

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. _____

Petition of EGP Solar 1, LLC for a certificate of)
public good, pursuant to 30 V.S.A. § 248,)
authorizing the installation and operation of a)
2.2 MW solar electric generation facility to be)
located in Sheldon, Vermont, to be known as)
the “Sheldon Springs Solar Project”)

PETITION FOR CERTIFICATE OF PUBLIC GOOD

NOW COMES EGP Solar 1, LLC (“EGP Solar” or “Petitioner”), and hereby submits this Petition pursuant to 30 V.S.A. § 248 and Public Service Board (“Board”) Rule 5.400, requesting the Board to issue a Certificate of Public Good authorizing Petitioner to construct and operate a 2.2 MW solar electric generation facility to be located in Sheldon, Vermont, known as the so-called “Sheldon Springs Solar Project” (“Project”).

By this Petition, Petitioner represents as follows:

Background & Project Description

1. EGP Solar is a Delaware limited liability company with offices located at 1 Tech Drive, Suite 220, Andover, Massachusetts 01810.

2. EGP Solar is a wholly owned subsidiary of Enel Green Power North America, Inc. (“EGPNA”). EGPNA manages a uniquely diversified operating project portfolio spanning five technologies: hydroelectric power, wind, geothermal, solar and biomass. With over 320 employees in North America, EGPNA owns and operates over 70 projects with a total installed

capacity of over 1000 MW operating in 20 U.S. states and three Canadian provinces. EGPNA also has close to 600 MW of additional renewable energy projects under construction.

3. EGPNA is an indirect subsidiary of Enel Green Power S.p.A. (“EGP”), the company within the Enel Group dedicated to developing and managing energy generation from renewable sources at an international level with a presence in 17 countries within Europe and the Americas, and an installed capacity of over 6,102 MW.

4. Enel S.p.A. is EGP’s parent company and is the second largest utility in the world, with an installed capacity of approximately 95,000 MW, serving over 60 million customers across 40 countries.

5. This Project is being developed under Vermont’s Sustainably Priced Energy Enterprise Development (“SPEED”) standard-offer program.

6. The Petitioner and the SPEED Facilitator (Vermont Electric Power Producers, Inc. (“VEPPI”)) executed a Standard Offer Power Purchase Agreement effective 14 October 2011 for a 2.2 MW AC solar electric generation facility.

7. The Project will be co-located adjacent to the existing 25 MW Sheldon Springs Hydroelectric facility, which is owned and operated by an EPGNA affiliate, Missisquoi Associates.

8. The Project will utilize the hydro project's existing access road and substation.

The Project will interconnect on the low side of the Sheldon Springs Hydroelectric substation at 4.16 kV and subsequently with Vermont Electric Cooperative's ("VEC") existing 46 kV transmission line. No new transmission lines, poles or VEC equipment will be installed.

9. The Project is designed to conform to the SPEED PPA and be 2.2 MW (AC) based on the cumulative nameplate capacity of the inverters. The expected net energy output of the Project will be approximately 2,700,000 kWh per year.

10. The principal Project components and upgrades include:

- Approximately 8,000-10,000 solar photovoltaic panels rated between 240 and 300 watts each¹ attached to a fixed mounting system secured to the ground by a combination of helical piles measuring approximately 3" in diameter, and concrete ballasts 10 feet in length (with a square cross-section measuring 1 foot). The approximate number of piles and ballasts used is 2,000 to 3,000 and 100 to 150, respectively. The panels will be tilted at an angle of approximately 30 degrees, with minimum and maximum ground clearances of between 3-4 feet and 8-12 feet, respectively. The arrays of panels will be grouped in rows running east to west;
- Four 630 kW inverters (operated at an aggregate nameplate capacity of 2.2 MW (AC));
- Two 1,250 kVA step-up transformers;
- Electrical lines in underground conduit connecting the combiner boxes to the inverters; and
- Approximately 2.7 acres of tree removal and 4.5 acres to be managed for height to eliminate shading during the operational phase of the Project.

¹ The total nameplate capacity of the Project will not exceed 2.2 MW (AC); however, the final number and wattage of the panels will be determined prior to construction. The final design regarding the specific type of panels and Project footprint will be consistent with the array design depicted in Exh. Pet. VE-2.

11. The Project will be accessed by Heather Lane, a private, paved access road for the Sheldon Springs hydroelectric facility that connects to Shawville Road to the east of the Project site.

12. During the development of the site, EGPNA consulted with regulators and revised the original layout to maintain an appropriate shoreline buffer and wetland buffers, avoid all archeologically significant sites, and manage tree removal as appropriate, and EGPNA is currently coordinating with VEC to ensure access and clearance for VEC's required maintenance of its 46kV transmission lines located on Missisquoi Associates' land.

13. EGP Solar is requesting the Board to also approve the identified alternative developable areas depicted within the footprint of the proposed Project site plan (Exh. Pet. VE-2) if necessary to limit site impacts.

14. As a renewable energy resource, the Project will contribute to meeting the regional and State's need for renewable power. Docket No. 7250, Order of 4/16/09 at 24.

15. In support of this petition, Petitioner submits testimony and exhibits sponsored by the following witnesses:

<u>Witness</u>	<u>Subject</u>
Victor Engel (Enel Green Power North America, Inc.)	Introduces the witnesses offering testimony in support of the Project, provides an overview of the proposed Project, addresses decommissioning of the Project, and explains how the Project addresses certain Section 248 criteria, including orderly development and impacts upon noise, public health

and safety, transportation, municipal services and public investments.

Adam Crary (Vanasse
Hangen Brustlin, Inc.
("VHB"))

Describes the Project's potential impacts upon natural resources and wildlife.

Jeremy Owens (T.J.
Boyle Associates)

Describes the Project's potential visual impacts.

Dean Denis (Vermont
Electric Cooperative,
Inc.)

Describes the Project's potential impacts upon system stability, reliability and transmission infrastructure.

Charles Knight and
Catherine Quinn
(UVM Consulting
Archaeology Program
("CAP"))

Describe the Project's potential impacts upon archeological and historic sites.

Section 248 Criteria

16. As a developer of a SPEED project, Petitioner is not required to address 30 V.S.A. § 248(b)(2). PSB Rule 4.312.

17. The Petitioner is not a regulated utility having an obligation to provide a least-cost integrated plan. Therefore, 30 V.S.A. § 248(b)(6) is inapplicable to this Project. Docket No. 7250, Order of 4/16/09 at 89.

18. The Project does not involve construction of a waste-to-energy facility.

Therefore, 30 V.S.A. § 248(b)(9) is inapplicable to this Project. *Id.* at 90.

19. On August 31, 2010, the Board issued a procedural order conditionally waiving the following Section 248(b) criteria for renewable projects with plant capacities that are greater than 150 kW but not more than 2.2 MW:

- 30 V.S.A. § 248(b)(2) (Need) (except for projects developed by utilities);
- 30 V.S.A. § 248(b)(4) (Economic Benefit)
- 30 V.S.A. § 248(b)(5) & 10 V.S.A. § 6086(a)(1)(c) (Water Conservation)
- 30 V.S.A. § 248(b)(5) & 10 V.S.A. §§ 6086(a)(2) and (3) (Sufficiency of Water and Burden on Existing Water Supply)
- 30 V.S.A. § 248(b)(5) & 10 V.S.A. § 6086(a)(6) (Educational Services)
- 30 V.S.A. § 248(b)(7) (Compliance with Electric Energy Plan)
- 30 V.S.A. § 248(b)(6) (Least-Cost Integrated Resource Plan) (with the exception of projects developed by utilities).

In Re: Simplified Procedures for Renewable Energy Plants with a Capacity Between 150 kW and 2.2 MW, Order of 8/31/2010 at 8.

20. Because the criteria listed in paragraph 19 are conditionally waived for this Project, Petitioner is not required to address these criteria to support its request for a CPG.

21. The Project will promote the general good of the state in that it:

- (a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the Sheldon and Northwest Regional Planning Commissions, the

recommendations of the Sheldon Selectboard, if any, and the land conservation measures contained in the Sheldon Town Plans, in accordance with 30 V.S.A. §248(b)(1);

(b) will not adversely affect system stability and reliability in accordance with 30 V.S.A. §248(b)(3);

(c) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety, in accordance with 30 V.S.A. §248(b)(5);

(d) 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 Panel, in accordance with 30 V.S.A. §248(b)(8); and

(e) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers in accordance with 30 V.S.A. §248(b)(10).

Request for Waiver of PSB Rule 5.505(B)(2) – Fast Track Screening Criterion No. 2

22. Board Rule 5.505(B) establishes thirteen Fast Track Screening Criteria for interconnection review and, pursuant to Rule 5.506, a generation project is eligible for the Fast Track Screening process if it satisfies all of the thirteen enumerated criteria. PSB Rules 5.505, 5.506(A).

23. Section 5.505(B)(2) provides that the proposed interconnection point is not at transmission voltage (i.e., not over 23 kV line to line or 13.28 kV line to neutral).

24. The Project will be connected at 4.16 kV on the existing 46-4.16 kV transformers. Therefore, the interconnection point will be at a transmission voltage as set forth in Section 5.505(B)(2).

25. However, VEC's electrical analysis demonstrates that the Project and proposed interconnection at 4.16 kV will not have an adverse impact on the VEC transmission system nor will it require any upgrades to the VEC system. See Prefiled Testimony of Dean Denis and Exhibit Petitioner DD-1 (analysis).

26. The Project as proposed satisfies all of the other applicable 5.505(B) criteria. *Id.*

27. Board Rule 1.200 provides that: "Except where prohibited by statute or by the terms of the rule, itself, the Board may for good cause grant exceptions in particular cases to any provision of these rules." PSB Rule 1.200.

28. Good cause exists to grant a waiver of the application of Board Rule 5.505(B)(2) in this matter because the Petitioner, as an affiliate of Missisquoi Associates, is entitled to connect to the low side of the 46 kV transformer used for the operation of EPGNA's existing hydroelectric facility, which interconnection VEC has determined would neither result in any adverse impacts to VEC's system or require any upgrades or additions to the VEC facilities.

29. In addition, collocation of these two generation facilities at the Proposed project site results in an efficient use of existing electrical resources and avoids the associated impacts that would otherwise be caused by installation of additional electrical infrastructure if this interconnection opportunity were not available.

30. If Section 5.505(B)(2) were not waived, Petitioner would unnecessarily have to expend \$10,000 in capital to pay for a System Impact Study, which would result in a complete waste of resources and would delay the implementation of this renewable energy project. A System Impact Study would be a waste of resources because the engineering analysis demonstrates that the Project can be connected at the transmission voltage without any adverse impacts.

31. Such a result would provide no benefit and would not be in the general good of the state.

Request for Relief

WHEREFORE, Petitioner respectfully requests this Board to:

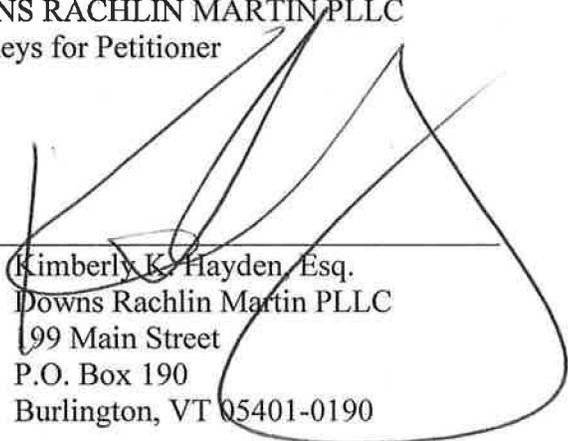
- A. Docket this Petition and schedule a prehearing conference in this matter as expeditiously as possible;
- B. Adopt the proposed Schedule included with this Petition;
- C. Hold hearings as the Board determines necessary;
- D. Make findings as required by 30 V.S.A. § 248;
- E. Issue final Findings, a final Order and Certificate of Public Good (“CPG”) approving the Project;
- F. Certify the Project as a SPEED project;
- G. Waive application of Board Rule 5.505(B)(2) and find that this Project is eligible for the Fast Track Screening Process; and

H. Take such other action as may be required for the expeditious review of this
Petition.

DATED at Burlington, Vermont, this 27th day of July, 2012.

DOWNS RACHLIN MARTIN PLLC
Attorneys for Petitioner

By: _____



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