

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Petition of Vermont Transco, LLC, and)
Vermont Electric Power Company, Inc.)
(collectively, "VELCO"), and Green Mountain)
Power Corporation ("GMP") for a Certificate of)
Public Good, pursuant to 30 V.S.A. § 248, for)
the "Gorge Area Reinforcement Project",)
located in the municipalities of South Burlington)
and Colchester, Vermont, consisting of the)
following elements: (1) construction of a new)
VELCO 115/34.5 kV substation ("VELCO)
Lime Kiln substation") and a new GMP 34.5 kV)
substation ("GMP Lime Kiln substation") in the)
City of South Burlington across the Winooski)
River from the existing GMP Gorge substation;)
(2) upgrade of the existing GMP Gorge)
substation in Colchester; and (3) reconstruct)
approximately 700 feet of GMP's existing 3307)
and 3308 34.5 kV lines between the GMP Lime)
Kiln and Gorge substations)

Docket No. _____

PETITION FOR CERTIFICATE OF PUBLIC GOOD

NOW COME Vermont Transco, LLC and Vermont Electric Power Company, Inc. (collectively "VELCO") and Green Mountain Power Corporation ("Green Mountain Power") (collectively, "Petitioners"), and file this Petition, pursuant to 30 V.S.A. § 248 and Public Service Board ("Board") Rule 5.400, requesting the Board to issue a Certificate of Public Good for the so-called Gorge Area Reinforcement Project (the "GAR" or "Project").

By this Petition, the Petitioners represent as follows:

1. VELCO and Green Mountain Power are each a "company" as defined by Section 201 of Title 30, Vermont Statutes Annotated, and as such are subject to the Board's jurisdiction pursuant to Section 203 of Title 30.
2. VELCO's office is located at 366 Pinnacle Ridge Road, Rutland, Vermont 05701.

3. Green Mountain Power's office is located at 163 Acorn Lane, Colchester, Vermont 05446.
4. VELCO owns, operates and plans for the State of Vermont's high voltage electric transmission system (115 kV and above).
5. VELCO operates Vermont's high voltage transmission system to assure the integrity of the portion of the regional bulk power system for which it is responsible, and to assure adequate and reliable transmission of electricity to the twenty-one distribution electric utilities that it serves in Vermont.
6. Green Mountain Power owns, operates and plans for an electric distribution and sub-transmission system serving customers in Chittenden County, Vermont and other areas of the State.
7. The Green Mountain Power 34.5 kV electric system in Chittenden County provides service to approximately 32,200 Green Mountain Power customers (after the completion of the Northwest Vermont Reliability Project) in South Burlington, Williston, Colchester, Winooski, Essex, Richmond, Bolton. The 34.5 kV system also serves Vermont Electric Cooperative and approximately one-third of the City of Burlington electric load.
8. The sub-transmission system in Chittenden County is currently fed by three VELCO substations (the Queen City substation in South Burlington, and the Tafts Corners and Essex substations in Williston. Upon completion of the East Avenue Loop Project, the Chittenden County 34.5 kV electric system will also be served by the East Avenue VELCO substation.

Project Need

9. Current transmission system planning studies indicate that for the load levels and load distributions projected for the summer of 2011, the Green Mountain Power 34.5 kV system in Chittenden County is expected to be susceptible to poor

voltage and thermal performance and two criteria violations. The contingencies that are most limiting are loss of the VELCO Essex X-20 transformer, and an outage of Green Mountain Power's 3307 and 3308 34.5 kV lines (which are on common structures).

10. Based upon current 2011 load projections, up to approximately 4000 customers could be lost following a contingency of the 3307 and 3308 lines. Loss of one of the Essex transformers, which overloads the remaining transformer, would potentially impact a much wider area of Chittenden County.
11. Petitioners have an obligation pursuant to Section 219 of Title 30, to furnish reasonably adequate service, accommodation and facilities to the public.
12. By this Petition, Petitioners request the 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 so-called "Gorge Area Reinforcement Project" ("Project" or "GAR Project").
13. The Project is the second phase of a three-phase, 20-year plan studied as part of the Burlington Waterfront Area-Specific Collaborative (or "ASC"), which examined solutions to electric system reliability concerns within the City of Burlington and in northern Chittenden County. The East Avenue Loop Project, recently approved by the Vermont Public Service Board in Docket No. 7314, is the first phase of the plan, and addresses local reliability problems for the City of Burlington Electric Light Department and the Green Mountain Power sub-transmission systems in Chittenden County through 2010.
14. The level of risk inherent in the existing system is unacceptable and jeopardizes the economy, public health and vital infrastructure.
15. The Project will address the thermal and voltage problems anticipated for 2011. These improvements will:

- Create a new 115 kV source into the Chittenden area 34 kV transmission system, which will maintain reliability as load increases, while allowing for a system contingency involving the failure of a single transmission element;
- Upgrade antiquated, aged GMP facilities, thus reducing the possibility of failure;
- Allow GMP to remove the Burlington waterfront lines while meeting reliability criteria;
- Allow increased peaking generation capability at the existing Gorge GMP substation;
- Allow the conversion of the existing 4.16 kV distribution feeders at the existing Gorge GMP substation to 12.47 kV.

Project Components

16. The Project as proposed consists of the following four principal components:

- Construction of a new VELCO 115/34.5 kV substation (VELCO Lime Kiln substation), which includes a three breaker 115 kV ring bus and a 115/34.5 kV, 56 MVA transformer, a new Green Mountain Power 34.5 kV five breaker ring bus substation (GMP Lime Kiln substation), and the underground line between the two new substations. The VELCO and GMP Lime Kiln substations will be located in South Burlington off of Berard Drive, across the Winooski River from the existing GMP Gorge substation in Colchester;
- A major upgrade of the existing GMP Gorge substation, which is located off Gorge Road in Colchester. The upgrade will require an expansion of the existing substation fence;
- Reconstruction of approximately 700 feet of Green Mountain Power's existing 3307/3308 34.5 kV lines between the GMP Lime Kiln substation and the GMP Gorge substation;
- The upgrades will allow for the removal of approximately 4.2 miles of Green Mountain Power's 3323 and 3328, 34.5 kV lines located between the McNeil substation located off of Intervale Road in Burlington and the Green Mountain Power Queen City substation located in South Burlington. The proposed activities include complete removal of the approximately 1.5 miles of existing structures and equipment associated with the 3323/3328 lines between the McNeil substation and the Moran substation located on the Burlington Waterfront, and removal of the upper-most circuits between the Moran substation and the GMP Queen City substation. The poles on this segment will remain in place if the Burlington Electric Light Department distribution lines remain on them, otherwise the poles will be removed along with GMP's lines.

Project Cost

17. The estimated total cost of the Project is approximately \$32.7 million.
18. Approximately \$11.7 million of the Project's total cost is eligible for Pool Transmission Facilities ("PTF") regionalized cost recovery.

Project Schedule

19. Currently, the estimated construction schedule is from 3rd quarter of 2009 through the 2nd quarter of 2011. In order to meet this in-service date to address the 2011 reliability need, a CPG must be issued by June of 2009.

Alternatives Evaluated

20. The Petitioners evaluated several transmission alternative ("TA") and non-transmission alternative ("NTA") solutions to the reliability problem, including alternative substation upgrades, energy conservation, demand response, and generation. The analysis presented with this Petition indicates that the only potential alternative that may cost effectively meet the need for this Project is new generation at the location of Green Mountain Power's existing Gorge generation site in Colchester, adjacent to the Gorge substation. Further detailed study work, which is anticipated to be completed this fall, must be completed and reviewed before a recommendation could be made.
21. Petitioners are submitting a petition to initiate regulatory review of the Project now, for several important reasons. First, even if this generation NTA were found to be a better alternative option to the Project, a substantial portion of the Project – the expansion of the GMP Gorge substation – would be a required part of this alternative.
22. The baseline load forecast used to assess timing of need for the Project, uses conservative assumptions. The critical loads could be reached sooner than the predicted 2010-2011 timeframe if Vermont experiences extreme weather over the

next several summers, or if there is unexpected development in the Project load area.

23. Waiting until the generation NTA is fully analyzed could jeopardize service area reliability by delaying the in-service date of the Project. Petitioners project that the current permitting and construction schedule will allow the proposed Project upgrades in service by 2011 to avoid the identified Green Mountain Power planning criteria violations and possible associated outages. However, delaying the Section 248 filing for the Project any further than July of 2008, would create unacceptable risk that Petitioners would not have time to complete Project permitting and construction prior to our projected date of need.

Witnesses

24. In support of this petition, Petitioners submit testimony and exhibits sponsored by the following witnesses:

Dean L. LaForest (VELCO) and Terry G. Cecchini (GMP) - Need

30 V.S.A. § 248 (b)(2)

30 V.S.A. § 248 (b)(3)

30 V.S.A. § 248 (b)(4)

30 V.S.A. § 248 (b)(6)

30 V.S.A. § 248 (b)(7)

30 V.S.A. § 248 (b)(10)

David W. Grimason (Grimason Associates, LLC) - Need

30 V.S.A. § 248 (b)(2)

Douglas C. Smith (GMP) - Need

30 V.S.A. § 248 (b)(2)

30 V.S.A. § 248 (b)(3)

30 V.S.A. § 248 (b)(4)

30 V.S.A. § 248 (b)(6)

Michael Barrett (PLM Inc.) – Substation Design

PSB Rule 5.402 (C)(1)(a)

PSB Rule 5.402 (C)(1)(b)

PSB Rule 5.402 (C)(1)(c)

Josh Castonguay (GMP) – Line Design
PSB Rule 5.402 (C)(1)(a)
PSB Rule 5.402 (C)(1)(b)
PSB Rule 5.402 (C)(1)(c)

Gerald Ostrander (VELCO) and Josh Castonguay (GMP) - Cost

Dorothy Schnure (GMP) – Public Outreach

Scott Mallory (VELCO) – Orderly Development
30 V.S.A. § 248 (b)(1)

Kenneth Kaliski, P.E. (Resource Systems Group, Inc.) - Noise
30 V.S.A. § 248 (b)(5)

Hope Luhman, Ph.D. (The Louis Berger Group, Inc.) - Archaeology
30 V.S.A. § 248 (b)(5)

Hugh Henry and Michael J. Buscher (T.J. Boyle Associates, LLC) – Historic
Properties - 30 V.S.A. § 248 (b)(5)

Michael J. Buscher (T. J. Boyle Associates, LLC) - Aesthetics
30 V.S.A. § 248 (b)(5)

Daniel J. Prasch (VHB Pioneer) - Environmental
30 V.S.A. § 248 (b)(5)

John Stamatov (VELCO) and Josh Castonguay (GMP) – Construction,
Environmental and Public Health & Safety, 30 V.S.A. § 248 (b)(5)

Request for Relief

WHEREFORE, Petitioners respectfully request this Board to:

- A. Hold a prehearing conference as expeditiously as possible, on or before September 1, 2008, on the Petition;
- B. Hold technical hearings as the Board determines are necessary, no later than early February, 2009;

- C. Make findings as required by 30 V.S.A. § 248 finding that the Project will promote the general good of the State of Vermont, and authorize VELCO and Green Mountain Power to undertake the actions described herein and in the attached testimony and exhibits;
- D. Issue and order and Certificates of Public Good to VELCO and Green Mountain Power substantially in forms of the Order and Certificate of Public Good attached hereto as Attachments I and II;
- E. Take such other action as may be required for the expeditious review of this Petition.

DATED at Burlington, Vermont, this 25th day of July, 2008.

DOWNS RACHLIN MARTIN PLLC
Attorneys for Petitioners

By: Kimberly K. Hayden /m.t.
Kimberly K. Hayden, Esq.
Downs Rachlin Martin PLLC
For: Vermont Electric Power Company, Inc.
and VT Transco, LLC
199 Main Street
P.O. Box 190
Burlington, VT 05401-0190

ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the proposed Project, in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued with the conditions set forth below:

1. The findings and conclusions of the Hearing Officer are adopted.
2. Construction, operation, and maintenance of the proposed Project shall be in accordance with the evidence and plans submitted in this proceeding, and the findings and requirements set forth in this Order.
3. Prior to proceeding with construction, Petitioners shall file, for the Board's approval, final construction plans for the Project, which Project plans shall conform substantially to the Project plans approved by the Order. Petitioners shall note any changes in the final plans from the plans approved by the Order and any affected party shall have two weeks to comment on any such changes from the date the plans are filed.
4. Prior to proceeding with construction, Petitioners shall obtain all necessary permits and approvals. Construction, operation, and maintenance of the proposed Project shall be in accordance with such permits and approvals.
5. Green Mountain Power shall conduct post-construction noise measurements at the Green Mountain Power Gorge substation within 60 days of completion of the substation, and file the results with the Board and the parties. The Board shall retain jurisdiction to decide any issues associated with post-construction noise at the Gorge substation.

Dated at Montpelier, Vermont, this ___ day of June, 2009.

_____)
_____) PUBLIC SERVICE
_____)
_____) BOARD
_____) OF VERMONT
_____)

OFFICE OF THE CLERK

FILED: _____

ATTEST: _____

Clerk of the Board

ATTACHMENT II

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

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substation in Colchester; and (3) reconstruct)
approximately 700 feet of GMP's existing 3307)
and 3308 34.5 kV lines between the GMP Lime)
Kiln and Gorge substations)

Technical Hearings
held at Montpelier,
Vermont on _____,
2009

Entered: _____

CERTIFICATE OF PUBLIC GOOD ISSUED
PURSUANT TO 30 V.S.A § 248

IT IS HEREBY CERTIFIED that the Public Service Board of the State of Vermont ("Board") this day found and adjudged that the construction of the proposed Gorge Area Reinforcement Project, described in the Board's June ____, 2009 Order in this Docket (the "Order"), will promote the general good of the State of Vermont, and a Certificate of Public Good is hereby issued to Vermont Electric Power Company, Inc. and Vermont Transco, LLC (collectively "VELCO") and Green Mountain Power Corporation ("Green Mountain Power")(collectively with VELCO, the "Petitioners"), subject to the following conditions:

1. Construction, operation, and maintenance of the proposed Project shall be in accordance with the evidence and plans submitted in this proceeding, and the findings and requirements set forth in this Order.

2. Prior to proceeding with construction, Petitioners shall file, for the Board's approval, final construction plans for the Project, which Project plans shall conform substantially to the Project plans approved by the Order. Petitioners shall note any changes in the final plans from the plans approved by the Order and any affected party shall have two weeks to comment on any such changes from the date the plans are filed.

3. Prior to proceeding with construction, Petitioners shall obtain all necessary permits and approvals. Construction, operation, and maintenance of the proposed Project shall be in accordance with such permits and approvals.

4. Petitioners shall conduct post-construction noise measurements at the GMP Gorge substation within 60 days of completion of the substation, and file the results with the Board and the parties. The Board shall retain jurisdiction to decide any issues associated with post-construction noise at the Gorge substation..

DATED at Montpelier, Vermont, this ____ day of June, 2009.

s/James Volz)
) PUBLIC SERVICE
)
s/David C. Coen) BOARD
)
) OF VERMONT
s/John D. Burke)

A true copy:

OFFICE OF THE CLERK

FILED: _____

ATTEST: _____

Clerk of the Board