

**UNITED STATES DEPARTMENT OF ENERGY**

**Office of Fossil Energy**

**Washington, D.C.**

**FE Docket No. PP-82-3**

**The Joint Owners of the Highgate  
Interconnection Facilities**

**Presidential Permit**

**Order No. PP-82-3**

**February 7, 2005**

## PRESIDENTIAL PERMIT

### Joint Owners of the Highgate Interconnection Facilities

#### ORDER No. PP-82-3

#### I. BACKGROUND

The Office of Fossil Energy (FE) of the Department of Energy (DOE) has the responsibility for implementing Executive Order (EO) 10485, as amended by EO 12038, which requires the issuance of Presidential permits for the construction, connection, operation, and maintenance of electric transmission facilities at the United States international border.

On May 14, 1985, DOE issued Presidential Permit PP-82 to the Joint Owners of the Highgate Project<sup>1</sup> (Joint Owners). The PP-82 facilities, also known as the Highgate Project, consist of a 120,00-volt (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.

On March 1, 1994, DOE issued Presidential Permit PP-82-2 which increased the allowable rate of transmission over the PP-82 facilities in the import mode from 200 megawatts (MW) to 225 MW, subject to certain operating conditions and limitations.

On September 3, 2003, Vermont Electric Power Company (VELCO), acting on its own behalf and as agent for the Joint Owners, filed a single application with DOE to amend Presidential Permits PP-66-1<sup>2</sup> and PP-82-2 to affect the physical and operational changes to those facilities required to implement VELCO's Northern Loop Project. In that same application, VELCO also requested that Presidential Permit PP-82-2 be amended by changing the names of the entities comprising the Joint Owners and by increasing the allowable rate of transmission in the import mode to 250 MW.

The Northern Loop Project is a proposal by VELCO to convert the transmission system in northern Vermont from a series of radial transmission lines to a networked system with multiple supply points. In part, the Northern Loop Project would disconnect radial load in north-

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1 The Joint Owners of the Highgate Project originally included Central Vermont Public Service Corp., Vermont Public Power Supply Authority, Green Mountain Power Corp., Vermont Electric Generation and Transmission Cooperative, Inc., Village of Johnson Electric Light Department, Rochester Electric Light and Power Co., Inc., Citizens Utilities Company (now, Citizens Communications Company; "Citizens"), and the City of Burlington Electric Light Department.

2 The PP-66 facilities consist of one, 120-kV transmission line that crosses the U.S.-Canadian border in the vicinity of Derby Line, Vermont. The transmission line connects to a substation near the border and also to Newport Substation and then extends approximately 52 miles to the west, connecting radially to Citizens' Highgate substation in northwestern Vermont.

central and northwestern Vermont from the PP-66-1 facilities and connect this load to the PP-82-2 facilities. This would result in a decrease in electricity imports from Canada over the PP-66-1 facilities and an increase in imports over the PP-82-2 facilities. It is this shift in power imports that would necessitate an increase in the allowable rate of import over the PP-82-2 facilities to 250 MW. The details of the Northern Loop Project are more fully described in the single application filed in this docket and in the PP-66-2 docket.

Notice of VELCO's application to amend Presidential Permit PP-82-2 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.

The Secretary of State and the Secretary of Defense have concurred in the amendment of Presidential Permit PP-82-2.

## II. DISCUSSION

The operation of the Highgate converter is coordinated with other utilities in the New England region and PP-82-2 contains conditions requiring adherence to several operating agreements and protocols in scheduling imports over the Highgate facilities.

In support of this application to amend PP-82-2, VELCO has submitted technical studies that demonstrate that the implementation of the Northern Loop Project would tend to improve the reliability of the electric system in northern Vermont. Based in part on these studies, DOE is granting the requested increase in power imports over the PP-82-2 facilities that would be necessary to implement the Northern Loop Project. However, DOE notes that no new information has been submitted which suggests that the existing protocols for operating the Highgate converter would no longer be required. Therefore, although this permit amendment authorizes an increase in the maximum rate of imports through Highgate to 250 MW, DOE will require the Joint Owners to continue to adhere to the operating protocols in the existing Presidential permit for scheduling imports through the Highgate converter.

In its application, VELCO noted that the legal name of the Joint Owners has changed to the "Joint Owners of the Highgate Interconnection Facilities." VELCO also notes that the entities that constitute the Joint Owners have changed because of the bankruptcy of Vermont Electric Generation and Transmission Cooperative, Inc., the merger of Franklin Electric Light Company, Inc. into Citizens, and the transfer of Citizens' share of the Highgate Project to Vermont Electric cooperative, Inc. Therefore, this amendment changes the name of the permit holder to "Joint Owners of the Highgate Interconnection Facilities" and re-defines the entities that constitute the Joint Owners as: City of Burlington Electric Department; Central Vermont Public Service Corporation; Vermont Electric Cooperative, Inc.; Green Mountain Power Corporation; Rochester Electric Light and Power Company, Inc.; Vermont Public Power Supply Authority; and the Village of Johnson Water and Light Department



### III. FINDING AND DECISION

DOE has assessed the impact that the amendment of Presidential Permit PP-82-2 of the proposed international transmission facilities would have on the reliability of the U.S. electric power supply system. As a result of this review and as discussed above, DOE has determined that the requested increase in the maximum allowable level of imports through the PP-82-2 facilities, as further limited herein, would not adversely impact the reliability of the U.S. electric power supply system. The technical studies supporting this finding are part of the docket in this proceeding.

DOE has also determined that the amendment of Presidential Permit PP-82-2 as requested by VELCO clearly would not constitute a major Federal action which could significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act of 1969. DOE has documented the rationale supporting this finding in a Finding of No Significant Impact.

### IV. ORDER

Pursuant to the provision of EO 10485, as amended by EO 12038, and the Rules and Regulations issued thereunder (Title 10, Code of Federal Regulations, §205.320 *et. seq.*), Presidential Permit PP-82 is hereby amended by changing the name of the permit holder to the Joint Owners of the Highgate Interconnection Facilities (Joint Owners) and by changing the names of the entities that constitute the Joint Owners to be: City of Burlington Electric Department; Central Vermont Public Service Corporation; Vermont Electric Cooperative, Inc.; Green Mountain Power Corporation; Rochester Electric Light and Power Company, Inc.; Vermont Public Power Supply Authority; and the Village of Johnson Water and Light Department. Presidential Permit PP-82 is further amended to read as follows:

Article 1. The facilities herein described shall be subject to all conditions, provisions and requirements of this permit. This permit may be modified or revoked by the President of the United States without notice, or by DOE after public notice, and may be amended by DOE after proper application thereto.

Article 2. The facilities covered by and subject to this permit shall include the following facilities and all supporting structures within the right-of-way occupied by such facilities:

One three-phase, alternating current transmission line, designed and constructed for 345-kV use but operated at 120-kV, and a back-to-back converter station. The transmission line will extend approximately 7.58 miles from the U.S.-Canadian border near the town of Franklin, Vermont, to the converter station located in the town of Highgate, Vermont. The converter station will be installed to convert electricity from the Hydro-Quebec electric system to direct current and then back to alternating current to allow connection to the existing VELCO 115-kV transmission system.

The facilities authorized by this permit are more specifically shown and described in the application filed in this docket.

Article 3. The facilities described in Article 2 above shall be designed and operated in accordance with all applicable reliability criteria, standards, and guides of the North American Electric Reliability Council, Regional Councils, independent system operators, or Regional Transmission Organizations, as appropriate, and on such terms as expressed therein and as such criteria, standards, and guides may be amended from time to time. Furthermore, the facilities described in Article 2 shall be operated in such a manner that the maximum instantaneous rate of transmission of electric energy entering the United States over the facilities authorized herein shall not exceed 250 MW. Operation of the subject facilities at import levels of up to 250 MW is further conditioned upon the following:

- a. Revision of the pre-contingency dispatch of VELCO's switched capacitors as detailed in Table 1 of the DOE Reliability Determination dated November 26, 1993, to prevent post-contingency reactive deficiency and pre-contingency overvoltages;
- b. Addition of a new relaying scheme whereby imports through the Highgate converter are reduced to 150 MW upon loss of the Sand Bar-Essex 115-kV line;
- c. Establishment of an operating agreement between VELCO and the other members of the New England Power Pool or its successor to limit imports through the Highgate converter to 200 MW whenever electric power is being imported through the Comerford converter; and,
- d. Adherence to the operating procedures outlined in Figure 1 of the DOE Reliability Determination dated November 26, 1993, which limits imports through the Highgate converter for various system operating configurations.

Article 4. No change shall be made in the facilities covered by this permit or in the authorized operation of these facilities unless such change has been approved by DOE.

Article 5. The Joint Owners shall at all times maintain the facilities covered by this permit in a satisfactory condition so that all requirements of the National Electric Safety Code in effect at the time of construction are fully met.

Article 6. The operation and maintenance of the facilities covered by this permit shall be subject to the inspection and approval of a properly designated representative of DOE, who shall be an authorized representative of the United States for such purposes. The Joint Owners shall allow officers or employees of the United States, with written authorization, free and unrestricted access into, through, and across any lands occupied by these facilities in the performance of their duties.



Article 7. The Joint Owners shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this permit. The Joint Owners shall take appropriate action as necessary to mitigate such situations. Complaints from individuals residing within one-half mile of the center of the transmission circuit are the only ones which must be resolved. The Joint Owners shall maintain written records of all complaints received and of the corrective actions taken.

Article 8. The United States shall not be responsible or liable: for damages to or loss of the property of, or injuries to, persons; for damages to, or loss of the facilities covered by this permit; or for damages to, or loss of the property of, or injuries to the person of the Joint Owners officers, agents, the Joint Owners' servants or employees or of others who may be on said premises; any of which may arise from or be incident to the exercise of the privileges granted herein; and the Joint Owners shall hold the United States harmless from any and all such claims.

Article 9. The Joint Owners shall arrange for the installation and maintenance of appropriate metering equipment to record permanently the hourly flow of all electric energy transmitted between the United States and Canada over the facilities authorized herein. The Joint Owners shall make and preserve full and complete records with respect to the electric energy transactions between the United States and Canada. The Joint Owners shall furnish annual reports to DOE, by the 15th of February each year, detailing for each month of the previous year: (1) the gross amount of electricity imported into the U.S., in kilowatt hours; (2) the consideration associated with the import; and (3) the maximum hourly rate of transmission, in kilowatts. Annual reports must be filed regardless of current activity and whether or not deliveries of electric energy have been made. If no transactions have been made, a one-sentence report indicating "no activity" for the previous year is sufficient.


Reports shall be submitted to the U.S. Department of Energy, Office of Fossil Energy, FE-27, 1000 Independence Avenue, SW, Washington, D.C. 20585-0305. Properly identified reports will also be accepted via facsimile at (202) 287-5736 to meet time requirements, but original copies should still be filed at the above address.

Article 10. Neither this permit nor the facilities covered by this permit, or any part thereof, shall be transferable or assignable, except in the event of the involuntary transfer of the facilities by the operation of law. In the case of such an involuntary transfer, this permit shall continue in effect for a period of 60 days and then shall terminate unless an application for a new permit pursuant to Title 10, Code of Federal Regulations, section 205.323, has been received by DOE. Upon receipt by DOE of such an application, this existing permit shall continue in effect pending a decision on the new application. During this decision period, the facilities authorized herein shall remain substantially the same as before the transfer.

Article 11. Upon the termination, revocation or surrender of this permit, the 345-kV transmission facilities (operated at 120-kV) which are owned, operated, maintained, and connected by the Joint Owners and described in Article 2 of this permit, shall be removed and the land restored to its original condition within such time as DOE may specify and at the expense of the Joint Owners. If the Joint Owners fails to remove such facilities and/or any portion thereof authorized by this permit, DOE may direct that such actions be taken for the removal of the facilities or the restoration of the land associated with the facilities at the expense

of the Joint Owners. The Joint Owners shall have no claim for damages by reason of such possession, removal or repair. However, if certain facilities authorized herein are useful for other utility operations within the bounds of the United States, DOE will not require that those facilities be removed and the land restored to its original condition upon termination of the international interconnection.

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