

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6347

Petition of Washington Electric Cooperative,)
Inc. for a certificate of public good authorizing)
the construction of a new substation to replace)
an existing substation located in the Town of)
Moretown, Vermont --)

Hearing at
Montpelier, Vermont
March 22, 2000

Order entered: 4/7/2000

Present: Peter B. Meyer, Hearing Officer
Appearances: Joshua R. Diamond, Esq.
Diamond & Robinson, P.C.
for Washington Electric Cooperative, Inc.

Leslie A. Cadwell, Special Counsel
for Vermont Department of Public Service

Jon Groveman, Esq.¹
for Agency of Natural Resources

I. INTRODUCTION

This case concerns a petition filed by Washington Electric Cooperative, Inc. ("WEC") on February 11, 2000, requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 to construct a new substation to replace an existing substation located in the Town of Moretown, Vermont.

On March 15, 2000, a public hearing was held in Montpelier, Vermont. Notice of the public hearing was sent to all parties and interested persons on February 24, 2000. In addition, notice of the public hearing was published in The Times-Argus newspaper on February 24, and March 2, 2000. The public hearing was held as scheduled at 5:30 P.M. at the Public Service Board Hearing Room, Chittenden Bank Building, 112 State Street, Montpelier, Vermont. Also on March 15, 2000, a site visit was held at the substation site in Moretown, Vermont.

On March 21, 2000, WEC and the Vermont Department of Public Service ("DPS") filed a Stipulation in which the two parties agreed that the Board should issue a CPG with

1. Did not appear at hearing.

conditions. The specific conditions contained in the stipulation are described in the findings below.

Notice of the technical hearing was also sent on February 24, 2000, to all parties specified in 30 V.S.A. § 248 and all interested parties. A technical hearing was held as scheduled on March 22, 2000, at 9:30 A.M. at the Public Service Board Hearing Room, Chittenden Bank Building, 112 State Street, Montpelier, Vermont. No one appeared in opposition to the petition and substantial evidence was presented in support of the petition.

II. FINDINGS

Based on the substantial evidence of record and the testimony presented at the hearing, I hereby report the following findings to the Board in accordance with 30 V.S.A. § 8.

1. WEC is a duly organized public service cooperative with its principal place of business in Montpelier, Vermont. Pet. at 1.
2. WEC owns and operates a substation in Moretown, Vermont, and provides electrical service to residents, businesses, schools, and governmental agencies in the Town of Moretown, Vermont. Kischko pf. at 3.
3. The proposed project under consideration involves the replacement of the existing substation located 1.2 miles up Hathaway Road (Town Highway # 5), off from Route 100B in the Town of Moretown. Kischko pf. at 3.
4. The existing substation must be replaced because the wood structure has deteriorated beyond reasonable economic repair, it experiences loading problems under normal operating conditions, lacks adequate, safe working clearances to energized "live" parts, and lacks the necessary oil containment system. The substation has reached the end of its life cycle. Kischko pf. at 4, 5.
5. The proposed project will be built on the existing one-acre site where the present Moretown substation is located. The proposed project will consist of replacing the existing wooden substation with a like size steel structure. New 1250 KVA low-loss power transformers, individual circuit regulation, remote monitoring, and single phase protection will be utilized. The existing 2,500 square foot substation fenced-in area will be expanded to an 8,000 square foot fenced-in area to allow for proper clearances, as well as the ability to place a portable

substation beneath the 34.5 KV transmission line in the event of a substation transformer failure. Kischko pf. at 5; exh. WEC-14.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

6. The proposed substation 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 any-affected municipality. This finding is supported by findings 7 through 10 below.

7. The Town of Moretown has not submitted any objections to the proposed substation. The Regional Planning Commission has no objections, and it has declined to participate in these proceedings. Weston pf. at 6; exh. WEC-1.

8. The Moretown Town Clerk has indicated that there is nothing in the Moretown Town Plan that would preclude the proposed project. Rice pf. at 3.

9. The proposed substation will be built on the site of the existing substation within an existing transmission corridor. It will not have any unduly adverse impacts upon ecological or sensitive/fragile areas. Rice pf. at 3, 4; Kischko pf. at 5; exh. WEC-14.

10. The new substation will provide for the current needs of the residents, businesses, and governmental entities in the Town of Moretown and surrounding areas. It will also allow for additional electrical capacity to accommodate new development in the region. Weston pf. at 6.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

11. The proposed substation is required to meet present and future demand for service which could not otherwise be provided in a more cost effective manner through energy conservation programs and measures and energy efficiency and load management measures. Weston pf. at 2; exhs. WEC-8 & 9. This finding is further supported by findings 3 through 5, above.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

12. The proposed project will not adversely affect system stability. Kischko pf. at 6, 7. Reliability to customers served by the substation will be enhanced by WEC's compliance with stipulated condition # 3. Stipulation at § III, ¶ 3.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

13. The total construction cost for the construction of the substation is estimated at \$306,000. Weston pf. at 4.

14. The proposed project will have an economic benefit to the State by reducing outages to Harwood Union High School, the State of Vermont records building, the Vermont State Police barracks, and over 1,200 residential customers. In addition, the new substation will accommodate new development and growth in the region. Weston pf. at 5, 6.

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

[30 V.S.A. § 248(b)(5)]

15. The new substation will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety. This finding is supported by findings 16 through 43 below, which are based on the criteria specified in 10 V.S.A. §§ 1424 a(d) and 6086(a)(1) through (8) and (9)(K). Rice pf. at 4.

Outstanding Resource Waters

[10 V.S.A. § 1424 a (d)]

16. The proposed project will not affect any outstanding resource waters of the state as identified by the Water Resources Board. This finding is supported by findings 17 through 27, below.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

17. The new substation will not result in undue water or air pollution. The proposed project does not involve industrial/manufacturing emissions, vehicle exhaust at congested intersections, excessive dust and smoke during construction, or processing or storage of radioactive materials. The new substation footprint will have a crushed stone surface that will absorb initial rainfall and slowdown runoff from extended storms. Basic drainage patterns will remain the same. In addition, the new transformer and regulator foundations are designed to collect and store the total volume of the transformer liquid in the event of any leakage incident. Rice pf. at 4-6. This finding is further supported by findings 18 through 28, subcriteria (A)-(G) and air pollution, below.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

18. There will be no undue adverse impact on headwaters. The proposed project will involve the placement of fill on approximately .13 acre of headwater wetland. However, there will be only "minor individual and cumulative impacts." Rice pf. at 6; exh. WEC - 2.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

19. The proposed project as designed will meet the applicable health and environmental conservation regulations regarding the disposal of wastes, and will not involve the injection of waste materials or any harmful toxic substances into ground water or wells. This finding is supported by findings 20 through 22, below.

20. There will be no discharge of any substance to surface or groundwater, either direct or indirect. Rice pf. at 6.

21. All construction debris will be disposed of at a State approved landfill or recycled where possible. Rice pf. at 6.

22. The new substation will contain an oil pit containment system. Any leak from a transformer will be collected in an impervious pit and piped to an underground oil/water separator tank. The transformer liquids or oil will be disposed of off site. Rice pf. at 7; exh. WEC-14.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

23. The proposed project will not utilize a significant supply of water. Rice pf. at 7.

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

24. The proposed project will not be located on a floodway. Rice pf. at 7; exh. WEC-11.

Streams

[10 V.S.A. § 6086(a)(1)(E)]

25. The proposed project is 75 feet away from an intermittent stream. The new substation will maintain the existing 25' vegetated buffer between the project site and the stream. There will be no undue adverse impact to the stream. Rice pf. at 8; exh. WEC-6 & 12.

Shorelines

[10 V.S.A. § 6086(A)(1)(F)]

26. The proposed project will not be located near any shorelines. Rice pf. at 8.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

27. There are Class III wetlands in the vicinity of the substation site. This proposed project will not cause any undue adverse impact upon the wetlands. Rice pf. at 9; exh. WEC-2 & 3.

Air Pollution

[10 V.S.A. § 6086(a)(1)]

28. The proposed project will not result in unreasonable air pollution because there will be no emissions from the new substation. Rice pf. at 4, 5.

Sufficiency of Water And Burden on Existing Water Supply

[10 V.S.A. § 6086(a)(2) & (3)]

29. The proposed project will not require significant amounts of water, and it will not place a burden on any existing water supply. Rice pf. at 9.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

30. The new substation will not result in unreasonable soil erosion or reduce the ability of the land to hold water. This finding is supported by findings 31 through 33, below.

31. Soil disturbance during construction will be minimal on this pre-existing level site. Rice pf. at 10. WEC will comply with the soil erosion control plan and specifications as filed. exhs. WEC-14 & 15.

32. Since much of the site is pre-existing, there will be no new impervious areas to increase peak runoff from the site. Rice pf. at 10; exh. WEC-14.

33. The substation footprint will have a crushed stone surface that will detain runoff from extended storms. Rice pf. at 10; exh. WEC-14.

Traffic Congestion and Safety

[10 V.S.A. § 6086(a)(5)]

34. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. The access drive off of Hathaway Road will not be changed. There is no regular traffic from Hathaway Road to the site where the new substation will be located. There will be a very minimal increase in traffic on Hathaway Road during the construction period. Rice pf. at 10; Weston pf. at 7; exh. WEC-14.

35. No other means of transportation will be affected by the proposed project. Rice pf. at 10.

Educational Services

[10 V.S.A. § 6086(a)(6)]

36. The proposed project will not cause an unreasonable burden on the ability of any of the involved municipalities to provide educational services. Rice pf. at 10, 11; Weston pf. at 7.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

37. The proposed project will not place an unreasonable burden on the ability of any involved municipalities to provide municipal services. Rice pf. at 10, 11; Weston pf. at 7.

**Aesthetics, Historic Sites or Rare
And Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

38. The project as proposed 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 39 through 42, below.

39. The ground elevation of the new substation will be nominally higher than the pre-existing one. However, the overall height of the new structure will be several feet lower than the existing one. Rice pf. at 12; Rice supp. pf. at 1.

40. The existing site is wooded on three sides and the proposed construction will preserve much of the existing tree buffer between the road and the substation. Landscaping will be added to complement the existing trees to provide visual screening. Rice pf. at 12; exhs. WEC-12 & 14.

41. There are no historic or archeological sites that will be effected by the proposed project. Rice pf. at 13; exh. WEC-4.

42. There will be no adverse impact upon rare and irreplaceable natural areas. Rice pf. at 13; exhs. WEC-5 & 6.

Discussion

Based on the above findings, the Board finds that this 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 3WO439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the proposed project will 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 is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue". Such a finding would be required if the 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.

Without the additional landscaping proposed by the petitioner, the project will have an adverse effect on the aesthetics of the area because construction of the new substation will remove much of the existing vegetative buffer on the south that currently screens the project from the adjacent property. Aside from this concern, the project is not significantly out of context with its surroundings because most of the project will take place on the site of the existing substation, it is screened from its surroundings on two sides by existing vegetation, and its overall height will be less obtrusive than the existing facility.

The Board should not find that this adverse impact is undue, however, because there is no written community standard that would be violated by the project, it will not offend the sensibilities of the average person, and by including additional landscaping on the north and south sides of the new substation, WEC has proposed to take all reasonable available mitigating steps to improve the harmony or fit of the project with the surroundings.

**Necessary Wildlife Habitat and
Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

43. The new substation will not impact any necessary wildlife habitats. Rice pf. at 13; exhs. WEC-5 & 6.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

44. The proposed substation will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public utility 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, services, or lands. The proposed project will occupy the existing substation site, and it will not impact such facilities, services or lands. Rice pf. at 13.

Consistent With The Least Cost Integrated Plan

[30 V.S.A. § 248(b)(6)]

45. The project as proposed is consistent with WEC's Least-Cost Integrated Plan. Weston pf. at 2, 3; exhs. WEC-8 & 9.

Compliance With Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

46. The project as proposed is consistent with the 20-Year Electric Plan provided WEC complies with stipulated conditions 1 & 2. Weston pf. at 3, 4; Stipulation at § III, ¶¶ 1 & 2.

Outstanding Water Resources

[30 V.S.A. § 248(b)(8)]

47. No waters of the State that might be designated as Outstanding Resource Waters will be affected by the proposed project. See, findings 16 et. seq., above.

Existing Transmission Facilities

[30 V.S.A. § 248(b)(10)]

48. This proposed project can be served economically by existing transmission facilities. There will be no undue adverse effect on Vermont utilities or customers. The only modification that will be required is the placement of a single pole to enhance the angle at which the transmission line enters WEC's substation facility. Weston pf. at 4.

III. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The construction of a new substation in Moretown, Vermont, by Washington Electric Cooperative, Inc., 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 in this matter.

2. The Stipulation, filed by Washington Electric Cooperative, Inc. and the Vermont Department of Public Service on March 21, 2000, concerning the substation facility is accepted and approved.

DATED at Montpelier, Vermont, this 7th day of April, 2000.

<u>s/Michael H. Dworkin</u>)	PUBLIC SERVICE
)	
)	BOARD
<u>s/Suzanne D. Rude</u>)	
)	OF VERMONT
)	
<u>s/David C. Coen</u>)	

OFFICE OF THE CLERK

Filed: April 7, 2000

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 mail) of any technical 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.