FINDING OF NO SIGNIFICANT IMPACT

Vermont Electric Power Company
FE Dockets PP-66-2 and PP-82-3

Background

Under Executive Order (EO) 10485, as amended by EO 12038, no person may construct, operate, maintain, or connect facilities at the international border of the United States for the transmission of electric energy between the United States and a foreign country without first obtaining a Presidential permit from the Department of Energy (DOE).

On June 21, 1979, DOE issued Presidential Permit PP–66 to Citizens Utilities Company (now Citizens Communications Company; ''Citizens'') for one 120,000-volt (120-kV) electric transmission line that crosses the United States border with Canada near Derby Line, Vermont, and interconnects with similar transmission facilities in Canada owned by Hydro-Quebec.

On August 21, 2003, Citizens and Vermont Electric Power Company (VELCO) jointly filed an application with DOE to transfer Presidential Permit PP–66 from Citizens to VELCO. VELCO is a Vermont corporation comprised of several electric utilities operating in the State of Vermont. VELCO currently owns and operates most of the bulk transmission facilities in Vermont, other than those currently owned by Citizens. The joint application by Citizens and VELCO was occasioned by VELCO's proposal to purchase Citizens' transmission facilities in northern Vermont, including the international transmission facilities authorized by Presidential Permit PP-66.

Notice of the Citizens and VELCO application to transfer PP–66 appeared in the *Federal Register* on September 2, 2003 (68 FR 52187) requesting that comments, protests, or requests to intervene be submitted to DOE by October 2, 2003. None were received. On November 5, 2003, DOE issued Order No. PP-66-1 which amended Presidential Permit PP-66 by changing the name of the permit holder from Citizens to VELCO.

The Northern Loop Project

Presently, the electric load in northern Vermont is supplied by three radial transmission lines: a 115-kV line between Georgia Substation and Highgate Substation; a 115-kV line between Littleton Substation and Irasburg Substation; and the PP-66 facilities which cross the U.S.-Canadian border and connect Mosher's Tap and Citizens' portion of the Highgate Substation. A radial line is one which can supply electricity to customers from a single direction. It is connected to a source of electric power (a generating station or a supply

substation) at only one end. If the transmission line is out of service because of damage or maintenance, all of the electric customers supplied from that radial line will be without electric service. VELCO's proposed Northern Loop Project would connect the three radial transmission lines in a way that would create a continuous electrical loop around northern Vermont and permit electric load to be supplied from more than one direction. This would improve the reliability of electric service in northern Vermont by reducing the likelihood that the outage of any one supply transmission line would cause the loss of electric service to customers.

Implementing the Northern Loop Project would require the following actions:

- Connecting VELCO's Irasburg Substation to Mosher's Tap with a new 115-kV line. This would require the replacement of an existing 48-kV transmission line between Irasburg and Mosher's Tap with new support structures that would contain both the existing 48-kV line and the proposed 115-kV line;

- Change in operation of the existing 120-kV line between Mosher's Tap and Citizens' Highgate Substation to 115-kV operation;

- Constructing a new bus section at Highgate Substation to connect the 115-kV circuit from Mosher's Tap to VELCO's existing 115-kV line between Georgia and Highgate Substations;

- Consolidation of the Citizens and VELCO portions of the Highgate Substation; and,

- Related improvements to VELCO's St. Johnsbury, Irasburg and St. Albans Substations.

On September 3, 2003, VELCO applied to DOE to amend Presidential Permits PP-66 and PP-82[1] to affect the physical and operational changes to those facilities required to implement the Northern Loop Project. In its application, VELCO stated that the effect of the Northern Loop Project would be to shift load supplied in northwestern Vermont from the PP-66 facilities to the PP-82 facilities. This would result in a decrease in electricity imports from Canada over the PP-66 facilities and an increase in imports over the PP-82 facilities. Accordingly, in this application VELCO requested that PP-82 be amended to increase the allowable level of electricity imports over the PP-82 facilities to 250 megawatts (MW).

Notice of VELCO's application to amend Presidential Permits PP-66 and PP-82 appeared in the *Federal Register* on October 9, 2003 (68 FR 58320) requesting that comments, protests, and petitions to intervene be submitted by November 10, 2003. No comments were received.

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1 The PP-82 facilities, also known as the Highgate Project, consist of a 120-kV transmission line that connects the Hydro-Quebec electric system in Canada with the electrical grid in northern Vermont. The line crosses the U.S.-Canadian border in northwestern Vermont and extends approximately 7.5 miles to Highgate Substation located in Highgate, Vermont. Highgate Substation contains a back-to-back converter station that converts alternating current to direct current and then back to alternating current. Presently, different portions of the facilities that comprise Highgate Substation are owned separately by Citizens and VELCO and are not electrically connected.

Prior to issuing a Presidential permit, DOE must evaluate the environmental impacts of the proposed action and reasonable alternatives pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321, *et. seq.*). In compliance with NEPA, DOE has prepared an Environmental Assessment (EA; DOE/EA-1503), entitled Vermont Electric Power Company Proposed Northern Loop Project, to analyze the environmental impacts related to the proposed Federal action of authorizing the requested modifications to the existing PP-66 and PP-82 facilities. Several of the required physical modifications are proposed to be made to existing domestic transmission facilities over which DOE has no jurisdiction. However, because the modifications to the domestic transmission facilities would not be necessary but for the physical and operational changes to the PP-66 and PP-82 facilities, the modifications to the domestic facilities are considered connected actions under NEPA and the environmental impacts associated with those actions also are considered in the EA.

In addition to the proposed action, the EA considers several alternatives, including a "No Action" alternative. Under the No Action alternative, DOE would deny the amendments to Presidential Permits PP-66 and PP-82, the Northern Loop Project would not be implemented, and there would be no environmental impacts from the physical modifications required to implement the project.

Other "action" alternatives considered in the EA included alternative routes for implementing the Irasburg-Mosher's Tap transmission improvements. One of these alternative routes would require development of a new 100-foot wide, 6.5-mile long right-of-way (ROW) for the entire length of the route; the other alternative route would utilize the existing ROW for approximately 4.4 miles of the route and then require development of an additional 2.1 miles of new 100-foot wide ROW.

The EA also contains a discussion of the following alternatives to the Northern Loop Project. These are alternatives that VELCO studied as possible actions that could serve the same purpose as the proposed action. However, each of these alternatives was eliminated from further consideration for the reasons given below:

- Construction of sufficient generation in northern Vermont that, coupled with the existing transmission system, could serve electrical load with the same reliability that would be achieved by the project. This alternative was eliminated from further consideration because of higher costs than the proposed project and significant environmental impacts, such as atmospheric emissions;

- Investments in conservation and efficiency measures that, coupled with the existing transmission system, could serve electrical load with the same reliability that would be achieved by the project. This alternative was eliminated from further consideration because of significantly higher costs than the proposed project and because such measures would be infeasible in that they would have to eliminate more than half of existing, peak-electrical requirements to achieve the same reliability benefits as the proposed project;

- Reducing the size of the conductor, reducing the spacing between poles or changing the structure design for the Irasburg-Mosher's Tap line to reduce the power line's size and height. This alternative was eliminated from further consideration because it would require more poles with greater associated visual and excavation impacts and because it would provide less capacity to meet future electrical requirements, potentially requiring the line to be rebuilt in the near future with additional future environmental impacts.

On November 9, 2004, the pre-approval version of the EA was distributed to state and local government agencies and to private entities known to VELCO or to DOE as possibly having an interest in the project, and inviting comments. No comments of any kind or expressions of concerns were received.

The EA is available upon request, both on paper and on CD-ROM. Additionally, the entire EA, including appendices, is available on the Internet at http://www.eh.doe.gov/nepa/ea/EA1503/toc.html .

Environmental Consequences of the Proposed Action

The project is located at four sites in four different regions of the state. St. Johnsbury is in the eastern Vermont piedmont, with rivers draining into the Connecticut River watershed. The Newport area is in the Lake Memphremagog basin, which drains north to the St. Lawrence River. The Highgate and St. Albans sites are in the Lake Champlain Valley west of the Green Mountains; Lake Champlain flows north to the St. Lawrence River.

Agriculture in Vermont is predominately dairy, with lands devoted primarily to growing feed crops or in pasture. The St. Johnsbury site has no active agricultural use nearby. A portion of the Irasburg-to-Mosher's Tap corridor crosses over areas that are currently farmed. There is no agricultural use in the immediate vicinity of Highgate Substation. St. Albans Tap is in the middle of a small field that is currently cropped with hay.

None of the project sites were found to interfere with forestry or with recreational activities enjoyed in the areas, such as snowmobiling, hunting, fishing, boating and camping. VELCO would negotiate with adjacent landowners to obtain easements where needed. None of the three state airports in proximity to the project are adversely affected by the project.

Air Quality Impacts

The proposed project would produce no air quality impacts because no powerplants are involved. None of the facilities would involve any pollution emissions.

Impacts due to construction activities would be minor, short in duration and local in nature (road dust, exhaust emissions from construction equipment and other vehicles). Any dust

produced during construction would be minimal because most construction would take place during the winter months when snow cover would minimize dust production.

Hydrology, Water Quality and Water Use

There are no surface waters in the vicinity of the St. Johnsbury facility; there is ground water located at a depth of five feet. There are several small streams and the Black River in the vicinity of the Mosher's Tap–Irasburg corridor; at its closest point, the corridor is approximately 500 feet distant to the east. The only surface water in the vicinity of the Highgate facility is a storm water pond. There are no surface waters in proximity to the St. Albans Tap site.

Of the four project sites, only the Mosher's Tap site is within the 100-year floodplain. However, the proposed use of single-pole power-line structures would not exacerbate flooding; the poles would not impede floodwater movement or reduce floodwater-storage capacity.

None of the four project sites lie within a public water-supply area. All of the sites except St. Johnsbury do lie within a potential aquifer-recharge area due to gravel underlayment. However, the proposed modifications to substations would not produce any impacts beyond those that are already present.

There are no Class One wetlands affected by this project, and there are no identified water quality problems at any of the four sites.

Ecology

The project is located primarily in the "northern hardwood forest" region of Vermont. The composition of the aquatic and wetland flora of the project area is influenced by the generally cool summer temperatures of the region, water chemistry, and nutrient input from runoff. There are no Federally-listed endangered species of plants or animals known to exist within or near the project areas. During plant inventories taken in 2001 and 2003, one plant species that is listed as threatened in Vermont was noted at the Irasburg Substation site: Greene's rush (Juncus greenei). However, the location of the species occurred outside the footprint of the proposed expansion and would be avoided during construction.

The State of Vermont's Department of Forest, Parks, and Recreation manages 33 designated natural areas. Of these, none are within one mile of any of the project areas.

Socioeconomics

There would be a slight short-term increase in employment in the towns affected by the project as people would be employed to help build the project. Some construction workers would be VELCO personnel, but others would be hired locally by contractors. However, the

total number of workers from outside the affected towns would be small and able to commute. Therefore, the project is not expected to have any adverse impact on the tourist industry in the area.

All the towns affected by the project would see a small increase in tax revenues due to the increased value of the utility facilities attributable to the project.

Visual Resources

All work proposed at the existing substations would be accomplished within the existing footprint of the facilities and would not increase the visibility of the facilities from any vantage point.

The proposed rebuild of the Irasburg-Mosher's Tap line would increase the height of the existing support structures by 30 feet and increase the visibility of the line at two locations. However, VELCO proposes to add screening pine trees at selected locations and to use wood poles and self-weathering steel poles to better blend the proposed line with the surrounding environment and, thus, mitigate any potential adverse visual impacts.

Cultural Resources

In the Irasburg-to-Mosher's Tap corridor, there are many lake-associated wetlands, along with several existing and former small lakes, and archaeological sites may be associated with these fresh-water marsh communities.

No Native American sites have been recorded within the transmission line corridor from Irasburg to Mosher's Tap. At Highgate, the closest known site to the substations is 1150 feet away. Two other sites have been found within 1.2 miles of the substations. However, because all substation modifications would occur within the existing perimeter of the substations, there would be no impact on any of the archaeological sites known to exist in the vicinity.
No Paleontological sites were identified in any project area.

Other Environmental Considerations

- The transmission line would not result in a significant increase in electric or magnetic fields or ion generation.

- With regard to environmental justice, no impacts would occur due to the construction of the proposed transmission line along the proposed alternative.

Conclusion

Based on the information contained in the EA, DOE has determined that the amendment of Presidential Permits PP-66 and PP-82, as requested in VELCO's application, would not constitute a major Federal action significantly affecting the quality of the human environment and, therefore, does not require preparation of an environmental impact statement.

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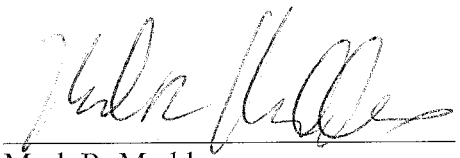

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