

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7559

Joint Petition of Village of Johnson Water &)
Light Department and Village of Morrisville)
Water & Light Department for a certificate of)
public good, pursuant to 30 V.S.A. § 248(j),)
authorizing the connection of a 34.5 kV line)
owned by Morrisville Electric to the Johnson)
Electric substation located in Johnson, Vermont)

Order entered: 12/10/2009

I. INTRODUCTION

This case involves the joint petition filed by the Village of Johnson Water and Light Department ("Johnson Electric") and the Village of Morrisville Water & Light Department ("Morrisville Electric") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248(j) authorizing the connection of a 34.5 kV line owned by Morrisville Electric to the Johnson Electric substation located in Johnson, Vermont. In today's Order, we conclude that the proposed project 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.

II. BACKGROUND

On April 24, 2007, in Docket 7272, the Board issued a CPG to Johnson Electric to upgrade an existing substation on the Johnson Electric substation property. The CPG authorized Johnson Electric to upgrade the existing substation for 12.47 kV operation, expand the fence line, replace an existing transformer, and install a new oil containment system. The April 24, 2007, CPG also authorized Johnson Electric to install a temporary substation with a 5 MVA transformer to provide service during construction. In Docket 7272, Johnson Electric is seeking an amendment to its CPG that will allow for the permanent installation of the existing temporary

substation. The substation with a 5 MVA transformer will serve as a back-up to the main substation transformer and be operated in emergency situations.

The proposed project in this docket will connect a 34.5 kV line owned by Morrisville Electric to the backup substation on the Johnson Electric substation property. If the amendment to the CPG in Docket 7272 is not approved, the proposed project will connect the Morrisville Electric 34.5 kV line to the main substation at the Johnson Electric substation property.¹

III. PROCEDURAL HISTORY

On June 2, 2009, Johnson Electric and Morrisville Electric filed a joint petition with the Vermont Public Service Board ("Board") requesting a certificate of public good under 30 V.S.A. § 248(j) authorizing the connection of a 34.5 kV line owned by Morrisville Electric to the Johnson Electric substation located in Johnson, Vermont. Johnson Electric and Morrisville Electric submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

On August 14, 2009, Board staff conducted a site visit at the Johnson substation to review the proposed design and layout for the connection of the 34.5 kV line.²

On August 21, 2009, Johnson Electric filed supplemental exhibits that included a revised site plan.

Notice of the petition was sent on October 5, 2009, to all entities specified in 30 V.S.A. § 248(a)(4)(c) and 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 November 9, 2009. A similar notice of the filing was published in *The Transcript* on October 12, 2009, and October 19, 2009.

In an October 5, 2009, memorandum, the Board requested comments on whether, if the petition is granted, the CPG should include the requirement for Johnson Electric and Morrisville

1. The Board has approved Johnson Electric's request to amend its CPG, see Docket 7272, Order of 12/10/09.

2. The site visit also involved a petition filed by Johnson Electric, in Docket 7272, for an amendment to its CPG approved under § 248(j) for authorization of the permanent installation of its temporary substation with a 5 MVA transformer at the Johnson Electric substation property.

Electric to file a switching plan with the Department of Public Service ("Department"), with a copy to the Board, before construction begins. The plan would identify the switching procedures, how coordination would occur among the Johnson Electric, Morrisville Electric, and Central Vermont Public Service Cooperation ("CVPS") systems, and include review and acceptance by the three utilities.

On October 29, 2009, CVPS filed a letter agreeing that any CPG issued in this docket should include a condition for the development of a switching plan, and stated that it did not believe it was necessary to include a requirement to file the plan with the Department and Board.³

On November 2, 2009, Johnson Electric and Morrisville Electric filed a letter agreeing that a CPG should include a condition for the development of a switching plan and indicating that Johnson Electric, Morrisville Electric, and CVPS were cooperatively working on the development of a switching plan.⁴

On November 9, 2009, the Department filed a letter stating that the petition does not raise a significant issue with respect to the criteria of Section 248 and a CPG should be issued. The Department agreed that the CPG should include a condition for the development of a switching plan, but stated that it did not believe it was necessary to include a requirement to file the plan with the Department and Board. No other comments were received regarding the petition.

On November 20, 2009, the Board requested comment on whether the record in Docket 7272 should be incorporated into this docket given that the issues the Board will consider in deciding whether to authorize the petition in this docket are closely linked to the evidence that has been presented in Docket 7272, including such issues as aesthetic and environmental impacts. On November 25, 2009, Johnson Electric and Morrisville Electric filed a letter stating that they had no objection to the incorporation of the record from Docket 7272. Therefore, we are incorporating the entire record of Docket 7272 into this record.

3. Letter from Jeanne E. Burns, Esq., to Susan M. Hudson, Clerk of the Board, dated October 29, 2009 (CVPS Letter).

4. Letter from Joslyn Wilschek, Esq., to Susan M. Hudson, Clerk of the Board, dated November 2, 2009 (Johnson and Morrisville Electric Letter).

IV. FINDINGS

1. The petitioners, Johnson Electric and Morrisville Electric, are companies as defined by 30 V.S.A. § 201, and are subject to the Board's jurisdiction. Petitioners are also organized municipal electric utilities under Chapter 79 of Title 30. Petition at 1.

2. The proposed project will connect a 34.5 kV line owned by Morrisville Electric to a backup substation on the Johnson Electric substation property located in Johnson, Vermont. Hastings pf. at 2.

3. There are two 34.5 kV lines that enter into the Johnson Electric substation property. One line is from the CVPS Johnson substation to the main substation and is the feed from which Johnson Electric takes its sub-transmission service. The second line is a Morrisville Electric 34.5 kV feed that comes from their "B22" line. The Morrisville Electric line enters the property near the back-up substation to a step-down transformer, where it is stepped down to 12.5 kV and serves a distribution circuit of Morrisville Electric. Hastings pf. at 3-4; exhs. Johnson-Hastings-6 and Johnson-Hastings-Revised-1.

4. The proposed project will install a new conductor, taps, and a load break switch between the Morrisville Electric 34.5 kV line and the high side of Johnson Electric's backup substation. The new conductor will be approximately 15 to 20 feet long. In order to make the connection, the proposed project will remove one existing pole on the 34.5 kV line and replace it with a new pole that is about 35 feet closer to the back-up substation. Hastings pf. at 4; exhs. Johnson-Hastings-6 and Johnson-Hastings-Revised-1.

5. The proposed project will move the existing Morrisville Electric step-down transformer from a pole just outside of the back-up substation to the new pole on the 34.5 kV line. The distribution pole near the back-up substation will be removed and replaced with a new pole further from the back-up substation to connect the Morrisville Electric 12.5 kV distribution line to the step-down transformer on the 34.5 kV line. Hastings pf. at 4; exhs. Johnson-Hastings-6 and Johnson-Hastings-Revised-1.

6. The proposed project will allow Johnson Electric to switch to a back-up transmission source within minutes of the CVPS 34.5 kV line being out of service. The Johnson Electric main substation and back-up substation will be configured such that Johnson Electric could run its

entire system off either substation from either transmission source by opening or closing various switches. Hastings pf. at 4-5.

7. The Johnson Electric system is a small, compact system of approximately 850 metered customers. Johnson State College is the single largest user, representing over 25 percent of system load capacity. Currently, the CVPS 34.5 kV line is the only transmission source available to the Johnson Electric substation. Hastings pf. at 3-4.

8. The proposed inter-connection to the Morrisville Electric 34.5 kV line will greatly enhance reliability by providing a back-up transmission path for Johnson Electric in the event that the CVPS substation or sub-transmission is out of service. Hastings pf. at 5.

9. The total estimated cost of the proposed project is approximately \$15,000. Johnson Electric will pay the full cost of the proposed project and anticipates being able to pay for the improvement as a small capital project with existing capital funds without a rate increase. Hastings pf. at 6; exh. Johnson-Hastings-4.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

10. 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 any affected municipality. This finding is supported by findings 11 and 12, below.

11. The proposed upgrades will occur at an existing substation property and will have minimal aesthetic impact with no disruption to the existing landscape. Hastings pf. at 8.

12. The Town of Johnson Municipal Development Plan, and the Lamoille County Regional Planning Commission Plan have no provisions indicating that the proposed project would adversely impact orderly development in the town or region. Hastings pf. at 7-8.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

13. The proposed project is required to meet the need for 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. This finding is supported by findings 14 through 16, below.

14. Johnson Electric has experienced a number of power supplier outages in the past and the proposed project would help mitigate the impact of these outages on its customers. Hastings pf. at 7.

15. The primary benefit of the interconnection of Johnson Electric's system with an additional source is increased reliability in the event of the primary transmission source being out of service. Hastings pf. at 6.

16. The benefit of the proposed project cannot be replicated through efficiency, conservation, or load management and avoids the need for siting new generation to provide back-up for Johnson Electric's load. Hastings pf. at 6.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

17. The proposed project will not adversely affect system stability and reliability. Hastings pf. at 6. This finding is also supported by findings 18 through 20, below.

18. The proposed project will greatly enhance reliability and system stability. Hastings pf. at 7.

19. The proposed connection to the Morrisville Electric 34.5 kV line will provide an additional, separate sub-transmission path for the Johnson Electric system in the event that the CVPS substation or sub-transmission is out of service. Hastings pf. at 7.

20. The interconnection to another transmission system and the permanent back-up substation provide a significant level of system reliability and stability for Johnson Electric customers. Hastings pf. at 7.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

21. The proposed project will have an economic benefit to the State. The proposed project will reduce the number of outages on the Johnson Electric system, which in turn will reduce costs and provide customers with a more reliable supply of electricity. Hastings pf. at 8.

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

[30 V.S.A. § 248(b)(5)]

22. The project, 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 23 through 45, 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)]

23. The proposed project will not be located on or near any designated resource waters. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 13.

Air Pollution

[10 V.S.A. § 6086(a)(1)]

24. The proposed project will not result in undue air pollution. The proposed project will require minimal site construction with the addition of one new pole and replacement of another pole. Hastings pf. at 4 and 6.

Water Pollution

[10 V.S.A. § 6086(a)(1)]

25. The proposed project will not result in undue water pollution. This finding is supported by findings 26 through 33, below.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

26. The proposed project is located in a headwaters area, but will not have an undue adverse effect. Erosion prevention and sediment control measures will minimize impacts to the site. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 15; Docket 7272, Johnson Electric Letter at 2.⁵

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

27. The proposed project will meet applicable health and environmental conservation regulations regarding the disposal of wastes. The proposed project will require minimal site construction and replacement of one transmission pole. Hastings pf. at 4 and 6.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

28. The proposed project will not require the use of water. Hastings pf. at 4 and 6; Docket 7272, Hastings pf. (11/30/06) at 16.

Floodways

[10 V.S.A. §§ 6086(a)(1)(D)]

29. The proposed project is not located within a floodway. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 16-17.

Streams

[10 V.S.A. §§ 6086(a)(1)(E)]

30. The proposed project will not adversely impact streams. There is a small intermittent stream on the south side of the substation property which is culverted under the access drive.

5. Docket 7272, letter from Joslyn Wilschek, Esq., to Susan M. Hudson, Clerk of the Board, dated October 23, 2009 (Johnson Electric Letter).

There is a small ephemeral drainage on the north side of the substation property. Appropriate erosion prevention and sediment control measures will protect the streams from impacts. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 16-17; Docket 7272, Johnson Electric Letter at 2.

Shorelines

[10 V.S.A. §§ 6086(a)(1)(F)]

31. The proposed project is not located near a shoreline. Hastings pf. at 6; Docket 7272, Hastings pf. at (11/30/06) 16-17.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

32. The proposed project will not adversely impact wetlands. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 17.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

33. The proposed project will not require a water supply and therefore will not place a burden on the existing water supply. Hastings pf. at 4 and 6; Docket 7272, Hastings pf. (11/30/06) at 17-18.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

34. The proposed project will not cause undue soil erosion. The proposed project will require minimal soil disturbance for the placement of one new pole and replacement of an existing pole. Hastings pf. at 4 and 6.

35. The upgrade of the Johnson Electric substation under the April 24, 2007, CPG, in Docket 7272, included erosion control improvements at the substation property following accepted soil erosion prevention practices. Johnson Electric continues to monitor the substation

property for any signs of erosion in compliance with the condition of its CPG in Docket 7272. Hastings pf. at 6; Docket 7272, Johnson Electric Letter at 2.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

36. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. Construction will take place at the substation, which is away from busy streets and state highways. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 18-19.

Educational Services

[10 V.S.A. §§ 6086(a)(6)]

37. The proposed project will not cause an unreasonable burden on educational services. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 19.

Municipal Services

[10 V.S.A. §§ 6086(a)(7)]

38. The proposed project will not cause an unreasonable burden on municipal services. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 19.

Aesthetics, Historic Sites

and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

39. The proposed project will 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 40 through 43, below.

40. The proposed project will take place at an existing substation property with minimal construction that includes the removal of one pole that will be replaced with a new 45-foot pole. Hastings pf. at 4; exhs. Johnson-Hastings-6.

41. The Johnson Electric substation is built into a steep wooded bank above the Gihon River Valley. The substation property is well screened from the Johnson State College campus because of natural wooded surroundings and its lower elevation on the steep bank. The substation is located 600 feet away from Route 100C and is approximately 75 feet higher in elevation than the road. There is a short section of the road, which is on a sharp curve, with an open view to the substation through the existing right-of-way. The view for drivers on Route 100C is limited by the height of the substation, the likely speed of the driver, and the curve in the road. Docket 7272, Hastings pf. (10/7/08) at 4; Docket 7272, Johnson Electric Letter at 1-2.

42. There are no historic or archaeological sites located within the proposed project site. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 19; exh. DH-4.

43. The proposed project will not result in any undue adverse effects on rare and irreplaceable natural areas. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 19; exh. DH-4.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

44. The proposed project will not have any adverse impacts on wildlife habitats or threatened or endangered species. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 19; exh. DH-4.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

45. The proposed project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental or public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to, such facilities, services, or lands. Hastings pf. 8.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

46. Johnson Electric and Morrisville Electric have filed integrated resource plans with the Board and are waiting approval. The proposed project complies with the principles of integrated resource planning as defined in 30 V.S.A. § 218c because the project will significantly increase system stability at a low cost without negatively impacting the environment. Hastings pf. at 9.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

47. The proposed project is consistent with the *Vermont Electric Plan*. The *Plan's* objectives call for the provision of electric service that is "carefully balanced" between the following policy goals: efficient, adequate, reliable, secure, sustainable, affordable, safe, and environmentally sound, while encouraging the state's economic vitality and maintaining consistency with other state policies. The proposed project strikes a proper balance between these objectives by providing increased system stability at a low cost without negative impacts. Hastings pf. at 10.

48. The Department filed a determination on November 9, 2009, that the proposed project is consistent with the *Vermont Electric Plan*, in accordance with 30 V.S.A. § 202(f).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

49. The proposed project is not located near any outstanding resource waters. Hastings pf. at 6; Docket 7272, Hastings pf. (11/30/06) at 13.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

50. The proposed project can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. Morrisville Electric and Johnson Electric are developing a written protocol for switching operations that will include

review and acceptance by Johnson Electric, Morrisville Electric, and CVPS. The protocol will establish parameters for utility communications and for the protection of employees. Hastings pf. at 10; Johnson and Morrisville Electric Letter; CVPS Letter.

Discussion

The Board requested comments on whether, if the petition is granted, the certificate of public good should include the requirement for Johnson Electric and Morrisville Electric to file a switching plan with the Department, with a copy to the Board, before construction begins. The plan would identify the switching procedures, how coordination will occur among the three systems, and include review and acceptance by Johnson Electric, Morrisville Electric, and CVPS. Johnson Electric and Morrisville Electric agreed to the condition. The Department and CVPS supported the requirement for the development of a switching plan, but indicated that it was not necessary to file the plan with the Department or the Board. We conclude that a switching plan should be developed and that it is not necessary that the plan be filed with the Department or Board. However, we conclude that a letter should be filed with the Board certifying that a switching plan has been developed and approved by Johnson Electric, Morrisville Electric, and CVPS and that procedures are in place to protect and enhance system reliability.

V. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed project 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.

VI. ORDER

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

1. The proposed connection of a 34.5 kV line owned by the Village of Morrisville Water & Light Department to the Village of Johnson Water and Light Department's substation located in Johnson, Vermont, 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 to that effect shall be issued.
2. Construction shall be in accordance with the plans as submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
3. The proposed project shall be designed and constructed in accordance with the National Electric Safety Code requirements.
4. A switching plan for the proposed project shall be developed, identifying the switching procedures and coordination among the three electrical systems of the Village of Johnson Water and Light Department, Village of Morrisville Water & Light Department, and Central Vermont Public Service Corporation. A letter shall be filed with the Board within 60 days of this Order certifying that the switching plan has been developed.

Dated at Montpelier, Vermont this 10th day of December, 2009.

s/ James Volz)

) PUBLIC SERVICE

s/ David C. Coen)

) BOARD

s/ John D. Burke)

) OF VERMONT

OFFICE OF THE CLERK

FILED: December 10, 2009

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.