSDEC. 2019. New York State Department of Environmental Conservation Environmental Mapper. Available online at: <http://www.dec.ny.gov/gis/erm/>. Accessed October 2019.

<sup>4</sup> The USFWS 4(d) rule indicates a distance of 150 feet from known occupied roost trees and a 0.25-mile distance from hibernacula, while the VTFWD guidance indicates a distance of 0.25 miles in the Special Management Zone 1 and a 1-mile distance in the Special Management Zone 2 from known roost trees or hibernacula.

<sup>5</sup> TRC. 2013. Best Management Practices for the Avoidance of Listed Threatened and Endangered Species Integrated Vegetation Management and O&M Activities. Prepared for Vermont Electric Power Company (VELCO) & Green Mountain Power.

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location; therefore, the amount of forest habitat to be cleared represents less than 1.0% (0.5%) of the forest habitat available within a 1-mile radius (Attachment 4).

Tree clearing timing restrictions are not proposed for the Project because suitable habitat for Indiana bat is not available: the tree hedgerows represent low quality habitat with tree DBHs generally less than 8 inches. Further, the hedgerows are relatively isolated within agricultural fields. The amount of tree clearing within the general area is negligible (less than 1.0% of forested habitat within a 1-mile radius of the Project. As required by the VT PUC, a conceptual aesthetic mitigation plan (Attachment 6) has been developed that will result in additional tree plantings on the periphery of the Project Site, thereby replacing portions of the forested hedgerow that are to be cleared during Project construction.

We request that you concur with our determination(s) of “may affect, not likely to adversely affect” for Indiana bat and northern long-eared bat, and that you concur that time of year clearing restrictions would not be required for either species.

For additional information, please don't hesitate to contact me using the information below.

Regards,

**Stantec Consulting Services Inc.**



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Attachment: Attachment 1 – Project IPaC Official Species List  
Attachment 2 – Project Natural Resources Map  
Attachment 3 – Representative Site Photographs  
Attachment 4 – New Haven Operations Facility Location Map  
Attachment 5 – Indiana Bat Habitat Assessment  
Attachment 6 – Conceptual Aesthetic Mitigation Plan



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
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In Reply Refer To:

October 11, 2019

Consultation Code: 05E1NE00-2020-SLI-0108

Event Code: 05E1NE00-2020-E-00316

Project Name: VELCO New Haven Operations Facility

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
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