

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 8632

Petition of Elizabeth Mine Solar I, LLC, for a )  
certificate of public good, pursuant to 30 V.S.A. )  
§ 248, authorizing the installation and operation )  
of a 4.99 MW solar electric generation facility )  
on land within the Elizabeth Mine Superfund site )  
in the Towns of Thetford and Strafford, )  
Vermont, to be known as the “Elizabeth Mine )  
Solar Project” )

Order entered: 12/22/2016

**ORDER RE: COMPLIANCE FILINGS AND PROPOSED PROJECT CHANGES**

**I. INTRODUCTION**

On June 29, 2016, the Vermont Public Service Board (“Board”) issued a certificate of public good (“CPG”) in this docket approving, subject to certain conditions, the installation and operation of a 4.99 MW solar electric generation facility on land within the Elizabeth Mine Superfund site in the Towns of Thetford and Strafford, Vermont (the “Project”). Among other things, the CPG required Elizabeth Mine Solar I, LLC (the “CPG Holder”) to make a number of post-certification compliance filings.

On December 1, 2016, the CPG Holder made a compliance filing pursuant to Conditions 1, 7, and 10 of the CPG, including proposed changes to the Project supported by affidavits and additional exhibits.

The Vermont Department of Public Service, the Vermont Agency of Natural Resources (“ANR”), the Town of Strafford, and the Vermont Division for Historic Preservation (collectively the “non-Petitioning Parties”) filed letters stating that: (1) the CPG Holder’s proposed changes to the Project will not have an undue adverse impact under the criteria of 30 V.S.A. § 248, (2) they have no objection to the Board’s approval of the changes, (3) they waive the comment period under Condition 10 for the final Decommissioning Plan, and (4) they do not object to the admission of the CPG Holder’s affidavits and supplemental exhibits into the evidentiary record for this proceeding.

In this Order, we approve certain revisions to the Project in accordance with Condition 1 of the CPG, conclude that the CPG Holder has fulfilled its obligations under Condition 7, and approve the final Decommissioning Plan in accordance with Condition 10, subject to the CPG Holder filing an executed letter of credit.

## **II. LICENSE AGREEMENT**

Condition 7 of the CPG states:

Prior to site preparation for or construction of the Project, the CPG Holder shall enter into a License Agreement with ANR documenting ANR's approval of the Project pursuant to ANR's independent authority under the terms of the land-use easements applicable to the Project site. The License Agreement shall be filed with the Board prior to site preparation or construction. Adherence to the terms and conditions of the License Agreement shall be a requirement of the CPG.

On December 1, 2016, the CPG Holder provided the Board and parties with an executed version of the License Agreement.

### **Discussion**

Condition 7 does not contemplate a comment period or Board approval. Accordingly, we find that the CPG Holder has fulfilled its obligation under Condition 7 to enter into a License Agreement and to file the Agreement with the Board.

## **III. CHANGES TO THE PROJECT**

Condition 1 of the CPG states:

Construction, operation, and maintenance of the Project shall be in accordance with the plans and evidence as submitted in this proceeding. Any material deviation from these plans or substantial change to the Project must be approved in advance by the Board. Failure to obtain advance approval from the Board for a material deviation from the approved plans or substantial change to the Project may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.

The CPG Holder states that as part of finalizing the License Agreement with ANR, certain changes have been made to the Project to address comments from ANR and the United States Environmental Protection Agency ("EPA"). As a result, the CPG Holder now seeks Board approval for these changes to the Project, and represents that the changes are minor and will not have a material impact or result in any undue adverse effects under any of the Section 248 criteria.

In support of its request for approval of these changes, the CPG Holder filed affidavits and exhibits from each witness who provided testimony on behalf of the CPG Holder.

The non-Petitioning Parties have reviewed the proposed changes to the Project. They believe the changes will not have an undue adverse impact under the criteria of 30 V.S.A. § 248, do not object to the Board's approval of the changes, and do not object to the affidavits and exhibits being admitted into the evidentiary record for this proceeding.

### Description of the Project Changes

The CPG Holder represents that certain "detailed technical" changes to the Project's design specifications are necessary as a result of discussions with ANR and the EPA regarding the License Agreement, and that other changes to the Project were made based on the availability of certain equipment and technological changes that have occurred since the time that it filed its petition. The proposed changes fall into seven categories: (1) revision to the Project layout, (2) changes to solar panel and inverter specifications, (3) changes to support ballasts, (4) changes to transformer pad mounting, (5) changes to the route of electrical lines, (6) changes to the access road width, and (7) change in the type of facility safety equipment.

#### *Revision to the Project Layout*

The layout of Project panels has been modified to remove panels from the southwestern portion of the Project to avoid construction in an area known as the "slime exclusion zone." This area contains low-strength soils under the cap that may not support the weight of the panels. Therefore, the CPG Holder removed panels from this area to avoid any potential for damage to this area of the cap. In addition, the CPG Holder has reduced the total number of panels and racks due to the availability of higher wattage panels, and has made minor adjustments in the panel setback from stormwater swales based on comments from EPA and ANR. Finally, minor changes to the above-grade electrical conduits and interconnection wiring were made due to the design layout changes as well as input from Green Mountain Power Corporation regarding the most efficient interconnection point. *See* Affidavits of Ronald Kelly, Benjamin Green, and Mark Kane; exhibit EMS-RK-2 (revised).

### *Solar Panels and Inverters*

The CPG Holder proposes to use a more efficient solar panel, thus resulting in fewer panels needed to achieve the same AC system capacity. The CPG Holder will now use 20,592 panels of 335 watts and 345 watts, as opposed to the 22,590 panels of 315 watts as originally proposed. In addition, although the dimensions of the panels will not change, they will now be tilted at a 21-degree angle rather than 30 degrees as originally proposed. *See* Affidavits of Ronald Kelly and Brian Browning; exhibits EMS-RK-6(a) and EMS-BB-3.

The CPG Holder proposes to modify the electrical design in order to maximize the Project's efficiency in light of the revised solar panel type and layout. The CPG Holder proposes to use one 1,799 kW, one 1,200 kW, and one 1,999 kW inverter, rather than the three 1,666 kW inverters originally proposed. *See* Affidavits of Ronald Kelly and Brian Browning; exhibit EMS-RK-6(a).

### *Support Ballasts*

The CPG Holder proposes to use pre-cast concrete ballasts to support the panel racking rather than cast-in-place ballasts as originally proposed. The CPG Holder states that it was unable to obtain cast-in-place ballasts from the manufacturer due to the dimensions required for the Project. Due to this change, the CPG Holder represents that construction traffic on the cover system will be reduced and the need for fully loaded concrete trucks to traverse the cap on access roads will be eliminated. In addition, the size of individual ballasts will be reduced as a result of the change in solar panels and the change in tilt to 21 degrees. *See* Affidavits of Ronald Kelly and Benjamin Green; exhibit EMS-RK-2 (revised).

### *Equipment Mounting*

The CPG Holder continues to propose using cast-in-place concrete for the three equipment pads. However, rather than installing the equipment directly on the concrete surface, the CPG Holder proposes instead to use an equipment skid containing pre-mounted equipment. The CPG Holder states that the equipment skids will be made of stainless steel, and that the use of skids will simplify on-site construction activities. In order to properly ground the equipment

skids, the CPG Holder proposes to bury ground rings in the soil beneath each concrete pad. Each grounding ring will be hand-dug and will be limited to four to six inches deep in the topsoil. *See* Affidavits of Ronald Kelly, Benjamin Green, and Suzanne Cherau; exhibit EMS-RK-2 (revised).

### *Electrical Lines*

The CPG Holder states that the alignment of the medium-voltage AC lines has been changed and the proposed switchgear pad has been eliminated. The alignment of the medium-voltage AC lines will no longer extend down Trestle Road, across the stormwater swale, and up the western buttress to the solar array. Instead, the CPG Holder states that from the point of interconnection near the site entrance on Mine Road, the AC lines will be located below grade within the limits of the existing access road. Near the approach to the capped portion of the site the AC line will transition to above grade and will be supported by pre-cast concrete paver blocks. On the cap, the above-grade AC line will be located to the north and west of the main access road, with road crossings as needed to access the three equipment skids. In addition, the locations of three utility poles near the interconnection point have been modified, and three additional utility poles are proposed for a pole-mounted recloser that will take the place of the switchgear pad that is being eliminated. The CPG Holder states that an archaeological review of each utility pole location was conducted, and represents that each location has been previously disturbed and there is no archaeological sensitivity for these locations. *See* Affidavits of Ronald Kelly, Benjamin Green, Mark Kane, Brian Browning, and Suzanne Cherau; exhibits EMS-SC-2, EMS-RK-2 (revised), and EMS-BB-4.

### *Access Road*

Based on comments from EPA and ANR, the CPG Holder proposes to increase the access roadway width to maintain a 12-foot-wide travel lane. This change results in an overall road width of 14.6 feet. The CPG Holder also proposes to use an off-cap delivery and unloading area in order to minimize large truck traffic on access roads. *See* Affidavits of Ronald Kelly and Suzanne Cherau; exhibit EMS-RK-2 (revised).

### *Perimeter Fencing*

The CPG Holder requested, and was granted by the Board, a waiver of Board Rule 3.500 with respect to the National Electrical Safety Code requirement for a perimeter fence. Subsequently, the CPG Holder has learned that it is not possible to use protective screening on the back of the solar modules in lieu of a fence because the voltage for the Project is too high to safely use scrim screening. Accordingly, in order to comply with the Public Health and Safety criterion of Section 248(b)(5), the CPG Holder now proposes to include a ballast-mounted perimeter safety fence. The fence will be seven feet high, chain link, gated, and mounted on top of concrete fence ballasts in order to minimize soil disturbance or grounding. The CPG Holder represents that even with the additional fence ballasts, the total impervious area on the cap will be less than what was originally proposed due to the reduced ballast sizing and module counts. The CPG Holder will request an amendment to the construction and operational stormwater permits from ANR to reflect these changes. *See* Affidavits of Ronald Kelly, Benjamin Green, Mark Kane, and Suzanne Cherau; exhibit EMS-RK-2 (revised).

### Discussion

We have reviewed the proposed changes to the Project, the supporting affidavits and exhibits, and the comments of the non-Petitioning Parties.<sup>1</sup> Based on this review, we conclude that the proposed changes to the Project do not have the potential for significant impact with respect to any of the applicable criteria of Section 248(b) or on the general good of the state under Section 248(a). Accordingly, the proposed changes are hereby approved and do not necessitate an amendment to the CPG.

### **IV. DECOMMISSIONING PLAN**

Condition 10 of the CPG states:

Prior to commencing site preparation or construction of the Project, the CPG Holder shall submit the final Decommissioning Plan to the Board for review and approval. The Decommissioning Plan shall be subject to approval by ANR as part

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1. Each party has affirmatively stated that it does not object to the admission of the affidavits and exhibits into the evidentiary record for this proceeding. Therefore, they are admitted.

of the License Agreement prior to its submission to the Board. Other parties shall have two weeks to review and comment on the Decommissioning Plan after its submission to the Board. The Decommissioning Plan shall establish a Decommissioning Fund, in an amount approved by ANR and the Board, which will be funded by an appropriate, bankruptcy-remote financial assurance mechanism, to be issued by an A-rated institution solely for the benefit of the Board. The bankruptcy-remote financial assurance mechanism shall be in the form of a final executed letter of credit ("LC") that shall be an irrevocable standby LC that: (i) is bankruptcy remote, (ii) includes an auto-extension provision (i.e., "evergreen clause"), and (iii) is issued solely for the benefit of the Board. No other entity, including EMS or ANR, shall have the ability to demand payment under the LC without the consent of the Board. The amount of the LC shall represent the full estimated costs of decommissioning without netting out any estimated salvage value for Project infrastructure.

The CPG Holder has submitted a final Decommissioning Plan for Board review and approval. The CPG Holder included in its filing a form LC which it requests the Board to approve, and subsequently the CPG Holder will submit an executed letter of credit prior to commencing operation of the Project.

### Discussion

The Decommissioning Plan includes a description of the Project, the roles of certain entities in Project decommissioning, required permits and approvals, and a detailed description of decommissioning activities and sequencing. Attached to the Plan is a cost estimate for decommissioning activities and a form LC and drawing certificate. The CPG Holder estimates that Project decommissioning will cost \$435,260 in 2016 dollars. This figure does not net out the salvage value for any Project infrastructure or equipment.

The Decommissioning Plan was subject to approval by ANR as a result of the License Agreement. In addition, each party has waived the two-week comment period, and no party has objected to the Board approving the Decommissioning Plan.

We hereby approve the Decommissioning Plan filed pursuant to Condition 10 of the CPG. The Decommissioning Plan includes as Appendix B a form LC and drawing certificate. The form LC is for an irrevocable standby LC, indicates that the Board is the sole beneficiary of the LC, and includes an attached drawing certificate. The form LC lacks certain specific information and is

not signed, but provides the form the CPG Holder would use for a final LC. The form LC and drawing certificate contain similar terms and conditions to previous Board-approved LCs.

In its filing memorandum, the CPG Holder requests that the Board “approve the use of this form letter for this Project . . . and [CPG Holder] will submit an executed version prior to commencing operation of the Project.” However, in the Decommissioning Plan itself, the CPG Holder states that once the Decommissioning Plan has been approved, the “executed copy in the form set forth in Appendix B will be filed with the Board prior to commencement of site preparation or construction.” Notwithstanding this inconsistency of whether the final executed LC will be filed prior to the commencement of operation or construction, we conclude that the form LC is appropriate for its purpose and is therefore approved as to form. However, to satisfy this CPG requirement, the CPG Holder shall file a final, executed LC with the Board consistent with the form LC. The CPG Holder shall not commence site preparation or construction until its final, executed LC has been approved by the Board.

#### **V. ORDER**

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

1. The proposed changes to the Project are approved.
2. Elizabeth Mine Solar I, LLC (the “CPG Holder”) has fulfilled its obligation under Condition 7 of its certificate of public good (“CPG”) to enter into a License Agreement with the Vermont Agency of Natural Resources (“ANR”) documenting ANR’s approval of the Project pursuant to ANR’s independent authority under the terms of the land-use easements applicable to the Project site and to file the License Agreement with the Board.
3. The final Decommissioning Plan is approved. The draft letter of credit (“LC”) is appropriate as to form, but does not fulfill the requirements of Condition 10 of the CPG because it is not a fully executed LC. In order to comply with Condition 10 of the CPG, the CPG Holder

shall file a final, executed LC with the Board consistent with the draft LC. The CPG Holder shall not commence site preparation or construction until its final, executed LC has been approved by the Board.

Dated at Montpelier, Vermont, this 22<sup>nd</sup> day of December, 2016.

<u>s/James Volz</u>	)	
	)	
	)	
<u>s/Margaret Cheney</u>	)	PUBLIC SERVICE
	)	
	)	
<u>s/Sarah Hofmann</u>	)	BOARD
	)	
	)	OF VERMONT

OFFICE OF THE CLERK

FILED: December 22, 2016

ATTEST: s/Judith C. Whitney  
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@vermont.gov)*