

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Petition of Chelsea Solar LLC, pursuant to)
30 V.S.A. § 248, for a certificate of public)
good authorizing the installation and)
operation of the “Chelsea Solar Project,” a)
2.0 MW solar electric generation facility)
located off Willow Road in Bennington,)
Vermont)

Docket No. 17-5024-PET

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (“MOU”) dated as of June 22, 2018 is among Chelsea Solar LLC (“Chelsea” or “Petitioner”) and the Vermont Agency of Natural Resources (“ANR” or “Agency”). Petitioner and ANR are also referred to collectively herein as the “Parties” and individually as a “Party.” This MOU supersedes (i) the Partial Memorandum of Understanding, dated January 16, 2015 and (ii) the Second Partial Memorandum of Understanding, dated June 15, 2015 (together the “2015 MOUs”), between the Parties. The 2015 MOUs were part of the evidentiary record in Case 8302, which involved a prior version of the Project.

PRELIMINARY STATEMENT

The Parties have resolved all outstanding issues between them related to the Project, consisting of the solar panels, racking, inverter, transformer, pads, driveway, potential O&M access, fencing and other related infrastructure associated with the 2.0 MW solar photovoltaic electric generation facility to be located on approximately 9.64 acres of clearing on a larger 27.3 acre parcel of land (“Solar Plant”), including that portion of the Project involving the Green Mountain Power (“GMP”) distribution line extension to the south and east of the Project (“Line

Extension”) and as such wish to memorialize their mutual understandings in this Memorandum of Understanding and stipulate as to certain conditions, as set forth below.

STIPULATION

The Parties, having had an opportunity to fully review and assess the proposed Project, hereby stipulate and agree as follows.

1. All prefiled testimony and exhibits (except as indicated in paragraph 2), this MOU, and the Petition shall be admitted without objection as evidence in the proceeding. The Parties agree that to the extent any of the Parties’ testimony or evidence submitted in this proceeding conflicts with the provisions of this MOU, it shall be superseded by this MOU and the provisions of this MOU shall control.

2. a. The Parties agree that the 2015 MOUs, which were filed as Exhibits CS-BW-75 and CS-BW-77 on April 9, 2018 in this Case, are hereby withdrawn. The terms and conditions of the 2015 MOUs are superseded by the terms and conditions of this MOU. The Parties agree that the 2015 MOUs are of no further force or effect and the Commission should not consider, or rely on, them.

b. The Parties agree that Petitioner shall perform, during the 2018 growing season, a comprehensive natural resources assessment of all areas of the adjacent property which may potentially be utilized by Petitioner to access the alternative O&M gate described by Brad Wilson in his second supplemental testimony dated February 14, 2018. The natural resources assessment shall include a survey for RTE plants. The complete natural resources assessment documentation and report shall be provided to the Agency, and filed as an exhibit in this case, along with supplemental testimony, upon its completion and no later than August 31, 2018.

c. The Parties agree that Petitioner shall perform, between June 1 and July 31 of 2018, a Northern Long-Eared Bat acoustic survey. The survey shall be performed by a consultant approved by the Agency and in accordance with a methodology approved by the Agency. The survey results and report shall be provided to the Agency, and filed as an exhibit in this case, along with supplemental testimony, upon its completion and no later than August 31, 2018.

3. The Parties agree that, based upon the agreements set forth in this MOU, there are no issues of material fact with respect to the Project. The Project, subject to compliance with the below conditions, will not result in an undue adverse effect on the natural environment. The Commission may issue a CPG for the Project, provided it is consistent with and subject to the terms and conditions of this MOU.

4. Petitioner shall comply with the provisions contained in the following paragraphs 5 through 25 and agrees to their incorporation as conditions in any Order and CPG issued by the Commission. Petitioner agrees to include these conditions in any Proposal for Decision that it may file with the Commission.

5. a. Petitioner shall not commence site preparation or construction, including tree clearing, on the Solar Plant portion of the Project without first obtaining an authorization to discharge under Construction General Permit 3-9020, or other applicable construction stormwater permit, from the Agency's Department of Environmental Conservation Stormwater Management Program. All Project site preparation and construction activities shall be performed in accordance with such permit.

b. If any authorization to discharge under Construction General Permit 3-9020 or other applicable construction stormwater permit is required by the Agency's Department of

Environmental Conservation to authorize the discharge of stormwater runoff from construction activities in connection with the Line Extension, then neither GMP nor the Petitioner shall commence site preparation or construction on the Line Extension portion of the Project prior to obtaining any such authorization. All Line Extension site preparation and construction activities shall be performed in accordance with such permit.

6. Within sixty days of commencement of operation of the Project, Petitioner shall perform post-construction, as-built, field verification of all impervious surfaces associated with both the Solar Plant and the Line Extension portions of the Project (including the Alternative O&M Access Drive, if any) and report the total impervious surface area to the Department of Environmental Conservation's Stormwater Management Program. If it is determined by the Stormwater Program that the total impervious surface area associated with the Project, in combination with the total impervious surface area of any other project deemed by the Stormwater Program to be part of a common plan of development (as defined in the Department's stormwater rules), results in a total amount of impervious surfaces that exceed the 1 acre threshold, Petitioner shall obtain an operational stormwater discharge permit and the Project shall be retrofitted with required stormwater treatment practices pursuant to the Vermont Stormwater Management Manual, Volume I.

7. To the extent any tree clearing activities associated with the Project's site preparation or construction are not covered by the Construction General Permit 3-9020, or other applicable construction stormwater permit, then Petitioner shall perform such tree clearing in accordance with the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs).

8. Petitioner shall avoid disturbing all wetlands and their associated fifty-foot buffers during site preparation and construction of the Solar Plant portion of the Project. In order to ensure wetlands and buffers are not disturbed, Petitioner shall demarcate all wetlands, and their buffers, at the Project site with visible flagging prior to site preparation or construction and instruct all work crews to avoid those areas.

9. Within 60 days of the commencement of Project operation, Petitioner shall provide the Agency's Department of Environmental Conservation Wetlands Program with a written certification that the Solar Plant has been built outside of the Class II wetlands, and their associated 50-foot buffers.

10. No later than six months in advance of the Project's decommissioning, Petitioner shall complete, and provide to the Department of Environmental Conservation Wetlands Program, an updated wetlands assessment to determine if any of the Project infrastructure is located within any Class II wetlands or their 50-foot buffers.

11. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class II wetland or its 50-foot buffer, then Petitioner shall obtain from the Wetlands Program a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit, in which case Petitioner shall obtain such permit prior to performing any decommissioning activities and comply with its terms and conditions. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class II wetland or its 50-foot buffer and a Vermont Wetland Permit is not required, Petitioner shall, sufficiently in advance of decommissioning, submit a wetlands restoration plan to the Wetlands Program for review and approval as an allowed use under the Vermont Wetland Rules (see Section 6.23 of the Vermont Wetland Rules). The restoration plan shall address the removal of

the solar array and other Project infrastructure located in any wetland, and shall, at a minimum, contain the following elements:

- a. Identification of phasing and staging areas;
- b. Utilization of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of construction mats or similar techniques to minimize soil disturbance;
- c. Revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and
- d. Provisions for inspection by the Agency prior to and following site restoration.

12. If any Project infrastructure is located within a Class II wetland or its 50-foot buffer at the time of decommissioning, then decommissioning of the Project shall not take place until the Agency has issued a Vermont Wetland Permit or has approved the wetlands restoration plan as an allowed use under the Vermont Wetland Rules, whichever is applicable.

13. All electric distribution line upgrades associated with the Line Extension portion of the Project shall be performed in accordance with Section 6.22 of the Vermont Wetlands Rules. If utility poles are to be located within a Class II wetland or its 50-foot buffer in excess of what is permitted under Section 6.22 of the Vermont Wetlands Rules, Petitioner shall ensure that GMP obtains the necessary Vermont Wetland Permit prior to construction of such work. This distribution upgrade condition shall only apply to the specific site preparation and construction activities that are necessary for purposes of interconnecting the Project, and shall terminate upon completion of construction of such project-specific upgrades in accordance with their terms. It is expressly understood that this condition shall not apply in any way to any independent utility construction activities which are not necessitated by the Project and over

which Petitioner has no direct or indirect control, or to any of the utilities' current operations and maintenance activities along the existing distribution route, or to any future operations, maintenance, or construction activities associated with the utilities' distribution facilities.

14. Petitioner shall comply with the following provisions in order to mitigate impacts to the Arrow-Leaved American Aster (*Symphyotrichum urophyllum*), an S1-ranked very rare species, so that such impacts are not unduly adverse.

a. Site Preparation and Construction of the Solar Plant Portion of the Project:

i. Prior to site preparation and construction, Petitioner shall establish, and designate, two Conservation Areas in the areas shown on the Site Plan included as Attachment C to the Rare, Threatened and Endangered Plant Mitigation Report dated November 11, 2014 (Plant Report) admitted into evidence in this proceeding as Exhibit CS-BW-64. The Conservation Areas shall encompass the entire polygons of the areas shown in the southwest (to be designated Conservation Area 1) and southeast (to be designated Conservation Area 2) corners of the property on the Site Plan. In other words, the Conservation Area polygons shall include the totality of the contiguous diagonal line markings shown on the Site Plan and illustrated in various colors designating the RTE survey information for "S3 – Uncommon", "S1 – Very Rare" and "Proposed Mitigation area" in the southwest and southeast corners of the property.

ii. The Conservation Areas shall be identified with GPS coordinates, as shall the three 2' by 2' transplant plots identified in the Plant Report. The GPS coordinates shall be provided to the Agency's Natural Heritage Inventory program, and the locations of the transplant plots shall be added to, and clearly shown on, a larger scale version of the Site Plan (or a current aerial photo), which shall also to be provided to the Agency.

iii. The Arrow-leaved American Aster plants located in the area of the proposed solar arrays shall be transplanted to the transplant plots in a manner, under conditions, and within a date range, approved in advance by the Agency.

iv. Petitioner shall carry out the activities (tree and shrub removal) as described in the Plant Report for establishment of the Conservation Areas, taking care not to damage or disturb the Arrow-leaved American Aster plants existing in, or transplanted to, those areas. All equipment shall be cleaned of soil and plant material prior to entry into the Conservation Areas in order to minimize the spread of invasive species by reducing the transportation and introduction of seeds and plant material.

v. Prior to site clearing and construction, Petitioner shall place a temporary perimeter fence, consisting of an orange snow fence, or similar fencing, to ensure that construction workers and machinery avoid the Conservation Areas. Petitioner shall have a representative of Arrowwood Environmental inspect the fencing prior to construction, to confirm it is appropriately located, secured, and clearly visible. The Arrowwood Environmental representative shall also brief the construction crew on the locations of, and need for avoidance of, the Conservation Areas prior to commencement of construction and site preparation activities.

vi. The temporary perimeter fencing shall be removed upon completion of all construction activities.

b. Post-Construction Monitoring of Conservation Areas:

i. The Conservation Areas shall be monitored by Arrowwood Environmental for a period of three years from completion of construction to document survivorship of the transplanted plants as further described in the Plant Report.

ii. The Conservation Areas, and surrounding 50' zone, shall be inspected by Arrowwood Environmental at least one time per year for a period of three years from completion of construction to monitor and control any invasive plants within the Conservation Areas and the surrounding 50' zone. All invasive plants shall be removed from these areas. The use of herbicides is not permitted without express written approval of the Agency. Mechanical removal is allowed.

iii. An annual report detailing the activities identified in subparts b.i. and ii., above shall be submitted to the Agency's Natural Heritage Inventory program by December 31 of each year during the three-year monitoring period.

iv. Representatives of the Agency's Natural Heritage Inventory program shall be permitted to access the Conservation Areas, at reasonable hours, in order to independently inspect the conditions of those areas and the plants growing therein during the life of the Project.

c. Project Operations and Maintenance:

i. Petitioner shall inform its operations and maintenance contractors of the location and significance of the Conservation Areas. All operations and maintenance activities shall be conducted in a manner that avoids damage or harm to the Arrow-leaved American Aster plants, and other plants noted in the Plant Report. The Conservation Areas shall be mowed at least once every three years. All mowing in these areas shall take place after October 15.

ii. All equipment shall be cleaned of soil and plant material prior to entry into the Conservation Areas in order to minimize the spread of invasive species by reducing the transportation and introduction of seeds and plant material.

d. Project Decommissioning:

i. Prior to any decommissioning activities, Petitioner shall place a temporary perimeter fence, consisting of an orange snow fence, or similar fencing, to ensure that construction workers and machinery avoid the Conservation Areas. Petitioner shall have a qualified botanist inspect the fencing prior to decommissioning, to confirm it is appropriately located, secured, and clearly visible. The qualified botanist shall also brief the decommissioning crew on the locations of, and need for avoidance of, the Conservation Areas prior to commencement of decommissioning activities. All decommissioning activities shall avoid the Conservation areas.

ii. The temporary perimeter fencing shall be removed upon completion of all decommissioning activities.

e. Line Extension.

i. Prior to any vegetation disturbance and tree clearing taking place, the populations of Arrow-leaved American-aster shall be flagged by Arrowwood Environmental. In addition, a qualified botanist shall be present to supervise tree clearing work along Willow Road between poles 14 and 16 to ensure that there is no earth disturbance and no placement of wood chips or fill within the boundaries of the identified Arrow-leaved American-aster plant population.

ii. All tree clearing along Willow Road between poles 14 and 16 shall be conducted during the dormant season for the Arrow-leaved American-aster or be performed entirely from the road. Trees shall be cut at the ground surface without earth disturbance and stumps shall remain in place.

15. Petitioner shall perform an updated RTE plant survey if Project site preparation or construction does not commence by April 30, 2019. In that case, site preparation or construction shall not take place until the Vermont Fish and Wildlife Department has reviewed

the updated RTE plant survey and determined that there are no undue adverse impacts to RTE plants or approved appropriate avoidance or mitigation measures.

16. Petitioner shall provide the Agency with the Project's "as-built" annual electric generation design estimate within 60 days of the commissioning date of the Project to assist the Agency with compiling and analyzing greenhouse gas impacts.

17. Petitioner shall provide the Agency with the following Project "as-built" information within 60 days of the commissioning date of the Project to assist the Agency with compiling and analyzing greenhouse gas impacts:

- a. Solar panel manufacturer and model;
- b. Solar panel country of origin (manufacture);
- c. Solar panel cell technology (e.g. mono-Si, multi-Si, CdTe, etc.);
- d. Rated solar panel output (in watts DC);
- e. Total number of solar panels installed;
- f. Total number of spare panels acquired (if any);
- g. Array mounting type (fixed, 1-axis tracking, 2-axis tracking, ground, roof, other);
- h. For fixed or 1-axis tracking, panel orientation and mounting angle;
- i. Design system capacity (DC and AC);
- j. Rack system manufacturer and model;
- k. Rack system components, including the number of each type of major component (e.g., rails, mounting posts, ballasts) and material (e.g., aluminum, steel concrete);
- l. Manufacturer, model and number of inverters;
- m. Manufacturer, model and number of transformers;
- n. Mass of concrete used (for ballasts, foundations, mounting pads, etc.);

- o. Percent of Portland cement composition of concrete mass above;
- p. Description, quantity and source of any recycled materials used (e.g., recycled content concrete, recycled aluminum racking, etc.);
- q. Amount (length) and gauge of wiring used for project;
- r. Components for connection to grid (circuit boxes, circuit breaker panels, metering equipment, etc.);
- s. Distance (e.g., truck miles traveled) for transport of system components to site; and
- t. Distance to grid connection.

18. By January 30 of each year, the Agency may request that Petitioner provide an annual report for the previous calendar year of operations to the Agency which shall contain the information set out below that will be used to assist the Agency with compiling and analyzing greenhouse gas impacts; Petitioner will have 60 days from the date of the Agency's request to supply the information. Should the Agency not request the information set out below by January 30, Petitioner will not have any obligation to provide an annual report from the previous year of operations. The information to be provided includes the following:

- a. Electric generation in kWh for the prior year, broken down by month; and
- b. Any information about the replacement of PV panels, inverters, transformers, or a complete racking system. In instances of failure and replacement of equipment (e.g. PV panels, inverters, etc.), Petitioner shall provide descriptions of both the failed and replacement components at the same level of detail as required by the "as-built" reporting requirements of paragraph 17, above. This provision does not require Petitioner to provide information about de minimis replacement of system

components (e.g., replacement of racking system hardware), or information regarding regular maintenance activities.

19. Should the Agency not request the information in paragraph 18, above, in any two consecutive years after Project commissioning, Petitioner's reporting obligations will automatically cease.

20. The Agency and Petitioner, by mutual agreement, may cancel Petitioner's reporting obligations related to greenhouse gas impacts at any time.

21. Fencing utilized for the Project shall be installed and maintained with a ground level opening (i.e., a gap) of 6 inches above the surface.

22. Petitioner shall use a non-toxic, bio-based coolant (FR3 or equivalent) for the Project transformer. Petitioner shall install a secondary containment system sufficient to accommodate 110% of the transformer coolant volume, plus 5 inches of freeboard for rain. The secondary containment system shall be designed and constructed substantially in accordance with the design depicted on Exhibit Petitioner CS-IJ-2. Petitioner's operations and maintenance contractor shall perform periodic inspections of the secondary oil containment system and maintain the system in good working order for the life of the Project.

23. Petitioner shall obtain the Agency's prior approval of the species composition for any vegetative screening to be planted in connection with the Project.

24. Petitioner, if it utilizes the alternative O&M access gate, shall avoid impacts to all significant natural resources on the adjacent property (e.g., wetlands, streams, RTE plants, necessary wildlife habitat, bat roost trees, etc.) identified in the 2018 natural resource assessment of the adjacent property. If Petitioner is unable to avoid all impacts, it shall prepare an impact minimization and mitigation plan and submit it to the Agency for review and approval. Any

impact minimization and mitigation plan that is approved by the Agency shall then be filed with the Commission for its review and approval after a 14-day comment period for all parties.

25. Petitioner shall comply with all of the Agency's requirements for avoiding impacts to Northern Long-Eared Bats in connection with the Project's site preparation and construction activities if the Agency determines that the 2018 Northern Long-Eared Bat acoustic survey indicates the probable presence of Northern Long-Eared Bats at the Project site. Petitioner shall perform an updated Northern Long-Eared Bat acoustic survey if Project site preparation or construction does not commence by June of 2023. In that case, site preparation or construction shall not take place until the Agency has reviewed the updated Northern Long-Eared Bat acoustic survey and determined that there are no undue adverse impacts to Northern Long-Eared Bats or approved appropriate avoidance or mitigation measures.

26. This MOU is governed by Vermont law and any disputes under this Memorandum of Understanding shall be decided by the Commission.

27. The Parties agree that this MOU shall not be construed by any party or tribunal as a waiver as to jurisdiction or otherwise having precedential impact on any future proceeding involving either Party, except as necessary to implement this MOU or to enforce an order of the Commission resulting from this MOU.

28. The Parties have made specific compromises to reach this Memorandum of Understanding. If the Commission fails to approve this MOU in its entirety or acts to overrule or disapprove any portion hereof, each such Party agrees that the agreement set forth herein may terminate, if such Party determines in its sole discretion, and each shall have the same rights as each would have had absent this MOU.

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Dated at New York, New York, this 22nd day of June 2018.

CHELSEA SOLAR LLC

By: 

Michael Melone, Esq.

Dated at Waterbury, Vermont, this 22nd day of June 2018.

VERMONT AGENCY OF NATURAL RESOURCES

By: 

Donald J. Einhorn, Esq.
Legal Counsel