#### STATE OF VERMONT PUBLIC UTILITY COMMISSION

Case No. 23-\_\_\_\_

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 construction of the "Franklin County Line Upgrade Project" consisting of upgrades to VELCO's existing K42 transmission line in Georgia, St. Albans, Swanton, and Highgate, Vermont

## <u>PREFILED TESTIMONY OF JEFFREY S. DISORDA</u> <u>ON BEHALF OF VERMONT ELECTRIC POWER COMPANY, INC.</u> <u>AND VERMONT TRANSCO LLC</u>

October 26, 2023

Mr. Disorda discusses: 1) vegetation management within the right-of-way needed for construction and expected vegetation conditions following construction, 2) the danger tree removal outside of the right-of-way that is needed for the Project, and 3) VELCO's vegetation management program to maintain vegetation for the future.

# **EXHIBITS**

Exhibit Petitioner JSD-1

Résumé of Jeffrey S. Disorda

Exhibit Petitioner JSD-2 VELCO Transmission Vegetation Management Plan

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## PREFILED TESTIMONY OF JEFFREY S. DISORDA

1	Q1.	Please state your name, current employer, business address, and position.
2	A1.	My name is Jeffrey S. Disorda. I am the Vegetation Management Program
3	Manager at V	ermont Electric Power Company, Inc. (together with Vermont Transco LLC
4	referred to as	"VELCO"), located at 366 Pinnacle Ridge Road, Rutland, Vermont 05701.
5		
6	Q2.	Please describe your education and employment background.
7	A2.	My résumé is included with this filing as <b>Exhibit Petitioner JSD-1</b> .
8		
9	Q3.	Have you previously provided testimony before the Vermont Public Utility
10	Commission	("the Commission")?
11	A3.	Yes, I have provided testimony for several past VELCO projects including:
12	Northwest Re	eliability Project, Docket No. 6860; East Ave. Project, Docket No. 7314; Lamoille
13	County Proje	ct, Docket No. 7032; Southern Loop Project, Docket No. 7373; and the Connecticut
14	River Valley	Project, Docket No. 8605.
15		
16	Q4.	What is the purpose of your testimony?
17	A4.	The "Franklin County Line Upgrade Project," consists of upgrading VELCO's
18	existing K42	transmission line located in the Towns of Georgia, St. Albans, Swanton, and
19	Highgate, Ve	rmont (the "Project"). My testimony addresses the following: 1) vegetation
20	management	within the right-of-way ("ROW") needed for construction and expected vegetation
21	conditions for	llowing construction, 2) the danger tree removal outside of the ROW that is needed

1	for the Projec	ct, and 3) VELCO's vegetation management program to maintain vegetation for the
2	future.	
3		
4	Q5.	Please provide a summary of the Project.
5	A5.	The Project involves a rebuild of the current K42 transmission line in a single
6	pole vertical	design to fit within the existing 150-foot ROW. VELCO witnesses Scott Mallory
7	and William	McNamara describe the Project in detail.
8		
9	Q6.	What vegetation management is needed for Project construction?
10	A6.	For this Project, VELCO will need to remove both incompatible and compatible
11	vegetation to	allow for the construction of the new line, decommissioning, and removal of the
12	existing K42	line. Incompatible and compatible vegetation are defined in the VELCO
13	Transmission	Not Vegetation Management Plan ("TVMP"), provided here as Exhibit Petitioner
14	JSD-2, and s	pecifically as follows:
15	•	Compatible Vegetation - Vegetation that does not mature at heights greater than
16	12 feet. The	ROW must be maintained with compatible vegetation that does not mature at
17	heights great	er than 12 feet and grows very slowly.
18	•	Incompatible Vegetation – Vegetation that matures at heights greater than 12 feet.
19	All incompat	ible species must and will be removed as part of the company's four-year vegetation
20	management	cycle because they have the potential to encroach into the power line if left
21	unmanaged.	

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1	Vegetation removal for the project will be completed by utilizing various techniques.	
2	Primarily, VELCO will use excavator mounted brush mowers that grind trees in place and spread	
3	the chips on the ground. These chips will assist in protecting the soils from compaction and	
4	erosion. In areas where the brush mowers cannot be utilized due to terrain limitations such as	
5	rock ledges and wetlands, vegetation will be hand cut with chainsaws, cut up into smaller pieces,	
6	and left within the ROW. Hand cutting in these areas reduces soil disturbance and temporary	
7	access construction that would be required to allow for equipment access into these areas. In	
8	residential areas, trees will be hand cut utilizing chainsaws, and the limbs will be chipped into	
9	trucks and removed, unless the landowner requests that the wood be left on their property.	
10		
11	Q7. What does VELCO expect in terms of regrowth/revegetation within the	
12	ROW?	
13	A7. VELCO expects compatible vegetation to reestablish quickly within the easement	
14	following construction. The easement has been maintained for compatible vegetation on a 4-	
15	year cycle and it is well established. The compatible vegetation root and seed stock will remain	
16	in place in areas where the soil is not disturbed. In those areas where there is soil disturbance	
17	during construction, VELCO will add seed and mulch post-construction to facilitate regrowth.	
18	Following construction, vegetation will be maintained in accordance with the TVMP and is	
19	expected to generally reestablish to pre-project conditions.	
20		
21	Q8. What are danger trees?	

A8. Danger trees are trees that have the potential to cause a fault or damage to the
transmission line in the event of a tree failure. Pursuant to its TVMP, VELCO has a practice of

1	evaluating and removing danger trees outside of the cleared ROW where those trees have the	
2	potential to risk the safe and reliable operation of the transmission line. Typically, easements	
3	allow for the removal of trees outside of the easement area that VELCO deems may have an	
4	impact to the safe and reliable operation of the line.	
5	Trees that are tall enough to make contact with the conductors or are capable of growing	
6	tall enough over the next four-year cycle are evaluated based on the International Society of	
7	Arboriculture ("ISA") best management practices for tree risk assessment utilizing the danger	
8	tree evaluation criteria as set forth in the TVMP. If a tree does not pose a concern, it will not be	
9	cut and will be reevaluated during subsequent vegetation cycle inventories and patrols.	
10		
11	Q9. Does VELCO need to remove danger trees outside of the ROW for Project	
12	construction? If so, please explain why such removal is necessary.	
13	A9. Yes, VELCO needs to remove danger trees from outside of the easement area to	
14	ensure safe and reliable transmission of electricity. If trees grow the Minimum Vegetation	
15	Clearance Distance ("MVCD") as defined in the TVMP, or fall and make contact with the	
16	conductors, they can cause a sustained outage of the line and likely cause damage that would	
17	require repair to return the line to service.	
18		
19	Q10. Please describe the specific danger tree removal outside of the ROW that is	
20	needed for this Project.	
21	A10. VELCO has identified danger trees to be removed as part of the Project. As the	
22	new line is being constructed closer to the edge of the existing edge of the ROW, trees are now	
23	closer to the energized line. As the conductors move closer to the edge of the ROW, there is an	

1	increase in the number of trees that could impact the line. In many cases, trees along the edge
2	have grown limbs that extend out into the easement. In some cases, if those limbs were trimmed
3	to the edge of the easement, the trees would likely die or decay and pose a risk to the safety and
4	reliability of the line.
5	
6	Q11. Has VELCO coordinated with the owners of the land which is crossed by the
7	ROW to inform them of the need for danger tree removal?
8	A11. Yes, VELCO arborists have identified danger trees to be removed as part of the
9	Project. The identified trees have been marked in the field and the landowners have been
10	notified.
11	
12	Q12. Could you discuss VELCO's general practice of vegetation management
13	within and outside of the right-of-way?
14	A12. VELCO follows its TVMP as the guide for managing vegetation on the nearly
15	13,000 acres of rights of way it maintains throughout Vermont. VELCO's TVMP documents the
16	maintenance policy, procedures, and specifications VELCO uses to prevent the encroachment of
17	vegetation into the MVCD. VELCO is responsible for maintaining a reliable electric
18	transmission system by using a multi-layered strategy to manage vegetation located on
19	transmission rights of way and minimize encroachments from vegetation located adjacent to the
20	ROW, thus preventing the risk of those vegetation-related outages that could lead to vegetation
21	caused outages. The goal of the TVMP is to establish a sustainable vegetation management plan
22	to minimize encroachments into the MVCD of VELCO's ROW. VELCO identifies vegetation
23	encroachments in the TVMP as:

1	• A fall-in from inside the ROW that causes a vegetation-related Sustained Outage	
2	(outage lasting longer than 5 minutes);	
3	• Blowing together of applicable lines and vegetation located inside the ROW that	
4	causes a vegetation-related Sustained Outage; and	
5	• Vegetation growth into the MVCD that causes a vegetation-related Sustained	
6	Outage.	
7	In order to accomplish this goal, VELCO utilizes a system of vegetation management that	
8	manages plant communities in which compatible and incompatible vegetation are identified,	
9	action thresholds are considered, control methods are evaluated, and selected control(s) are	
10	implemented to achieve a specific objective. The choice of control method or methods is based	
11	on safety, environmental impact, effectiveness, site characteristics, security, and economics.	
12	This system of vegetation management is called Integrated Vegetation Management ("IVM").	
13	The purpose of Integrated Vegetation Management is to promote sustainable plant	
14	communities that are compatible with the intended use of the site and to discourage incompatible	
15	plants that may pose concerns, which in VELCO's case includes species that mature at heights	
16	greater than 12 feet. Other elements of IVM include safety, security, access, fire hazard, electric	
17	service reliability, emergency restoration, visibility, line of sight requirements, regulatory	
18	compliance, environmental, or other specific concerns. The primary objectives of VELCO's	
19	TVMP are reliability, safety, compliance, environmental impact, economics, access, public land	
20	impacts, aesthetics, public outreach and education, as well as the investigation of new	
21	technologies.	

## 1 Q13. Are there standards that require VELCO to implement vegetation 2 management practices? If so, could you please describe those standards. 3 North American Electric Reliability Corporation ("NERC") Reliability Standard A13. 4 FAC-003-4 applies to overhead lines greater than 200kV and those identified as elements of an 5 Interconnection Reliability Operating Limit ("IROL"). Although a very important element of 6 VELCO's transmission system, the K42 line is not currently subject to the NERC standards. 7 Although not applicable to the NERC standard, VELCO applies the elements of the reliability 8 standard, and the related practices contained within the VELCO TVMP, to VELCO's entire 9 electric transmission system regardless of voltage class as part of an effort to ensure electric 10 reliability to the state. 11

#### 12 O14. Does this conclude your testimony at this time?

13 A14. Yes.

## DECLARATION OF JEFFREY S. DISORDA

I declare that the above statements are true and accurate to the best of my knowledge and belief. I understand that if the above statements are false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

10/26/23 Date

/s/ Je<u>ffrey</u> S. Disorda Jeffrey S. Disorda