

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7209

Petition of Washington Electric Cooperative,)
Inc. ("WEC") for: (1) a certificate of public)
good, pursuant to 30 V.S.A. § 248(j),)
authorizing the Coventry Project Expansion; and)
(2) approval of WEC's promissory note to the)
National Rural Utilities Cooperative Finance)
Corporation, pursuant to 30 V.S.A. § 108, to)
finance the Coventry Project Expansion)

Order entered: 10/5/2006

I. INTRODUCTION

This case involves a petition filed by Washington Electric Cooperative, Inc. ("WEC") on August 4, 2006, requesting a certificate of public good under 30 V.S.A. § 248(j) to install an additional 1.6 MW engine and other facilities at the Coventry Generation Facility. WEC submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).¹

Notice of the filing was sent on August 28, 2006, to all entities 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 27, 2006. A similar notice of the filing was published in the *Newport Daily News* on August 30 and September 6, 2006.

The only comment received was from the Department of Public Service, filed on September 27, 2006, stating that it does not believe that the petition raises a significant issue with

1. We approve the financing for this project in a separate order in this Docket issued today.

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. In 2005, WEC finished construction of its 4.8 MW landfill-gas-to-energy generation facility in Coventry, Vermont. The Coventry Generation Facility currently utilizes three 1.6 MW Caterpillar 3520 engines to produce energy from the landfill gas. The building that houses the existing three engines was built with a fourth bay to accommodate the installation of a fourth 1.6 MW Caterpillar 3520 engine. Patt pf. at 3-4; *see* Docket 6925, Order of 6/4/04.

2. The Coventry Generation Facility will reach its current maximum capacity in the fall of 2006 or early 2007 due to recovery of landfill gas exceeding expectations. The installation of the additional 1.6 MW engine would increase the installed capacity of the facility from 4.8 MW to 6.4 MW. The increased availability of landfill gas would permit four engines to generate at a rate of approximately 5.6 MW by late 2007. Murphy pf. at 6; exh. WEC- 33.

3. The fourth engine would be installed in a pre-existing building that currently houses the three existing engines. The major structural, electrical, and mechanical infrastructure needed for the fourth engine currently exists. Weston pf. at 4-5; exh. WEC-3d.

4. WEC also proposes to install washing equipment and a composting toilet at the facility. WEC would install a 1,200 gallon reservoir tank, which would be filled with non-potable water provided by a water truck. Pressurized water would be dispensed through an electric pump, rubber hose, and spray nozzle. Spent wash water would enter pre-existing floor sumps and be piped into a pre-existing 1,500 gallon storage tank. The storage tank would be emptied by a licensed hauler and disposed at an appropriate treatment facility. The composting toilet would be placed in an empty room adjacent to the switch gear room at the facility. Murphy pf. at 7-8; exhs. WEC-34, WEC-35, and WEC-40.

5. The anticipated cost of the proposed project is \$1,300,000. WEC would pay for the proposed project with low-cost financing provided through a note with the National Rural Utilities Cooperative Finance Corporation funded by the sale of Clean Renewable Energy Bonds, established pursuant to the Energy Policy Act of 2005. Patt pf. at 5; Weston pf. at 7.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

6. The proposed project would 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 and 8, below.

7. The proposed project was presented to the Town of Coventry and the Northeastern Vermont Development Association. Neither entity submitted any objections. Both entities waived the 45-day advance notice requirement contained in Section 248(f). Weston pf. at 8; exhs. WEC-4 and WEC-5.

8. The proposed construction would occur within an existing building, which is located within a landfill. Weston pf. at 21; exhs. WEC-8 and WEC-10.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

9. The proposed project 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. WEC's need for capacity over the next twenty years will likely range between 8 to 12 MW, assuming the implementation of demand-side management. Accordingly, the proposed project would meet WEC's capacity requirements in the near and long-term. Faryniarz pf. at 15-16; exh. WEC-53.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

10. The proposed project would not adversely affect system stability and reliability. This finding is supported by findings 11 through 14, below.

11. The proposed project does not present thermal or voltage concerns that would adversely impact local transmission and sub-transmission reliability. LaForest pf. at 3.

12. Installation of a fourth 1.6 MW engine would help address some local reliability concerns by providing local generation in an area that largely imports its power. LaForest pf. at 3.

13. ISO-NE has no concerns that the proposed project would have an adverse impact on the transmission system. LaForest pf. at 4.

14. The current substations and transmission lines serving the Coventry Generation Facility have sufficient capacity to accommodate the proposed increase in generation. Crocket pf. at 3-6.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

15. The proposed project would provide an economic benefit to the State. This finding is supported by findings 16 through 18, below.

16. The total cost to WEC for the proposed project is approximately \$1.3 million. As a result of adding a fourth engine at the Coventry Generation Facility, the projected 20-year levelized net cost of power at the facility would drop from 4.3 c/kWh to 3.8 c/kWh. Patt pf. at 5; Weston pf. at 7; Faryniarz pf. at 26, 28; exhs. WEC-55a and WEC-55b.

17. The proposed project would provide an economic benefit to the State by providing WEC customers with a low-cost, stable power source. Faryniarz pf. at 10-11.

18. The proposed project would benefit the State economically by providing power directly within Vermont and into the VELCO transmission system without further burdening the ISO-NE system with imported energy. In addition, the power generated from the proposed project would be an economic benefit to the State by satisfying an increasing statewide demand for power. Faryniarz pf. at 17, 30.

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

[30 V.S.A. § 248(b)(5)]

19. 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 20 through 40; 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

[10 V.S.A. § 1424(a)(d)]

20. The proposed project would not affect any outstanding resource waters. Weston pf. at 11.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

21. The proposed project would not result in undue water or air pollution. This finding is supported by findings 22 through 26, below.

22. Landfill gas at the generation facility is chilled to remove the moisture prior to its combustion in the engines. The moisture or condensate is mixed with the leachate already produced at the landfill and trucked off-site to a water treatment facility. The incremental increase in condensate created by the fourth engine would not be significant and would be disposed in the manner described above. Murphy pf. at 11-12.

23. The proposed project would not result in any discharges to the groundwater. The proposed composting toilet is completely self-contained and would not generate any discharges. The spent wash water would be collected in an existing underground, water-tight concrete storage tank. The spent water would be properly disposed of at a permitted waste water treatment facility. The Agency of Natural Resources has issued a permit authorizing the installation of the wash-water system and the composting toilet. Murphy pf. at 7, 12-13; exhs. WEC-10, WEC-34, and WEC-35.

24. In the event of an oil or glycol leak from the fourth engine, the oil or glycol would be contained in the existing concrete pits underneath the engine. Any leakage into the pit would be pumped, collected, and disposed or recycled at an appropriate disposal facility. Murphy pf. at 14; exhs. WEC-3d and WEC-34.

25. The proposed project would not involve earth disturbance or changes to the existing landfill conditions. Weston pf. at 5, 10.

26. The proposed project would not result in undue air pollution. The net emissions of air contaminants (after accounting for the diversion of landfill gas from the landfill flare to the generating facility) would be within acceptable limits. The existing Air Pollution Control Permit covers a fourth 1.6 MW engine and the Air Pollution Control Division of the Agency of Natural Resources does not require an amendment to the existing permit for the fourth engine. Murphy pf. at 9-10; exhs. WEC-37 and WEC-38.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

27. The proposed project is located within a headwaters region. However, because the proposed construction occurs within an existing building located on the site of a landfill, there would not be an undue adverse impact on the water quality in the area. Weston pf. at 12-13; findings 22-25, above.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

28. The proposed project would meet applicable health and environmental conservation regulations regarding the disposal of wastes, and would not involve the injection of waste materials or any harmful toxic substances into ground water or wells. Murphy pf. at 14.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

29. The proposed project would not utilize a significant amount of water. The composting toilet does not require any water. A modest amount of non-potable water would be provided by truck and held in a 1,200-gallon reservoir tank for quarterly wash-downs. A limited amount of water would also be needed for engine cool-downs. Annually, less than 1,000 gallons of spent wash water would be generated. Murphy pf. at 7, 13, 15.

Floodways, Streams, and Shorelines

[10 V.S.A. §§ 6086(a)(1)(D)(E) &(F)]

30. The proposed project is not located within a floodplain or near a stream or shoreline. Murphy pf. at 13-14.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

31. There is a Class II wetland in the vicinity of the generation facility. However, the proposed project would not change the footprint or utilities leading to the building. Consequently, there would be no adverse impact to the wetland. Weston pf. at 15; exh. WEC-8.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

32. The proposed project would not utilize a significant amount of water. The composting toilet does not require any water. A modest amount of non-potable water would be provided by truck and held in a 1,200-gallon reservoir tank for quarterly wash-downs. A limited amount of water would also be needed for engine cool-downs. Annually, less than 1,000 gallons of spent wash water would be generated. Murphy pf. at 7, 13, 15.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

33. The proposed project would not cause soil erosion, as the proposed construction would not involve soil disturbance. Weston pf. at 15.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

34. The proposed project would not cause unreasonable congestion or unsafe conditions with respect to transportation systems. Weston pf. at 16.

Educational and Municipal Services

[10 V.S.A. §§ 6086(a)(6) and (7)]

35. The proposed project would not cause an unreasonable burden on educational or municipal services. Weston pf. at 16.

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

[10 V.S.A. § 6086(a)(8)]

36. The proposed project would not have an undue adverse impact on the scenic or natural beauty, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 37 and 38, below.

37. The proposed construction would take place within an existing building. The only external changes involve a venting pipe for a composting toilet and an additional exhaust vent for the engine. Weston pf. at 18.

38. There are no historic sites or rare and irreplaceable natural areas in the vicinity of the proposed project that would be impacted. Weston pf. at 18; exhs. WEC-9 and WEC-10.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

39. There are no known wildlife habitats or endangered species in the immediate vicinity of the proposed project that would be adversely impacted by the proposed construction. Weston pf. at 19; exh. WEC-10.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

40. The proposed project would 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. Weston pf. at 20.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

41. The proposed project is consistent with WEC's Least-Cost Integrated Resource Plan by providing sustainable renewable energy at stable costs. The proposed project has superior emissions and societal-cost profiles compared with fossil-fuel generation and permits WEC to maximize the benefits of its access to low-cost capital. Faryniarz pf. at 32-33; exh. WEC-52.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

42. The proposed project is consistent with the Vermont Twenty-Year Electric Plan because it would help meet Vermont's electricity needs in a manner that is reliable, sustainable, affordable, and environmentally sound. Faryniarz pf. at 33-36.

43. The Department filed a determination on September 22, 2006, that the proposed project is consistent with the Vermont Twenty-Year Electric Plan, in accordance with 30 V.S.A. § 202(f).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

44. The proposed project would not affect any outstanding resource waters. Weston pf. at 11.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

45. The proposed project could be economically served with existing transmission facilities without an undue adverse impact on Vermont utilities or customers. The current substation and transmission lines have adequate capacity for the fourth 1.6 MW engine. Crocket pf. at 4-5.

III. REQUIRED VOTE AND ASSESSMENT OF RISKS AND BENEFITS

WEC is required by Section 248(c) to conduct a vote on the proposed project, and to provide its voters with a written assessment of associated risks and benefits identified by the Board and an assessment of any other risks and benefits identified by WEC.

The benefits associated with the proposed project include the generation of WEC-owned, stable, renewable, low-cost power. The risks associated with the proposed project include the \$1.3 million financial commitment to a creditor to pay for the construction of the proposed project.

IV. 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.

V. 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 5th day of October, 2006.

<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: October 5, 2006

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: psb.clerk@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.