

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7090

Petition of Central Vermont Public Service)
Corporation, pursuant to 30 V.S.A. § 248(j), for)
a certificate of public good authorizing the)
replacement of an existing 3.75 MVA)
transformer at the Thetford substation in)
Thetford, Vermont, with a 5 MVA transformer)
to be removed from the Manchester distribution)
substation in Manchester, Vermont

Order entered: 12/14/2005

I. INTRODUCTION

This case involves a petition filed by Central Vermont Public Service Corporation ("CVPS") on June 17, 2005, requesting a certificate of public good under 30 V.S.A. § 248(j) to replace a failed 3.75 MVA transformer at the Thetford substation in Thetford, Vermont, with a 5 MVA transformer to be removed from CVPS's Manchester distribution substation. The petitioner submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

This petition is a result of a failed transformer at CVPS's Thetford substation. On May 13, 2005, CVPS filed a petition with the Public Service Board ("Board") requesting a waiver, pursuant to Section 248(k) of Section 248's general prohibition against site preparation and construction of electric transmission facilities prior to the issuance of a certificate of public good from the Board. The May 13 petition stated that a 3.75 MVA transformer had failed and requested authorization from the Board to replace the failed transformer at Thetford with a 5 MVA transformer from its Manchester substation. On May 20, 2005, the Board issued an Order, pursuant to Section 248(k), granting CVPS's petition. As a condition of the May 20 Order,

CVPS was required to file a petition for such construction pursuant to Section 248(j), and address in such petition whether oil containment at the Manchester site was necessary.

Notice of the filing in this Docket was sent on August 15, 2005, to all parties specified in 30 V.S.A. § 248(a)(4)(c) and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before September 15, 2005. A similar notice of the filing was published in the *Valley News* on August 18 and August 25, 2005. The only comment received was from the Vermont Department of Public Service ("Department") stating that it does not believe that the petition raises a significant issue with respect to the criteria of Section 248 and has no objection to the issuance of a certificate of public good.

The Board has determined that the proposed construction will be of limited size and scope and that the petition has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures authorized by Section 248(j) are sufficient to satisfy the public interest, and no hearings are required.

II. FINDINGS

1. CVPS is a company, as defined in 30 V.S.A. § 201. CVPS is a duly organized public service corporation with its principal place of business at 77 Grove Street, Rutland, Vermont. Petition at 1.

2. The proposed project will replace the failed 3.75 MVA substation transformer at Thetford with a 5 MVA transformer that is being removed from CVPS's Manchester substation. Jones pf. at 2.

3. No changes to the Thetford substation footprint or existing structures and foundation will be necessary. The work will take place at an existing substation, and will consist entirely of the replacement of existing equipment on existing supporting structures. Upton pf. at 2.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

4. The proposed project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of the affected municipality. This finding is supported by findings 5 through 7, below.

5. The proposed project will not materially impact existing or potential land uses in the region. All work will take place within an existing substation lot and the replacement transformer will be installed on the existing foundation. Upton pf. at 2.

6. The proposed project consists of replacement of a transformer on an existing foundation. The proposed project will not have an undue adverse impact on land conservation measures included in the Thetford Town Plan. Upton pf. at 2.

7. The Thetford Selectboard and Planning Commission and the Two Rivers-Ottauquechee Regional Commission were provided with a description of the proposed project. None recommended changes to the proposed design. Upton pf. at 2.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

8. CVPS does not have a spare 3.75 MVA transformer, and to order a new one could take up to 10 to 12 months. Existing loads at the substation have exceeded the rating of the 3.75 MVA transformer, during the winter months, approximately 1% of the time. Jones pf. at 4.

9. The proposed project is the most cost-effective manner to meet present and future needs. Jones pf. at 4.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

10. The proposed project will not adversely affect system stability. Jones pf. at 4.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

11. This proposed project is the least-cost solution to the transformer failure that occurred at the Thetford substation. Jones pf. at 5.

**Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

12. The modifications as proposed will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 13 through 36 below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

13. The proposed project is not located on any Outstanding Resource Waters. Upton pf. at 9.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

14. The proposed project will consist entirely of the replacement of existing equipment on existing supporting structures. Air quality will not be impacted by the proposed project. Upton pf. at 2.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

15. The proposed project is not located in a headwaters area. Upton pf. at 3.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

16. The proposed project will meet applicable health and environmental conservation department regulations regarding the disposal of wastes. This finding is supported by findings 17 through 21, below.

17. The proposed project does not involve disposal of wastes or injection of any material into surface or ground water. Upton pf. at 3.

18. The Board directed CVPS to specifically address oil containment in its petition, after consultation with the Agency of Natural Resources. Department of Environmental Conservation ("DEC") Regulations apply to the disposal of waste contaminated by oil subsequent to a spill. The U.S. Environmental Protection Agency ("EPA") has jurisdiction over spill preparedness for facilities of this type. In accordance with EPA regulations, CVPS maintains a Spill Prevention, Control, and Countermeasures ("SPCC") Plan for the Thetford substation. The response to any oil release will be performed in coordination with DEC. Upton pf. at 3-4; exh. TOU-2.

19. The risks associated with oil spills will be essentially unchanged as a result of the proposed project. Existing drainage ditches direct surface runoff around the back side of the substation yard. The Agency of Transportation maintains a substantial drainage ditch along Route 113, directing surface runoff away from the front of the lot. The likelihood of a release of transformer oil large enough to travel outside the substation yard and enter any nearby surface waters is remote. Upton pf. at 4-5.

20. The replacement transformer has been classified as non-PCB through laboratory testing. Upton pf. at 4-5.

21. Given the remote risk of transformer oil spills and infiltration of nearby water bodies, it would not be practical to build a new oil containment system for the substation transformer at this time. When constructing or significantly reconstructing substations, it is CVPS's normal practice to install modern oil containment systems. If the Thetford substation is substantially rebuilt at this location, the design will include a new oil containment system. Upton pf. at 4-5.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

22. The proposed project will not involve the use of water. Upton pf. at 5.

Floodways, Streams, and Shorelines

[10 V.S.A. §§ 6086(a)(1)(D)(E)&(F)]

23. The proposed project is not located in a floodway or near a stream or a shoreline. Upton pf. at 5-6.

24. There is a small intermittent stream behind the substation lot, which is dry most of the year. Because the proposed project involves the replacement of existing equipment on existing support structures, it will have no impact of the stream, and its existing natural condition will be maintained. Upton pf. at 5.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

25. There are no Class I or Class II wetlands near the proposed project. Upton pf. at 6; TOU-1.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

26. The proposed project will not require a water supply. Therefore, the proposed project will not impact an existing water supply. The substation is not located within any designated Source Protection Area. Upton pf. at 6.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

27. The proposed project is limited to the replacement of a failed transformer on an existing foundation. Therefore, no unreasonable soil erosion or reduction in the capacity of the land to hold water will stem from this proposed project. Upton pf. at 6.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

28. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to use of the highways, waterways, railways, airports or airways, and other means of transportation. The existing access from Vermont Route 113 will be unchanged. Upton pf. at 6.

Educational Services

[10 V.S.A. § 6086(a)(6)]

29. No additional educational services will be required by the facility as a result of the proposed modifications. Upton pf. at 6.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

30. No additional municipal services will be required as a result of the proposed modifications. The proposed project will not cause an unreasonable burden on the ability of Thetford to provide educational or municipal services. Upton pf. at 6.

**Aesthetics, Historic Sites
and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

31. The proposed project will not have an undue adverse effect on the scenic or natural beauty, aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 32 through 34, below.

32. The replacement transformer will be installed on the existing foundation. No new construction will be necessary. Upton pf. at 1-2.

33. The new 5 MVA transformer will have slightly different dimensions than the previous transformer. The new transformer will be 4 inches longer, 8 inches smaller, and 13 inches taller, than the existing 3.75 MVA transformer. The impact on aesthetics will be minimal and will not have an adverse impact on the scenic or natural beauty. Upton pf. at 7-8.

34. Because it will be built on an existing substation lot away from rivers or perennial streams, the proposed project is unlikely to have any impact on potential archeological sites. There are no known rare or irreplaceable natural areas at the proposed project site. Upton pf. at 8.

Discussion

Based on the above findings, the Board finds that the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, the Board has relied on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called Quechee Lakes decision. Quechee Lakes Corporation, #3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by Quechee Lakes, it is first appropriate to determine if the impact of the proposed project would be adverse. The proposed project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it would be located. If it is found that the impact would be adverse, it is then necessary to determine that such an adverse impact would be "undue." Such a finding would be required if the proposed project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps would not be taken to improve the harmony of the proposed project with its surroundings. The Board's assessment of whether a particular proposed project will have an "undue" adverse effect based on these standards should be significantly informed by the overall societal benefits of the project.¹

Because the replacement transformer will be in the same location as, and will be similar in size to, the existing transformer, the proposed project will fit the context of its surroundings and not have an adverse impact on the area in which is located.

1. Docket 6884, Order of 4/21/04 at 20-21.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

35. There are no known endangered species sites or areas of necessary wildlife habitat in the proposed project area. Therefore, the proposed project will not impact any necessary wildlife habitat or affect any known sites containing endangered species. Upton pf. at 8; exh. TOU-1.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

36. The proposed modifications will not impact any public areas or investments in any governmental public facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of the public's use or enjoyment of or access to such facilities. Upton pf. at 8.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

37. The proposed project is consistent with the principles for resource selection in accordance with CVPS's approved least-cost Integrated Resource Plan. The Integrated Resource Plan states the importance of efficiency and reducing system losses when possible. The 5 MVA transformer has lower overall losses than the 3.75 MVA. Jones pf. at 5.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

38. The proposed project is consistent with the 2005 Vermont Electric Plan because it will improve the distribution system efficiency by reducing overall losses, while maintaining reliable, safe service to the customers served by the Thetford 26 circuit. Jones pf. at 5.

39. The Department has determined, in a letter dated September 13, 2005, that the proposed project is consistent with the Vermont 20-Year Electric Plan, pursuant to 30 V.S.A. § 202(f).

Outstanding Resources Waters

[30 V.S.A. § 248(b)(8)]

40. The proposed project is not located on any Outstanding Resource Waters. Upton pf. at 9.

Waste to Energy Facilities

[30 V.S.A. § 248(b)(9)]

41. The proposed project is not a municipal solid-waste-to-energy facility, and, therefore, this criterion is inapplicable.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

42. The proposed project can be served economically by existing transmission facilities without undue adverse effect on Vermont utilities or customers. Jones pf. at 4-5.

III. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed construction will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the proposed modifications, in accordance with the evidence and plans presented in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter.

Dated at Montpelier, Vermont this 14th day of December, 2005.

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

OFFICE OF THE CLERK

FILED: December 14, 2005

ATTEST: s/Susan M. Hudson
Clerk of the Board

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.