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April 16, 2007

Susan M. Hudson, Clerk  
Vermont Public Service Board  
Drawer 20, 112 State Street  
Montpelier, VT 05620-2701

RE: Petition of Vermont Electric Power Company, Inc. and Vermont Transco, LLC (collectively "VELCO"), the City of Burlington Electric Light Department ("BED"), and Green Mountain Power Corporation ("Green Mountain Power"), requesting the Public Service Board ("Board") to approve, pursuant to Section 248 of Title 30, a series of transmission and sub-transmission network upgrades in Chittenden County, Vermont, known as the "East Avenue Project" ("Project" or "EAL")

Dear Ms. Hudson:

With this letter, the above-named electric utilities ("Petitioners") respectfully submit a petition, prefiled testimony and exhibits in support of Petitioners request, pursuant to Section 248 of Title 30, to construct the East Avenue Loop Project

### **Project Need**

The present electric sub-transmission and distribution networks in the EAL Chittenden County area (which includes South Burlington, Williston, Colchester, Winooski, Essex, Richmond, and Bolton) cannot provide adequate and reliable electric service to the customers served in that area. Under the present system configuration and loads, significant amounts of Chittenden County's electric load would be lost under a number of single contingency scenarios. VELCO's East Avenue Substation, which typically supplies 40% to 50% of the City of Burlington's electric load, is fed by a single 115 kV line and 115 kV transformer. Loss of the East Avenue 115 kV source causes the instantaneous loss of the load served by this substation, including critical

facilities like Fletcher Allen Health Care, the University of Vermont and its research facilities, the City of Burlington water and wastewater processing facilities, and the City of Burlington downtown commercial core.

In addition, engineering analysis reveals (among other potential contingencies) that failure of one of the two VELCO Essex Substation 115/34.5 kV transformers, places Green Mountain Power's Chittenden County load (165 MW) in jeopardy, which includes BED load served at the Lake Street Substation (approximately one-third of the City of Burlington's electric load). Chittenden County features the State's largest concentration of people and employment. *See* Chittenden County Regional Plan at 11.15. The level of risk inherent in the existing electric systems serving this area is unacceptable and jeopardizes the economy, public health and vital infrastructure. As this Board concluded in connection with the recent Northwest Vermont Reliability Project upgrades: Vermont needs an electric system "that very rarely fails, because our society has become increasingly dependent on the electric grid." Docket No. 6860 Order of 1/28/05 at 10.

The East Avenue Loop Project addresses the serious reliability problems faced by the City of Burlington and Chittenden County. The East Avenue Loop will provide a redundant delivery supply point to East Avenue so that power is not instantaneously lost for failure of critical facilities, and provides necessary reinforcement to the sub-transmission and distribution network in this area. The Petitioners evaluated several transmission and non-transmission alternative solutions to the reliability problem, including energy conservation, generation and demand response. None could cost efficiently meet the reliability need for this Project.

### **Project Components**

The Project as proposed consists of the following elements:

1. Replacement of VELCO's existing 4.8-mile 115 kV H-frame transmission line located between VELCO's Essex Substation (located in Williston) and its East Avenue Substation (located in Burlington), with two new looped 115 kV single pole transmission lines, to be located within the existing right-of-way.
2. Expansion of VELCO's existing East Avenue Substation located adjacent to Centennial Field to accommodate the second 115 kV line and two new transformers needed to serve area load;
3. Installation of an approximately 1.5-mile 34.5 kV line from the East Avenue Substation to the BED McNeil Substation (located off of Intervale Road in Burlington), with most of the new line to be installed underground from Centennial Road to just west of Colchester Avenue, and along the existing underground conduit on Riverside Avenue until Intervale Road;
4. Relocation of BED's Lake Street Substation transformer and installation of new equipment, within the existing fence of at BED's McNeil Substation located; and



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5. Removal of segments of several BED 13.8 kV circuits connected to BED's Lake Street substation, including overhead lines that span the Burlington Waterfront Park.

The new transmission lines and substation upgrades will be introduced to locations where existing power lines and substations and are already an integral part of the landscape and therefore fit within the context of the existing landscape. In addition, the relocation of the BED substation equipment from the Lake Street Substation to the McNeil Substation, as well as the removal of sections of BED's Waterfront 13.8 kV lines, will improve the visual character of the Burlington Waterfront.

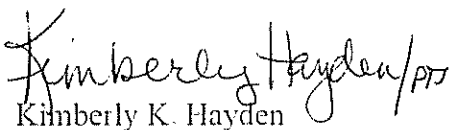
### **Filing Materials, Project Schedule & Request for Prehearing Conference**

A list of the witnesses is set forth in the Petition, and a matrix listing exhibits and tying the testimony and exhibits to the relevant Section 248 criteria, is included in the sleeve of each binder. Mr. LaForest's testimony provides an overview of the Project need, components, costs, expected cost treatment and schedule. He also introduces each of the witnesses.

Note that the Project design is considered final, and was developed in conjunction with substantial input resulting from Petitioners' public outreach process for this Project. As set forth in the testimony, Petitioners propose to commence construction as soon as all permits and approvals have been obtained, and anticipate construction commencing by the third quarter of 2008. In order to meet this schedule, Petitioners respectfully request the Board to docket this filing as expeditiously as possible and to schedule a prehearing conference to be held by mid-to-late May, 2007.

Thank you for your attention to this matter. Should you have any questions, please do not hesitate to contact either of us.

Very truly yours,

  
Kimberly K. Hayden

  
William J. Dodge

Enclosures

cc: Attached Service List

BTV 561443 01

