

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7632

Petition of Triland Partners, LP, for a Certificate of)	Technical Hearing
Public Good, pursuant to 30 V.S.A. Section 248,)	held at Montpelier, Vermont
authorizing the installation and operation of a)	November 2, 2010
2.1 MW solar electric generation facility in)	
Williamstown, Vermont)	

Order entered: 11/30/2010

HEARING OFFICER: Mary Jo Krolewski, Utilities Analyst

APPEARANCES: Jeanne Elias, Esq.
for Vermont Department of Public Service

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for Triland Partners, LP

I. INTRODUCTION

This case involves a petition filed by Triland Partners, LP ("Triland") on July 1, 2010, and supplemented on October 18, 2010, and November 1, 2010. The petition requests a certificate of public good ("CPG") under 30 V.S.A. § 248 authorizing the installation and operation of a 2.1 MW solar electric generation facility in Williamstown, Vermont.

In this Proposal for Decision, I recommend that the Vermont Public Service Board ("Board") approve the proposed project and issue a CPG to Triland authorizing construction of the proposed project.

II. PROCEDURAL HISTORY

On July 1, 2010, Triland filed a petition for a CPG, pursuant to 30 V.S.A. § 248, requesting approval to install and operate a 2.1 MW solar electric generation facility in Williamstown, Vermont.

On August 26, 2010, I held a prehearing conference at the Board's hearing room in Montpelier, Vermont.

On September 13, 2010, a site visit was held at the proposed project site in Williamstown, Vermont, and a public hearing was held at the Williamstown Middle High School. Seven members of the public provided comments at the public hearing. Comments were generally supportive of the proposed project, with questions on the project's capacity, decommissioning, and employment impacts. Written comments in support of the proposed project were filed by Washington Electric Cooperative, Inc. ("WEC") and a nearby property owner.

On September 28, 2010, in an Order on Motion to Intervene, I granted permissive intervention on the issues of economic and natural-environment impacts to the Vermont Agency of Agriculture, Food and Markets ("AAFM").

On October 18, 2010, Triland filed supplemental testimony and exhibits.

On October 19, 2010, Triland, the Vermont Department of Public Service ("Department"), and AAFM filed a Stipulation and proposed findings of fact and order in which the parties agreed that the Board should issue a CPG with conditions.

On October 19, 2010, the Vermont Agency of Natural Resources ("ANR") filed a letter stating that it did not oppose the proposed project, but would not be joining as a signatory to the stipulation nor would it be filing testimony.

In an October 22, 2010, memorandum, I identified fourteen questions regarding the petition and requested that Triland be prepared to answer them at the technical hearing. On November 1, 2010, Triland filed supplemental testimony and exhibits in response to the questions.

A technical hearing was held on November 2, 2010, in the Board's hearing room in Montpelier, Vermont. At the hearing, the prefiled testimony and exhibits of Triland were entered into evidence.

On November 9, 2010, Triland, the Department, and AAFM filed a revised proposed findings of fact and order in which all the parties agreed that the Board should issue a CPG with conditions. On November 12, 2010, Triland, the Department, and AAFM filed an amended stipulation. I am admitting the amended Stipulation and proposed findings of fact and order into evidence in this proceeding as exhibit Joint-2.¹

On November 12, 2010, ANR filed a letter stating that it did not object to the revised proposed findings of fact and order. ANR also filed an exhibit regarding design alternatives and construction details for security fencing. I am admitting the exhibit into evidence in this proceeding as exhibit ANR-1.²

III. 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.

Background and Project Description

1. Triland Partners, LP is a Massachusetts limited partnership with a principal place of business at 26 Hancock Street, Boston, Massachusetts, and is registered with the Vermont Secretary of State with a Vermont business address at 38 Church Street, Norwich, Vermont.

Garden pf. at 1.

2. The proposed project is a 2.1 MW solar electric generation facility located on a 16-acre parcel of land located at the southeast quadrant of the Exit 5 interchange of Interstate 89 and Route 64 in the Town of Williamstown, Vermont. Garden pf. at 2.

1. Parties have stipulated to the admission of the Stipulation and proposed findings of fact and order into evidence.

2. Parties have stipulated to the admission of the exhibit into evidence.

3. The proposed project will include: (1) 8,948 solar photovoltaic modules, 235 watts each, arranged in 744 rectangular arrays of twelve modules each; (2) a metal mounting system to elevate the modules above the ground; (3) electrical lines in underground conduit connecting the modules to the inverters and switch gear enclosure; (4) inverters; (5) transformers; (6) electrical lines from the interconnection transformer to WEC's distribution system. Garden pf. at 5-8; exhs. TTG-3, 4, 7, and 8.

4. The proposed solar arrays will be attached to a fixed mounting system that allows the sloping modules to be approximately 3 to 4 feet off the ground in the front and approximately 9 to 10 feet off the ground at the top of the array. The proposed solar arrays will be grouped into twenty-eight rows that extend across the site from east to west. Each row will be separated approximately 28 feet from the adjacent row to its immediate north or south. The arrays will be tilted at a fixed 30-degree angle with respect to horizontal and will face true magnetic south. This orientation will face the panels away from both Interstate 89 and Route 64 and toward the woodlands on the site's southern boundary. Garden pf. at 6; exh. TTG-4.

5. The proposed project includes eight 260-kilowatt inverters, grouped in two sets of four, that convert the DC current generated by the solar panels into AC current before it is sent to the distribution line. The inverters will be enclosed in two pre-engineered metal structures, 10 feet high by 9 feet wide by 36 feet long. The inverter enclosures will be mounted on elevated steel frames on posts approximately four feet above grade. The inverter structures may be mounted on reinforced concrete pads, as an alternative to a post-mounted frame. Garden pf. at 6; Townsend pf. at 4; Garden supp. pf. at 8; exhs. TTG-9 and TTG-10.

6. The proposed project will include two 1 MVA three-phase medium voltage step-up transformers located next to the inverter enclosures which will transform the 480-volt inverter output to 12.47 kV for interconnection to WEC's distribution system. The line carrying the output from the transformer will run underground to a riser pole at the far eastern portion of the property where the line will continue above ground spanning over 3 poles before connecting with WEC's distribution system at pole R17/122 on Route 64. Garden pf. at 6-7; Townsend pf. at 4.

7. The proposed project will require the upgrade of an existing WEC distribution line. WEC will rebuild approximately 1,200 linear feet on State Route 64 and 2,400 linear feet on

Stone Road of existing 7.2 kV single-phase line to 12.47 kV three-phase line. The upgrade will require the replacement of four or five of the existing fifteen poles. The maximum increase in the height of the new poles will be no more than five feet. Garden supp. pf. at 4-5; Crockett pf. at 2; exhs. TTG-S4 and TTG-S9.

8. The proposed distribution upgrade will not require additional poles along the 3,600 feet of upgraded line, but may require the modification of the wire span between specific poles to comply with the National Electrical Safety Code ("NESC"). WEC does not anticipate a need to modify existing easements or rights of way for the line upgrade. WEC may need to remove one large evergreen tree on private property and has indicated its intention to discuss the possible tree removal with the property owner at this location. Garden supp. pf. at 4-5.

9. The nameplate capacity of the proposed project is 2.1 MW DC, prior to conversion to AC. The expected net energy output of the proposed project (after DC to AC conversion) is 2,454,100 kWh per year. Garden pf. at 5.

10. Security fencing for the proposed project will be one of two alternatives. Alternative A, requested by ANR's Department of Fish and Wildlife, would allow for small and large wildlife passage at locations identified on the site layout plan. Alternative B would prevent wildlife from entering the site and will be employed if required by National Electrical Safety Code or by project lenders or insurers. Garden pf. at 8; Garden supp. pf. at 6; Garden 2nd supp. pf. at 10-11; tr. 11/2/10 at 43, 62-63 (Garden); exhs. TTG-S5 and ANR-1.

11. Under Alternative A, the proposed security fencing would be elevated 12 to 24 inches above the ground for the distance between two consecutive fence posts (approximately 10 feet in length) at specific locations identified on the site layout plan. These elevated openings would be spaced approximately every 300 linear feet along the fence. In the southeast and southwest corners of the site, the security fencing would be limited to 3 to 4 feet high for the distance between two consecutive fence posts. Garden pf. at 8; Garden supp. pf. at 6; Garden 2nd supp. pf. at 10-11; tr. 11/2/10 at 43, 62-63 (Garden); exhs. TTG-S5 and ANR-1.

12. Under Alternative B, the proposed security fence would be constructed to prevent large mammals from entering into and getting trapped in the site. The fence would be at least 6 feet

high on level ground, and at least 7 feet high on sloping ground. Garden supp. pf. at 6-7; tr. 11/2/10 at 63-64 (Garden); exh. ANR-1.

13. The proposed security fencing under either Alternatives A and B will be constructed of galvanized chain link and include trespassing and electrical warning signs. Garden pf. at 8; Garden supp. pf. at 6; Garden 2nd supp. pf. at 10-11; exh. ANR-1.

14. There is an existing 3-foot-high galvanized chain link state highway fence along the site property line parallel to the Route 64 right-of-way. This fence will be retained, and if possible, this fence will serve as the only fence along this portion of the proposed site. If required by project lenders, insurers or NESC under either Alternative A or B, additional fencing will be installed in accordance with the setback shown on the site layout plan. Garden supp. pf. at 6; exh. TTG-S5.

15. The proposed project will occupy a site that consists primarily of agricultural fields which have been fallow for several years and now contain shrub and small tree growth. The area around the existing driveway in the northeast portion of the site is littered with a collection of abandoned trailers and vehicles visible from Route 64. The proposed project will include the removal of these vehicles and landscaping of the area. Garden pf. at 3; exhs. MJB-1 and TTG-6.

16. Access to the proposed site will be from an existing curb cut and driveway along Route 64. The existing gravel driveway and parking area will be slightly expanded and landscaped in order to improve its appearance, safety and utility. The proposed landscaping includes: (1) a traffic barricade consisting of an extension of the existing Agency of Transportation guardrail, or a line of boulders, installed along the site driveway; and (2) trimming and removal of several large trees that have the potential to damage the proposed project's components if the trees were felled by high winds. Triland will obtain Agency of Transportation approval prior to constructing the traffic barricade or removing boundary trees. Garden pf. at 3, 8; Garden supp. pf. at 11; exhs. TTG-6 and TTG- S7.

17. The proposed project will include interpretative panels located on the perimeter of the parking area facing the solar arrays. Triland intends to work with the students at Williamstown Middle/High School to develop the educational information to be incorporated into these interpretive panels. Garden pf. at 3-4.

18. The proposed project is being developed under the Sustainably Priced Energy Enterprise Development ("SPEED") standard-offer program. A standard-offer contract has been signed with the SPEED Facilitator for the proposed project. The standard-offer contract provides for the sale of the proposed project output and other attributes, including the renewable energy credits, at a fixed price of \$0.30 per kWh for a period of 25 years. Garden pf. at 2; tr. 11/2/10 at 25-26 (Garden).

19. Triland has agreed, as a condition to the certificate of public good, to comply with any applicable requirements regarding the disclosure of renewable attributes that are established in other proceedings, including Docket 7533, and Board Rules. Exh. Joint-2.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

20. 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 21 through 28, below.

21. The proposed project is compatible with nearby land uses. The proposed site is an open field that is situated at the southeast quadrant of the Interstate 89 Exit 5 interchange with Route 64. Developed uses at this interchange include a State highway truck terminal (northeast quadrant), a State highway truck depot and commuter Park and Ride (northwest quadrant), and small industrial and residential structures (southwest quadrant). Garden pf. at 2, 11; exhs. TTG-1 and TTG-2.

22. For decades the gravel parking area on the proposed site has been used for quick rest stops and as a portion of the VAST trail. The proposed project will preserve access to the parking area and VAST trail. Garden pf. at 3-4; Garden supp. pf. at 7.

23. The proposed project is consistent with the Williamstown Town Plan with regard to energy policies that encourage renewable and solar energy and land use policies that encourage

commercial or industrial development within the interstate interchange area. Garden pf. 11-12; exhs. MJB-1 at 5, TTG-12, and TTG-13.

24. The Williamstown Town Plan does not identify the proposed project site as a scenic resource and the proposed project site does not meet general criteria to be considered a high value scenic resource. Exh. MJB-1 at 5.

25. The proposed project is consistent with the Central Vermont Regional Planning Commission Regional Plan which includes energy policies that encourage renewable energy production. Garden pf. at 12; exhs. TTG-14 and TTG-15.

26. The Central Vermont Regional Planning Commission Regional Plan and the Williamstown Town Plan do not contain land-conservation measures. Garden pf. 2nd supp. at 2.

27. The Williamstown Selectboard filed a letter in support of the proposed project, noting its consistency with the energy provisions in the Williamstown Town Plan. Garden pf. at 11-12; exh. TTG-12.

28. The Central Vermont Regional Planning Commission filed a letter in support of the proposed project, noting its consistency with regional planning objectives, including those to encourage renewable energy production. Garden pf. at 12; exh. TTG-14.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

29. The proposed project is a qualifying SPEED facility and no part of the proposed project is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers. Garden pf. 13; Garden 2nd supp. pf. at 3.

Discussion

Pursuant to 30 V.S.A. § 8005(b)(8):

a demonstration of compliance with subdivision 248(b)(2) of this title, relating to establishing need for the facility, shall not be required if the facility is a SPEED resource and if no part of the facility is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers.

Accordingly, Triland does not need to demonstrate compliance with this criterion.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

30. The proposed project will not adversely affect system stability or reliability. This finding is supported by findings 31 and 32, below.

31. A System Impact Study was prepared for the proposed project in cooperation with WEC. The proposed project will not adversely affect system stability and reliability, provided that Triland performs the following additional analyses and upgrades that are recommended in the System Impact Study:

- a. A complete coordination study on the WEC distribution system and the proposed project generating system to allow proper setting of the generator relays and the distribution circuit reclosers and fusing;
- b. Installation of four, 500 kVA, 12,470 volt wye/480 volt wye transformers as generator step-up transformers;
- c. Installation of a three-phase, gang-operated switch and fuses to provide protection and a visual, lockable open point for line maintenance;
- d. The re-build of WEC's existing 7.2 kV single-phase distribution conductor to three-phase 12.47 kV conductor along Route 64 to Covey Road in Williamstown;
- e. Relocation of the Covey Road regulators;
- f. Removal of the Berlin Pond Road capacitor and conversion of the Miller Road capacitor to a switched type;
- g. An inspection of the proposed project system by a State electrical inspector to assure compliance with the National Electrical Code; and
- h. The completion of the testing required by IEEE 1547, Section 5 as listed in Appendix D, with a written copy of the test results provided to WEC.

Crockett pf. at 2; exhs. DRC-1 and TTG-S4.

32. WEC has reviewed the System Impact Study and concurs with its conclusions. Triland will pay all costs to interconnect the proposed project to the WEC distribution system, including the distribution line upgrades. Garden pf. at 15-16; Crockett pf. at 3; exh. TTG-16.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

33. The proposed project will result in an economic benefit to the state and its residents. This finding is supported by findings 34 through 36, below.

34. The proposed project will generate local and state property taxes. The proposed project is anticipated to cost in excess of \$10 million. Garden pf. at 4 and 14.

35. The construction of the proposed project will require approximately 60 part-time employees, equivalent to 20 full-time employees. The construction trades utilized on-site will include the following: specialists in tree clearing, site preparation, and pile driving; steel workers; racking installers; module installers; electrical wiring specialists; and licensed specialists in electrical contracting and general contracting. It is anticipated that 95 percent of the workers involved with the construction will be Vermont residents. Garden 2nd supp. pf. at 1; tr. 11/2/10 at 13-16 (Garden).

36. The operations and maintenance of the proposed project will require approximately 6 part-time employees, equivalent to one full-time employee. These employees will be responsible for daily remote monitoring of the electric generation, weekly inspections of the facility, regularly scheduled maintenance on the inverters, and seasonal maintenance of the land and improvements. It is anticipated that 100 percent of these workers will be Vermont residents. Garden pf. at 10; Garden 2nd supp. pf. at 1; tr. 11/2/10 at 16-17 (Garden).

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

[30 V.S.A. § 248(b)(5)]

37. The proposed project 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 38 through 119, below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

38. The proposed project will not have any undue adverse impacts on public health or safety. This finding is supported by findings 39 through 42, below.

39. The interconnection of the proposed project to the grid will be designed and constructed consistent with Institute of Electrical and Electronics Engineers P1547 Standard (Standard for Interconnecting Distributed Resources with Electric Power Systems) and Board Rule 5.500, which will ensure the reliability, stability and safety of the interconnect. Garden pf. at 17; Crockett pf. at 2; exh. DRC-1.

40. The proposed project will comply with NESC requirements. Garden 2nd supp. pf. at 9-10; tr. 11/2/10 at 39-40 (Garden).

41. The inverters for the proposed project will be located in two Underwriters Laboratories-listed, code-approved electrical enclosures. Garden pf. at 6.

42. A perimeter fence with trespassing and electrical warning signs will enclose the entire proposed solar facility. Garden supp. pf. at 7.

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

43. The proposed project is not located near and will not affect outstanding resource waters. Gilman and Briggs pf. at 15.

Air Pollution

[10 V.S.A. § 6086(a)(1)]

44. The proposed project will not result in undue air pollution. This finding is supported by findings 45 through 50, below.

45. The construction of the proposed project may generate some dust from construction vehicles driving on the existing gravel parking area. Any dust that is generated will be controlled by applied water or calcium chloride. Townsend pf. at 3.

46. The operation of the proposed project will have limited generation of dust given that there will be very limited earth disturbance and all existing grass and low ground cover will be retained. Townsend pf. at 3.

47. Construction of the proposed project will occur between 7:00 A.M. and 6:00 P.M. to minimize the effects of constructed-related noises. Intermittent noise will be generated by work

vehicles delivering project components and workers installing the project components that include posts, racking system, solar modules, inverter structures, and utility poles. Townsend pf. at 3; Garden pf. at 15.

48. The proposed inverters, according to manufacturer specifications, will generate sound levels of 60 to 65 dBA (decibels) during operation. The manufacturer specifications for the inverter structures do not account for the attenuation in sound levels that will occur due to the inverters being fully housed in the pre-engineered structures. Garden pf. at 15; Garden 2nd supp. pf. at 3-4.

49. The U.S. Environmental Protection Agency has set 55 dBA day-night sound level (equivalent to a continuous noise limit of 48.6 dBA) as the noise limit for residential locations. Without accounting for the attenuating feature of the pre-engineered structure, the noise level at the nearest property line approximately 80 feet away is estimated to be 54 to 59 dBA. At the nearest residence, located approximately 300 feet away, the noise level is estimated to be 48 to 54 dBA. Garden 2nd supp. pf. at 3-4.

50. The inverters for the proposed project will generate noise during daylight hours, with the higher estimated decibel levels only being achieved at peak production (midday on a very sunny day). Garden pf. at 15; Garden 2nd supp. pf. at 3-4.

Discussion

Without accounting for the attenuating feature of the pre-engineered structures that house the proposed inverters, the noise level at the nearest property line approximately 80 feet away is estimated to be 54 to 59 dBA. The evidence in the record did not provide an estimate of the amount that the inverter enclosures would attenuate sound level. Based on Board review of other solar generation facilities, inverter enclosures are expected to provide significant attenuation of sound levels.³ However, because Triland did not provide an estimate of sound attenuation provided by the inverter enclosures, I recommend that the Board include a condition in the certificate of public good stating that the Board may require Triland to install additional noise

3. See Docket 7594, *Addison Solar Farm*, Order of 8/3/10 at 11-12; and Docket 7611, *Chittenden County Solar Partners*, Order of 9/15/10 at 9.

mitigation measures if the Board determines that operation of the proposed project results in undue noise levels

Water Pollution

[10 V.S.A. § 6086(a)(1)]

51. The proposed project will not result in undue water pollution. This finding is supported by findings 52 through 57, below, and by the specific findings under the criteria of 10 V.S.A. §§ 6086(a)(1)(A) through (G), below.

52. The proposed solar electric generation facility will generate no domestic or industrial wastes that could result in water pollution. Townsend pf. at 3.

53. The proposed project will include two 1 MVA three-phase medium-voltage step-up transformers, enclosed in 20-inch-deep cabinets. The transformers along with the inverter structures will be mounted on an elevated steel frame on posts approximately four feet above grade. The inverter structures and transformers may be mounted on concrete pads, as an alternative to a post-mounted frame. Townsend pf. at 4.

54. The ground area immediately below each proposed transformer will be protected by a catch basin, 10 feet long by 10 feet wide by 12 to 24 inches deep. The catch basin will be lined with a geotechnical fiber membrane that will allow water to permeate but will trap mineral oil. The membrane will be covered with crushed stone. If the transformers are mounted on concrete pads, the transformer pads will be surrounded by the same-sized catch basin, lined with the same geotechnical fiber membrane and covered with crushed stone. Townsend pf. at 4.

55. Each proposed transformer will contain a maximum of 450 gallons of mineral oil (or FR-3, a non-toxic vegetable oil). The volume of the 450 gallons equates to 64 cubic feet. The volume of each catch basin equates to a minimum of 100 cubic feet making each catch basin capable of containing all of the mineral oil from a transformer in the event of a spill. Garden 2nd supp. pf. at 5-6; tr. 11/2/10 at 28-29 (Garden); exh. TTG-Tech 2.

56. The proposed project will require, once or twice annually, the mowing of the undergrowth between the rows of solar modules. No herbicides or chemicals will be used to maintain the groundcover. Garden pf. at 10.

57. The proposed project will not require an operational stormwater discharge permit. The proposed project will create less than 5,000 square feet of new impervious surface, which is below the one-acre permit threshold. The impervious surface includes the concrete pad for the inverters and the upgrade and expansion of the existing driveway and parking area. Townsend pf. at 5-6.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

58. The proposed project is located in a headwaters region because a portion of the project site is above 1500 in feet in elevation. The proposed project will meet any applicable health and environmental conservation department regulation regarding reduction of the quality of the ground or surface waters flowing through or upon lands which are not devoted to intensive development. This finding is supported by findings 57, above, and 59 through 62, below.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

59. The proposed project will meet applicable Department of Health and Department of Environmental Conservation regulations for the disposal of wastes, and will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells. This finding is supported by findings 60 through 62, below.

60. The proposed project will comply with all applicable regulations regarding the disposal of waste generated during construction. Disposal of packing materials and damaged equipment will be in an approved landfill. Any cleared vegetation will be chipped and/or mulched, stored in upland areas on site and utilized for landscaping purposes in upland areas on the site. Townsend pf. at 5.

61. The operation of the proposed project will generate no sanitary sewage or other domestic or industrial wastewater. Townsend pf. at 5.

62. The proposed project will utilize no fuels, chemicals, pesticides, or other harmful or toxic substances, except for the transformer oil discussed in finding 55, above. Townsend pf. at 5.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

63. The construction of the proposed project will require no water supply, except possibly for dust control and equipment cleaning. Any water required during construction will be transported by vehicle to the site. Operation of the proposed project will require no water for cleaning purposes. The solar modules will be cleaned naturally by rain and snow. Townsend pf. at 5-6.

Floodways

[10 V.S.A. §§ 6086(a)(1)(D)]

64. The proposed project is not located within a floodway or floodway fringe. The upper reach of Robinson Brook is located in the northeast corner of the site. This area of the project site is not designated as a special flood hazard area on the FEMA National Flood Insurance Program map and is not considered a floodway or floodway fringe. The remainder of the project site contains no other streams or low areas adjacent to streams that would constitute a floodway or floodway fringe. Gilman and Briggs pf. at 2-3.

Streams

[10 V.S.A. §§ 6086(a)(1)(E)]

65. The proposed project will result in no undue or adverse impacts on streams. This finding is supported by findings 66 and 69, below.

66. There are two streams on the proposed project site. The upper reach of Robinson Brook crosses the northeast corner of the site, flowing from east to west. The existing driveway crosses this stream with a culvert. There is also a small seasonal stream that is tributary to Robinson Brook, running along part of the eastern edge of the site. Gilman and Briggs pf. at 3.

67. Construction of the proposed project may require work within the banks of Robinson Brook or the seasonal stream along the eastern edge of the project site to stabilize the side slopes of the driveway and to install guardrails in the area of the culvert. This work will involve less than 10 cubic yards of excavation or fill. Precautions during construction will be taken to ensure that there is no discharge to State waters. Gilman and Briggs pf. at 3.

68. Any construction work performed to stabilize the existing driveway slopes will be performed in accordance with the site-specific Erosion Prevention and Sediment Control Plan. Gilman and Briggs pf. at 3; exh. RT-2.

69. The proposed project will maintain an undisturbed naturally vegetated 50-foot buffer next to Robinson Brook, located in the northeast corner of the site, as recommended by ANR's Department of Fish and Wildlife. Gilman and Briggs pf. at 5; Townsend pf. at 3.

Shorelines

[10 V.S.A. §§ 6086(a)(1)(F)]

70. The proposed project will have no undue or adverse impacts to shorelines, since the proposed project is not located on or near a shoreline. Gilman and Briggs pf. at 6.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

71. The proposed project will have no undue or adverse impacts to identified wetlands. This finding is supported by findings 72 through 79, below.

72. There are three small Class III wetlands (identified as Wetlands B, C, and D on the proposed project site plan) located along Robinson Brook in the northeast corner of the project site and along the seasonal stream that runs along part of the east boundary of the project site. A fourth larger Class III wetland (identified as Wetland A) is irregular in shape and extends from beyond the southern boundary of the site across a gentle, even terrain to the northwest boundary of the site. Gilman and Briggs pf. at 6-7; exh. RT-1.

73. The majority of the proposed project site is a plateau that rises 18 to 34 feet above the elevation of the gravel driveway and parking area in the northeast corner of the project site.

Wetland A is located on a portion of the plateau. Wetland A is characterized as shrubby wetland with small trees around the perimeter and a slightly more open, grassy central portion. Gilman and Briggs pf. at 7; exh. GB-3.

74. The proposed project will require the installation of minor improvements within Wetland B (approximately 100 feet of security fencing) and additional improvements and grading within 50 feet of the boundaries of Wetland C (including placement of the inverter structures and power poles). The proposed project will have no impact on the hydrology or other functions of Wetlands B, C and D. Gilman and Briggs pf. at 10; exhs. TTG-3, TTG-4, and RT-1.

75. The installation of the proposed solar arrays will require cutting of small trees and other taller vegetation. After the installation, Wetland A and the rest of the plateau will be maintained by periodic mowing. Given the shade from the panels, the mowing, the seasonal wetness, and the nature of the site, the site will continue to be fully vegetated with either persistent shrubs, especially red-osier dogwood which is abundant on the site, or with grassy or herbaceous vegetation. Gilman and Briggs pf. at 10-11; Garden supp. pf. at 8.

76. The proposed project will not require either an Individual Permit or a General Permit authorization from the U.S. Army Corps of Engineers ("ACOE"). Triland, in response to a request by ACOE, has agreed to adhere to the following conditions during construction and operation of the proposed project in order to avoid dredging, filling, or mechanized land clearing in all the Class III wetlands located on the site, and specifically Wetland A:

- a. No grading, excavation, or backfilling will be performed in order to preserve the existing soils, plants, and hydrology;
- b. No temporary fill (such as timber mats) will be used;
- c. The cutting and removal of the existing trees and undergrowth will be performed by hand (using chain saws) with cuts at ground level;
- d. No removal of stumps or stump grinding/grubbing will be performed;
- e. Cuttings will be removed by hand and if chipped and stored on site will be kept out of the wetland;
- f. All work requiring the use of vehicles will be performed in winter taking advantage of frozen ground conditions or in the driest months of summer;
- g. Only small-medium size track and light-weight vehicles will be used; wheeled-vehicles will have low-inflation tires; skid-steer type vehicles will not be used due to the possible damage to underlying vegetation sometimes caused by the skid making turns;

- h. Posts installed to support the solar modules will be pile-driven. No cement footings will be used in order to avoid any soil displacement;
- i. No new roadways will be constructed;
- j. Existing low groundcover will be preserved; no herbicides or chemicals will be used to maintain the groundcover;
- k. Annual mowing will only be performed during the driest months of the summer using a brush hog or equivalent device;
- l. Posts for the perimeter security fencing will be pile-driven. No cement footings will be used in order to avoid soil displacement; and
- m. Any small vegetated spots that are inadvertently bared during construction will be seeded and mulched with a wetland conservation mix approved by ANR.

Gilman and Briggs pf. at 7-8; Garden supp. pf. at 9; exh. GB-4.

77. The proposed project will avoid any activity that would alter the inflow or outflow of water in Wetland A, by avoiding any grading, filling or other change in topography or soil conditions in Wetland A. The proposed project will include erosion prevention measures that will protect against changes in topography or formation of new surface channels. Gilman and Briggs pf. at 10-11.

78. Each proposed solar array will be supported by two pile-driven or helio-screwed posts, driven to an average depth of 8 to 10 feet. Approximately 871 of the 1488 posts supporting the solar arrays will be installed in Wetland A. Based upon soil testing performed on the site, the installation of the posts to support the solar arrays will not penetrate a soil sub-strata or otherwise create a subsurface drainage channel. Townsend pf. at 7-8; Garden supp. pf. at 9-10; exh. RT-1.

79. In the event that ledge is encountered, and neither pile-driving nor pinning is a satisfactory option in a specific field location, then a cement footing would be used to support the post. The cement footing will be 20 to 30 inches in diameter, approximately 36 inches below grade, and approximately 4 to 10 inches above grade. No cement footings will be located in Wetland A. In Wetland A, if neither pile-driving nor pinning is a satisfactory option for a given post location, the post will be moved to a feasible location, and a span will bridge the gap between posts. Garden supp. pf. at 9-10; Garden 2nd supp. pf. 8; tr. 11/2/10 at 32 (Garden).

Discussion

Triland, in response to the ACOE request, has agreed to adhere to conditions during construction and operation of the proposed project that will avoid dredging, filling, or

mechanized land clearing in all the Class III wetlands located on the site. Because the proposed project will avoid any activity that would alter the inflow or outflow of water in the identified wetlands on the project site, the installation of the proposed project will not require either an Individual Permit or a General Permit authorization from the ACOE. Therefore, I am recommending these agreed upon conditions be required as a condition to the CPG.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

80. The proposed project will not have an undue adverse impact on any existing water supply. The operation of the proposed project will not consume water and will not require the installation of a water supply system. Townsend pf. at 7.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

81. The proposed project will not result in unreasonable soil erosion or a reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by findings 82 through 88, below.

82. The ground disturbance for the proposed project site will be limited to the array posts, the underground electrical wiring system, the inverter structures, the installation of four utility poles, and the small extension of the driveway. Garden supp. pf. at 8.

83. The proposed project will utilize the existing gravel driveway and parking area. The proposed project will create less than 5,000 square feet of impervious surfaces for the driveway and parking-lot expansion, and possibly concrete pads for the inverters, all located outside of site wetlands. Townsend pf. at 9.

84. The proposed project will require very limited grading and earth disturbance. The proposed project will retain the existing topography of the site and almost all of the existing natural vegetative ground cover. Seasonal mowing will be performed to ensure that the vegetation does not grow high enough to affect the performance of the solar modules. Townsend pf. at 8; Garden supp. pf. at 8.

85. The construction of the proposed project will utilize best management practices for erosion protection and sediment control as specified in the site-specific Erosion Prevention and Sediment Control Plan. These practices will include the temporary installation of silt fence and stone check dams and mulching or re-vegetation of exposed soils, as set forth in the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites. Townsend pf. at 8; exh. RT-2.

86. The proposed project will adhere to conditions during construction and operation of the proposed project to avoid dredging, filling, or mechanized land clearing in all the Class III wetlands located on the site. Gilman and Briggs pf. at 7-8; Garden supp. pf. at 9; exh. GB-4.

87. Each proposed solar array will be supported by two pile-driven posts 12 feet apart, and the solar arrays will be arranged in rows with each row 28 feet from the next row. The arrangement of the arrays will allow open space for sunlight, rainfall, and air to reach the ground cover. Townsend pf. at 9.

88. The underground electrical lines that connect each row of solar modules to the adjacent row and then connect to the inverter structures will be located outside of the site wetlands. The electric wires will be contained in a flexible plastic conduit that will be approximately 2 inches in diameter, and placed in a trench that is approximately 6 inches wide by 20 to 30 inches deep. After the conduit is placed in the trench, the trench will be backfilled with the original soil and the original vegetative ground cover will be folded back on the top of the trench. The covered trench will be seeded with an ANR-approved seed mix. Garden supp. pf. at 10; Garden 2nd. supp. at 8; exh. TTG-S5.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

89. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to use of highways, waterways, railways, airports and airways, and other means of transportation existing or proposed. This finding is supported by findings 90 through 93, below.

90. The proposed project is situated at a federal highway interchange, so all vehicles accessing or exiting the project will have immediate access to Interstate 89 and State Route 64. Garden pf. at 15.

91. The existing gravel driveway and parking area will be slightly expanded and landscaped in order to improve its appearance, safety and accessibility. The existing parking area will be expanded by approximately 4,000 square feet to create a 35-foot radius, the optimal radius for fire department vehicles to maneuver, and a short driveway extension to the inverter structures for year-round access and winter plowing. Garden pf. at 8.

92. Safety features at the proposed parking area will include a new guard rail on either side of the driveway entrance in order to prevent a vehicle from inadvertently steering into Robinson Brook, and boulders on the border of the gravel parking area to restrict vehicles from driving beyond the parking area. Garden pf. at 8; exh. TTG-3.

93. The traffic generated by the proposed project will be greatest during the estimated three months of construction. At the peak of construction, vehicle traffic for construction workers may total 40 site trips per day. The equipment for the proposed project will be delivered in a total of 48 deliveries over the three-month construction period. Operation and maintenance of the proposed project will require between one and two worker vehicle trips per week. Garden 2nd supp. pf. at 4-5.

Educational Services

[10 V.S.A. § 6086(a)(6)]

94. The proposed project will not cause any unreasonable burden on the ability of any municipality to provide educational services. The proposed project will not result in an increase in the student population in the local schools. Garden pf. at 16.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

95. The proposed project will not cause any unreasonable burden on the Town of Williamstown to provide municipal services. Garden pf. at 17.

Aesthetics, Historic Sites
and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

96. 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 97 through 108, below.

97. Vermont Route 64 is the public vantage point from which the proposed project will be most visible. The views will be available at varying elevations for approximately 1,500 feet as the roadway passes north of the project in an east-west direction. Westbound views from Route 64 to the project site are well screened until just east of the site. Vehicles traveling on Route 64 will have very limited views, and there are no pedestrian ways along Route 64. Tr. 11/2/10 at 56 (Buscher); exhs. MJB-1 at 7, Appendix 3 and 5, TTG-S1, and TTG-S2.

98. The proposed project will also have limited visibility from Interstate 89. The interstate runs north and south past the project site. A buffer of mature vegetation separates the site from Interstate 89. The project will be visible to southbound traffic on Interstate 89 from a clearing in the vegetation for the northbound entrance ramp which exists for less than a few hundred feet. For northbound vehicles, landform primarily blocks any potential views of the project and the existing vegetative buffer west of the project site screens views directly adjacent to the site. Exh. MJB-1 at 6-7, Appendix 3.

99. The proposed solar arrays will be oriented away from both Interstate 89 and Route 64 and facing toward the woodlands on the site's southern boundary. Garden pf. at 6.

100. The proposed project will not use lighting, in order to preserve the undeveloped character of the property during evening hours. Garden pf. at 10.

101. The proposed project will include landscape mitigation plantings to reduce the visibility of the inverter structures. Exhs. MJB-1 at 7 and TTG-6.

102. A proposed interpretive area at the entrance of the proposed project will create a gateway to visitors and residents entering Williamstown from the Interstate 89 Exit 5 area. The proposed project may include a project identification sign located on the property near the Exit 5

interchange of Interstate 89 and Route 64. Tr. 11/2/10 at 58 (Buscher); exhs. MJB-1 at 8 and TTG-11.

103. Current full views of the proposed project site begin at the entrance drive and include a collection of abandoned trailers and vehicles. The proposed project will include the removal of the abandoned vehicles to improve the appearance of the project area. Exh. MJB-1 at 7; tr. 11/2/10 at 57-58 (Buscher).

104. The proposed project will not result in an adverse impact to aesthetics of the area for the following reasons: (1) the project will not be generally visible from public viewing locations; (2) the views available from Route 64 and Interstate I-89 will be brief and limited; and (3) public views that do exist to the site are not considered a scenic resource. Buscher pf. at 2; exh. MJB-1 at 7; tr. 11/2/10 at 55-59 (Buscher).

105. The proposed project may include a row of landscaping along the east and/or south elevations of the site in order to minimize wind load on the solar modules closest to State Route 64. The landscaping would consist of a row of evergreen trees of a species, size and number capable of minimizing the wind at this location. Garden supp. pf. at 3.

106. Triland has agreed, as a condition to the certificate of public good, following completion of construction of the proposed project (including installation of all landscaping), to arrange a site visit with the Board and all parties to review the effectiveness of the aesthetic mitigation measures. Exh. Joint-2.

107. The Vermont Division of Historic Preservation concluded that the proposed project will have no effect on any historic properties that are listed or eligible for the State Register of Historic Places. Garden pf. at 16; exh. TTG-17.

108. The proposed project site does not contain any rare or irreplaceable natural areas. Gilman and Briggs pf. at 11.

Discussion

Under the Stipulation filed by the parties, Triland has agreed to arrange a post-construction site visit with the Board and all parties to review the effectiveness of the aesthetic mitigation measures. The parties also recommended the Board reserve the right to require Triland Partners to install additional mitigation measures. At the request of the Department of

Public Service, Triland's expert witness created two computer generated simulations of the proposed project from the vantage points of westbound and eastbound travelers along State Route 64.⁴ Triland's expert witness concluded that the proposed project will not result in an adverse impact to aesthetics of the area and recommended no mitigation measures at these locations. Triland's expert witness concluded that the views along Route 64 were limited and short, and that limited views were consistent with the educational portion of the proposed project. A post-construction review of project aesthetics will provide confirmation to the conclusion that the proposed project does not have an adverse aesthetic impact. Therefore, I am recommending a post-construction review of the effectiveness of the aesthetic mitigation measures be required as a condition to the certificate of public good, along with a condition reserving the Board's authority to require any mitigation measures that the Board determines to be necessary.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

109. The proposed project will not have an undue, adverse impact on any necessary wildlife habitat and endangered species. This finding is supported by findings 110 through 115, below.

110. No threatened or endangered animal species have been identified on the proposed project site. Gilman and Briggs pf. at 14.

111. Field visits to the proposed project site have indicated some evidence of wildlife on the property, including deer and the presence of two woodcock nests in Wetland A. There is no critical habitat, i.e., habitat necessary for the survival of a species, on the project site. Gilman and Briggs pf. at 13.

112. The proposed site will not provide suitable cover for sheltering deer, because there is no softwood cover on the project site, and because the site slopes gently to northwest, exposing it to cold winter winds. Gilman and Briggs pf. at 13.

113. It is expected that the woodcock observed will continue to use the proposed project area as feeding and resting habitat, and possibly as breeding habitat, even with the project components

4. Garden supp. pf. at 2; exhs. TTG-S1 and TTG-S2.

in place, given the continued presence of natural ground vegetation, and the infrequent presence of human visitors. Gilman and Briggs pf. at 13.

114. There is no evidence of major wildlife trails across the proposed site, and the topography of the land does not suggest that it forms part of a wildlife corridor. Gilman and Briggs pf. at 13.

115. The security fencing for the proposed project may include access for wildlife passage at certain locations, subject to approval by project lenders and insurers and NESC requirements. At certain locations, the fence may be raised from the ground level by approximately 12 to 24 inches in height to allow passage of small animals under the fence and the height may be restricted to 4 feet to allow passage over the fence by larger mammals. Garden pf. at 8; Garden supp. pf. at 6; Garden 2nd supp. pf. at 10-11; tr. 11/2/10 at 43, 62-63 (Garden); exhs. ANR-1 and TTG-S5.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

116. The proposed project will not unnecessarily or unreasonably endanger the public or quasi-public investment in any 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 any such facility, service or lands. This finding is supported by findings 117 through 119, below.

117. The closest public properties are the right-of-ways for Interstate 89 and State Route 64. The public's use of these public properties will be unimpeded by the presence and operation of the proposed project. Garden pf. at 17.

118. The public will be welcome to access the site from the public roadways and view the interpretive educational panels that will be installed near the large gravel parking area on the site. Garden pf. at 17.

119. The perimeter fence will not block the VAST trail so that snowmobilers will have continued use of the trail. Garden supp. pf. at 7.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

120. Triland is not a distribution utility and is not required to have an integrated resource plan. Garden pf. at 17.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

121. The proposed project complies with the *Vermont Electric Plan* (the "Plan"), because it supports the Plan's recommendations that the State should advance clean energy initiatives and "promote the establishment of an on-going clean source mix." Garden pf. at 18.

122. The Department filed a determination on November 22, 2010, 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)]

123. The proposed project will not affect any outstanding resource waters of the State, as there are no waters located near the proposed project that have been designated as outstanding resource waters. Gilman and Briggs pf. at 15.

Waste to Energy Facilities

[30 V.S.A. § 248(b)(9)]

124. This criterion is not applicable to the proposed project.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

125. The proposed project will be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. The proposed project will interconnect with WEC's existing 12.47 kV distribution system and will not adversely affect

system stability or reliability. Triland will pay all costs to interconnect the proposed project to the WEC distribution system. Garden pf. at 15-16; Crockett pf. at 3; exh. TTG-16.

Agricultural Soils Reclamation

126. The proposed project site includes an area encompassing approximately 8.9 acres that qualify as prime agricultural soils, 5.9 acres of which would be in the area of the proposed solar modules. Garden supp. pf. at 13; exh. TTG-S8.

127. Triland, at the request of AAFM, will preserve and reclaim the prime agricultural soils on the project site. Triland submitted a Primary Agricultural Soils Reclamation Plan to the AAFM on October 19, 2010. The Soils Reclamation Plan was subsequently reviewed and approved by the AAFM. Garden supp. pf. at 13; Garden 2nd. supp. pf. at 11-12; exh. TTG-S10.

128. The proposed project will perform only minimal grading on the site to avoid significant disturbance of existing topsoils and native vegetation during the construction and operation of the project. Construction of the proposed project will include restoration of the open field characteristic of the project site. Garden supp. pf. at 13; Garden 2nd. supp. pf. at 11-12; exh. TTG-S10.

129. The proposed project, once constructed, will maintain the open field characteristic of the site by annual mowing and brush hogging. Following decommissioning of the proposed project, any primary agricultural soils disturbed by the project will be restored to their full agricultural potential through implementation of the Soils Reclamation Plan and the site will be fully restored to its earlier open field characteristics. Garden supp. pf. at 13; Garden 2nd. supp. pf. at 11-12; exh. TTG-S10.

130. The decommissioning fund for the proposed project will allocate \$5,000 of the fund to be dedicated to the implementation of the Soils Reclamation Plan for the site. Garden supp. pf. at 13.

131. The work contemplated by the Soils Reclamation Plan is consistent with the 30 V.S.A. Section 248 criteria. Garden 2nd. supp. pf. at 11-12.

Decommissioning Plan

132. The proposed project will be decommissioned at the end of its useful life. The solar modules will be dismantled and sold for reuse or be returned to the manufacturer for recycling. The solar panel support structures, underground electrical wiring, inverter enclosures, and educational kiosk will be removed from the site. The decommissioning will include implementing the requirements of the Soils Reclamation Plan. The decommissioning will effectively restore the site to pre-development conditions. Garden supp. pf. at 12-13; Garden 2nd. supp. pf. at 11.

133. Triland has agreed, as a condition to the certificate of public good, prior to commencement of construction, to submit to the Board for review and approval a plan for the creation of a decommissioning fund, that includes the following information:

- a. An estimate of the cost of decommissioning;
- b. Assurance that \$5,000 of the decommissioning costs will be dedicated to the requirements of the Soil Reclamation Plan;
- c. Assurance that the Fund is backed by an irrevocable standby letter of credit or other appropriate A-rated financial security;
- d. Assurance that the Fund be adjusted annually for inflation using the current annual Consumer Price Index as determined by the Bureau of Labor Statistics; and
- e. Assurance that the Fund is bankruptcy-remote in order to protect it from creditor claims in the event the proposed project encounters financial difficulties.

Garden supp. pf. at 12-13; Garden 2nd. supp. at 11; tr. 11/2/10 at 20-21 (Garden); exh. Joint-2.

Discussion

Board Rule 5.402(C)(2) requires non-utility petitioners to "include a plan for decommissioning the project at the end of its useful life. This requirement does not apply to proposed generation facilities with a capacity of one MW or less."

Triland has agreed, as a condition to the certificate of public good, prior to proceeding with the construction of the proposed project, to submit to the Board for review and approval a plan for the creation of a decommissioning fund. Triland recommended that parties be given one week from the date the plan is filed with the Board, to file any comments. I am also recommending that parties be given one week to file any comments.

IV. DISCUSSION

Triland has provided sufficient evidence to demonstrate that the proposed project complies with Section 248 criteria. I recommend that the Board issue a CPG, with conditions, authorizing construction of the proposed project.

On November 8, 2010, Triland, the Department, and AAFM filed a revised proposed findings of fact and order, and on November 12, 2010, filed an amended Stipulation in which all the parties agreed that the Board should issue a CPG with conditions. The parties waived their rights under 3 V.S.A. § 811 to review and comment upon a proposal for decision, and to present oral argument, provided that the Board issues an order substantially similar to that referenced in the Stipulation. Given that the Proposal for Decision is substantially similar to that referenced in the Stipulation, I am not circulating the Proposal for Decision to the parties for their review and comment.

V. CONCLUSION

Based upon the evidence in the record, I conclude that the proposed project, with the conditions identified below:

- (a) 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, and the recommendations of the municipal legislative bodies;
- (b) 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 land management measures;
- (c) will not adversely affect system stability and reliability;
- (d) will result in an economic benefit to the state and its residents;
- (e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) and §§ 6086(a)(1) through (8) and (9)(K);
- (f) is consistent with the principles of least-cost integrated resource planning;

- (g) is in compliance with the electric energy plan approved by the DPS under § 202 of Title 30 V.S.A.;
- (h) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Water Resources Board;
- (i) does not involve a waste-to-energy facility; and
- (j) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

I recommend that the Board approve the proposed project and issue a CPG for construction of the proposed project with the conditions set forth in the proposed Order and CPG, below.

Dated at Montpelier, Vermont, this 30th day of November, 2010.

s/ Mary Jo Krolewski
Mary Jo Krolewski
Hearing Officer

VII. ORDER

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

1. The findings, conclusions, and recommendations of the Hearing Officer are adopted.
2. The proposed installation and operation of a 2.1 MW solar electric generation facility by Triland Partners, LP in Williamstown, 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.
3. Construction, operation, and maintenance of the proposed project shall be in accordance with the plans and evidence as submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
4. The proposed project is hereby certified as a Sustainably Priced Energy Enterprise Development (SPEED) project.
5. Triland Partners shall comply with any applicable requirements regarding the disclosure of renewable attributes that are established in other proceedings, including Docket 7533, and Board Rules.
6. Triland Partners shall pay the entire cost of the distribution system upgrades.
7. Triland Partners shall implement the system protection and control strategies recommended by the System Impact Study for the proposed project.
8. During construction and operation of the proposed project, Triland Partners shall comply with all conditions requested by the U.S. Army Corps of Engineers, in order to avoid dredging, filling, or mechanized land clearing in all the Class III wetlands located on the site.
9. All construction activities shall comply with the site-specific Erosion Prevention and Sediment Control Plan developed for the proposed project.
10. Prior to proceeding with operation, Triland Partners shall comply with the screening requirements of the project landscaping plan.
11. Prior to commencement of construction, Triland Partners shall submit to the Board for review and approval a plan for the creation of a decommissioning fund that includes the

following information: (1) an estimate of the cost of decommissioning; (2) assurance that \$5,000 of the decommissioning costs will be dedicated to the requirements of the Soil Reclamation Plan; (3) assurance that the Fund is backed by an irrevocable standby letter of credit or other appropriate A-rated financial security; (4) assurance that the Fund be adjusted annually for inflation using the current annual Consumer Price Index as determined by the Bureau of Labor Statistics; and (5) assurance that the Fund is bankruptcy-remote in order to protect it from creditor claims in the event the proposed project encounters financial difficulties. Parties shall have one week from the date the plan is filed with the Board, to file any comments.

12. Prior to proceeding with construction, Triland Partners shall obtain all necessary permits and approvals. Construction, operation, and maintenance of the proposed project shall be in accordance with such permits and approvals, and with all other applicable regulations, including those of the Agency of Natural Resources.

13. Within 30 days of the completion of construction of the proposed project (including installation of all landscaping), Triland Partners shall arrange a site visit with the Board and all parties to review the effectiveness of the aesthetic mitigation measures, as installed. As a result of this inspection, the Board reserves the right to require Triland Partners to install additional mitigation measures.

14. The Board reserves the right to require Triland Partners to install additional noise mitigation measures if the Board determines that operation of the proposed project results in undue noise levels.

Dated at Montpelier, Vermont, this 30th day of November, 2010.

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

OFFICE OF THE CLERK

FILED: November 30, 2010

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.