



STATE OF CONNECTICUT  
*CONNECTICUT SITING COUNCIL*

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**VIA ELECTRONIC MAIL**

August 20, 2020

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103

RE: **PETITION NO. 1417** – Watertown Solar One, LLC and VCP, LLC d/b/a Verogy petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.975-megawatt-AC solar photovoltaic electric generating facility located at 669 Platt Road, Watertown, Connecticut, and associated electrical connection.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than September 3, 2020. To help expedite the Council's review, please file individual responses as soon as they are available. At this time, consistent with the Council's policy to prevent the spread of Coronavirus, please submit an electronic copy only to [siting.council@ct.gov](mailto:siting.council@ct.gov). However, please be advised that the Council may later request one or more hard copies for records retention purposes.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

*s/Melanie Bachman*

Melanie Bachman  
Executive Director

MB/MP

c: William Herchel, CEO, VCP, LLC d/b/a Verogy  
Bryan Fitzgerald, Director of Development, VCP, LLC d/b/a Verogy

**Petition No. 1417**  
**Interrogatories**  
**Set One**  
**August 20, 2020**

**Project Development**

1. If the project is approved, identify all permits necessary for construction and operation, and indicate which entity will hold the permit(s).
2. Referencing page 4 of the Petition, Watertown Solar One, LLC and VCP, LLC d/b/a Verogy (Petitioner) states that, “Alternatively, in the event virtual net metering capacity becomes available, energy produced by the Project may be delivered to Eversource...” As an update, what is the status of the availability of virtual net metering capacity for this project? Would the project be viable based on the market-based tariff if virtual net metering is not available?
3. Referencing page 4 of the Petition, the Petitioner notes that, “Energy produced by the Project will be sold to Eversource at market rates specified in the applicable utility tariff...” Would the Petitioner also sell its renewable energy certificates (RECs) it expects to generate with the proposed project? If so, to which public utility? If the RECs are to be sold to more than one public utility, provide the percentage to be sold to each public utility.
4. Would the Petitioner participate in the ISO-NE Forward Capacity Auction? If yes, which auction(s) and capacity commitment period(s)?

**Proposed Site**

5. In the lease agreement with Catholic Cemeteries Association of the Archdiocese of Hartford, are there any provisions related to site restoration at the end of the project’s useful life? If so, please provide any such provisions.
6. Would all components of the solar photovoltaic panels be recyclable? Could components of the panels be reused to make photovoltaic cells or whole panels be used to make new solar panels at the end of the life of this project? Could the solar panels and/or associated components be repurposed for a different use or product?

**Energy Output**

7. Have electrical loss assumptions been factored into the output of the facility? What is the output (MW AC) at the point of interconnection?
8. What is the projected capacity factor (expressed as a percentage) for the proposed project? For clarity, is this capacity factor based on a ratio of AC MWh to AC MWh, or a ratio of AC MWh to DC MWh?
9. What is the efficiency of the photovoltaic module technology of the proposed project?
10. Is the project being designed to accommodate a potential future battery storage system? If so, please indicate the anticipated size of the system and where it may be located on the site.

11. Would the impact of soft or hard shading reduce the energy production of the proposed project? If so, was this included in the proposed project's capacity factor?
12. Could the project be designed to serve as a microgrid?
13. If one section of the solar array experiences electrical problems causing the section to shut down, could other sections of the system still operate and transmit power to the grid?
14. Do solar facilities present a challenge for the independent system operator for balancing loads and generation (to maintain the system frequency) due to the changing (but not controlled) megawatt output of a solar facility? What technology or operational protocols could be employed to mitigate any challenges?

### **Site Components and Solar Equipment**

15. Referencing Sheet OP-1, provide the specifications sheets for the proposed 380 Watt and 390 Watt solar photovoltaic panels.
16. Would the panels be mounted in a portrait or landscape fashion?
17. How many panels will each rack hold?
18. Is the wiring from the panels to the inverters installed on the racking? If wiring is external, how would it be protected from potential damage from weather exposure, vegetation maintenance, or animals?
19. Referencing Figure 3 on page 9 of the Environmental Assessment (EA), Proposed Conditions Map, please provide a zoomed-in aerial map of the proposed project footprint that includes wetland buffers, and vernal pool envelope and critical terrestrial habitat distances.
20. What is the length (in feet) of the proposed access road in total linear feet? Are any upgrades to the existing access required to make it suitable for the construction and maintenance of this proposed solar facility?
21. Referencing Drawings SP-1 and SP-2, the proposed aisle width between solar panel rows is 16 feet. What is the minimum aisle width at which the solar panel rows could be installed?
22. Referencing page 4 of the Petition, the Petitioner notes that two pad-mounted switchgears and two transformers are proposed. However, page 5 of the EA notes that there would be one pad-mounted switchgear and one transformer. Please clarify the quantity of transformers and switchgear. Would such equipment all be located on the proposed 10-foot by 20-foot concrete pad identified on Sheet SP-1?

### **Interconnection**

23. Is the project interconnection required to be reviewed by ISO-NE?
24. Referencing page 5 of the Petition, the Petitioner notes that, "Eversource will be responsible for all necessary permits/approvals (if any) for this interconnection construction." Would the demarcation point of the Petitioner's/Eversource's control (or responsibility for permitting) be at

the proposed equipment pad or where the proposed underground connection route terminates near the existing electric distribution line on Platt Road, or another location?

25. Is the existing electrical distribution on Platt Road three-phase or would it have to be upgraded from single-phase to three-phase?

### **Public Safety**

26. Would the project comply with the National Electrical Code, the National Electrical Safety Code and any applicable National Fire Protection Association codes and standards?
27. Where is the nearest federally-obligated airport? Is a glare analysis required to comply with FAA policy?
28. With regard to emergency response:
- Is outreach and/or training necessary for local emergency responders in the event of a fire or other emergency at the site?
  - Could the proposed access accommodate emergency vehicles?
  - In the event of a brush or electrical fire, how would the Petitioner mitigate potential electric hazards that could be encountered by emergency response personnel?
  - Could the entire facility be shut down and de-energized in the event of a fire? If so, how?
29. Are there any drinking water wells on the site or in the vicinity of the site? If so, how would the petitioner protect the wells and/or water quality from construction impacts?

### **Environmental**

30. Referencing page 13 of the EA, how many acres of edge forest would be cleared to construct the project?
31. Did the Petitioner conduct a Shade Study Analysis? Would shading present any challenges for the proposed project? If so, provide acreage of trees that would be removed to mitigate for shading? How were the limits of tree shading determined?
32. The Greenhouse Gas (GHG) Assessment in Appendix M of Council Petition No. 1352 compared the life cycle GHG emissions from a solar project to a scenario where the solar project is avoided and an equivalent amount of natural gas-fired electric generation operated for the estimated life of the solar facility. For the proposed project, how would the net GHG emissions (or reduction) over the life of the solar facility and carbon debt payback be affected under this natural gas-fired generation versus proposed solar generation scenario?
33. Referencing page 29 of the EA, how many acres of Prime Farmland Soils would be impacted by the proposed project?
34. Referencing pages 8 and 9 of the Petition, the Petitioner would utilize biodegradable oil for the inverter step-up transformer(s). Explain why it is considered biodegradable. How quickly does it degrade in the environment?
35. What effect would runoff from the drip edge of each row of solar panels have on the site drainage patterns? Would channelization below the drip edge be expected? If not, why not?

36. Would the proposed project be consistent with the 2015 U.S. Army Corps of Engineers Vernal Pool Best Management Practices?
37. Referencing pages 8 and 9 of the Petition, please provide a Spill Prevention, Control and Countermeasure Plan.
38. Referencing page 20 of the EA, for Wetland 1 and Wetland 2, could a 100-foot buffer be utilized? How would utilizing a 100-foot buffer impact the project?
39. What is the length of the posts and to what depth would the posts be driven into the ground to provide structural stability? Are any impacts to groundwater quality anticipated? If so, how would the Petitioner manage and/or mitigate these impacts?
40. Describe the visibility of the proposed facility from the residences located on the east side of Platt Road within the areas depicted in orange in the viewshed map. Does Photo-simulation #1 depict some seasonal or year-round visibility of solar panels on the left side of the photo-simulation?
41. Describe the visibility of the proposed facility from the residences located north of Winding Brook Farm Road and located within the orange areas of the viewshed map.
42. Please submit photographic site documentation with notations linked to the site plans or a detailed aerial image that identify locations of site-specific and representative site features. The submission should include photographs of the site from public road(s) or publicly accessible area(s) as well as Site-specific locations depicting site features including, but not necessarily limited to, the following locations as applicable:

For each photo, please indicate the photo viewpoint direction and stake or flag the locations of site-specific and representative site features. Site-specific and representative site features include, but are not limited to, as applicable:

1. wetlands, watercourses and vernal pools;
2. forest/forest edge areas;
3. agricultural soil areas;
4. sloping terrain;
5. proposed stormwater control features;
6. nearest residences;
7. Site access and interior access road(s);
8. utility pads/electrical interconnection(s);
9. clearing limits/property lines;
10. mitigation areas; and
11. any other noteworthy features relative to the Project.

A photolog graphic must accompany the submission, using a site plan or a detailed aerial image, depicting each numbered photograph for reference. For each photo, indicate the photo location number and viewpoint direction, and clearly identify the locations of site-specific and representative site features show (e.g., physical staking/flagging or other means of marking the subject area).

The submission shall be delivered electronically in a legible portable document format (PDF) with a maximum file size of <20MB. If necessary, multiple files may be submitted and clearly marked in terms of sequence.

### **Facility Construction**

43. Referencing page 16 and Exhibit C of the Petition, has the Petitioner had any additional meetings with the Department of Energy and Environmental Protection (DEEP) Stormwater Division since January 2020? Has the Petitioner submitted its application to the DEEP Stormwater Division for a Stormwater Permit, including its Stormwater Pollution Control Plan (SWPCP)? Provide the status of the Stormwater Permit and the SWPCP.
44. With regard to earthwork required to develop the site, provide the following:
  - a) In what areas would the site be graded?
  - b) What is the desired slope within the solar array areas?
  - c) Could the solar field areas be installed with minimal alteration to existing slopes?
  - d) If minimal alteration of slopes are proposed, can existing vegetation be maintained to provide ground cover during construction?
  - e) Referencing Sheet T-1, do the amounts of cut and fill (approximately 14,015 cubic yards each) associated with site grading include the cut and fill for the proposed access road? If no, estimate any additional amounts of cut and fill in cubic yards for the access road.
  - f) If there any is excess cut resulting from site grading plus access road work, would this material be removed from the site property or deposited on the site property, e.g. used to construct the proposed berm noted on page 33 of the EA?
45. Would topsoil be stripped from the site prior to grading? If so, would the topsoil be spread over the disturbed areas once grading is complete? If not, how would growth of new vegetation/grasses be promoted within the graded areas if nutrient rich soils are not present?
46. Page 4 of the Petition notes that the racking system posts would be pile-driven, or ground screws would be spun into the ground. Would one post installation method be a primary method and the other a backup? How would the Petitioner determine which method to use? In the event that ledge is encountered, what methods would be utilized for installation?
47. What is the minimum access road width required for post-construction use?
48. Has a comprehensive geotechnical study been completed for the site to determine if site conditions support the overall Project design? If so, summarize the results. If not, has the Petitioner anticipated and designed the Project with assumed subsurface conditions? What are these assumed conditions?

### **Maintenance Questions**

49. Would the petitioner store any replacement modules on-site in the event solar panels are damaged or are not functioning properly? If so, where? How would damaged panels be detected?