



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

May 10, 2021

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **PETITION NO. 1443** - SR North Stonington, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 9.9-megawatt AC solar photovoltaic electric generating facility on five parcels located north and south of Providence New London Turnpike (State Route 184), west of Boombridge Road and north of Interstate 95 in North Stonington, Connecticut, and associated electrical interconnection.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than June 1, 2021. 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. 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 A. Bachman

Melanie A. Bachman
Executive Director

c: Service List dated February 26, 2021

Petition No. 1443
Interrogatories
May 10, 2021

Public and Municipal Outreach

1. Referencing page 14 of the Petition, SR North Stonington, LLC (SRNS or Petitioner) sent postcard mailers to abutting property owners during the fall of 2020 and provided formal notice to abutters on February 23, 2021. Summarize any feedback that the Petitioner received from abutters. How were any concerns addressed?
2. Identify any project features or changes/updates to the project that address neighborhood concerns.
3. Please respond to the following Town of North Stonington (Town) comments:
 - a) Planning and Zoning Commission and Inland Wetland Commission Chairman comments dated March 25, 2021;
 - b) Town Board of Selectman comments dated March 26, 2021; and
 - c) additional Planning and Zoning Commission and Inland Wetland Commission comments dated April 26, 2021.

Project Development

4. If the project is approved, identify all permits necessary for construction and operation and which entity will hold the permit(s)? Would U.S. Army Corps of Engineers permitting be required for any of the proposed wetland and watercourse crossings?
5. If the power purchase agreement expires and is not renewed and the solar facility has not reached the end of its lifespan, will the Petitioner decommission the facility or seek other revenue mechanisms for the power produced by the facility?
6. Did the Petitioner participate in ISO-NE Forward Capacity Auction #15? If so, what was the result? Does the Petitioner intend to participate in future Forward Capacity Auctions? If yes, which auction(s) and capacity commitment period(s)?

Proposed Site

7. Is the site parcel, or any portion thereof, part of the Public Act 490 Program? If so, how does the municipal land use code classify the parcel(s)? How would the project affect the use classification?
8. Has the State of Connecticut Department of Agriculture purchased any development rights for the project site or any portion of the project site as part of the State Program for the Preservation of Agricultural Land?
9. Is any portion of the site still currently in productive agricultural use? If so, how many acres and is it used by the property owner or is it leased to a third party?
10. Provide the distance, direction and address of the nearest property line and nearest off-site residence for the portions of the project located north of Providence New London Turnpike and located south of Providence New London Turnpike.

Energy Output

11. Referencing page 6 of the Petition, the proposed solar panels would be 455 Watts each. Is that wattage based on the front side of the panel only?
12. Referencing page 9 of the Petition, does the proposed capacity factor of about 21 percent take into account bi-facial effects for the solar panels, or is it based on the front sides of the panels only?
13. Have electrical loss assumptions been factored into the output of the facility? What is the output (MW AC) at the point of interconnection?
14. Is the project being designed to accommodate a potential future battery storage system? If so, please indicate the anticipated size of the system, where it may be located on the site, and the impact it may have on the RFP or PPA.
15. Could the project be designed to serve as a microgrid?
16. 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

17. 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, e.g. sheep?
18. Provide the lengths of the proposed access drives (in linear feet) for each of the four array areas.
19. What is the minimum aisle width at which the solar panel rows could be installed?

Interconnection

20. Where on the electrical interconnection route would the demarcation point (or location of change of control from the Petitioner to Eversource) be located?
21. Is the project interconnection required to be reviewed by ISO-NE?

Public Safety

22. Referencing page 19 of the Petition, the nearest airport is Westerly State Airport in Washington County, Rhode Island. Is this the nearest federally-obligated airport? Is a glare analysis required to comply with FAA policy?
23. Page 6 of the Petition notes that the maximum height of the solar panels above grade would be 11 feet. Referencing Tab O of the Petition, the FAA Notice Criteria Tool utilized a structure height of 10 feet. Please clarify the discrepancy.

24. Has the Petitioner consulted with DEEP Dam Safety program regarding permitting requirements, if any, for the proposed stormwater basins?

Environmental

25. Referencing page 16 of the Petition, the Petitioner notes that there would be approximately 46 acres of tree clearing. Tab L of the Petition estimates that, in North Stonington, the average tree density is about 76 trees (six inches diameter or greater) per acre. How was the total removal of 3,397 trees computed?
26. Please respond to the March 25, 2021 comments from the Council on Environmental Quality.
27. Please respond to the April 6, 2021 comments from the Department of Agriculture.
28. Did the Petitioner conduct a Shade Study Analysis? Would shading present any challenges for the proposed project? If so, of the approximately 46 acres of tree clearing, approximately what acreage constitutes mitigation for shading? How were the limits of tree shading determined?
29. 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?
30. Referencing Tab Z of the Petition – Preliminary Drainage Assessment, Custom Soil Resource Report, pp. 9-11, the subject property has Hinckley Soils in the southeastern limits of the property. Are eastern spadefoot occurrences typically correlated with the presence of Hinckley Soils? If yes, is the percent slope of the soils (e.g. 3 to 15 and 15 to 45 percent) a factor in the likelihood of eastern spadefoot presence?
31. Referencing page 24 of the Petition, the Petitioner notes that, “An eastern spadefoot toad survey is scheduled for May 2021.” Provide the status of such survey.
32. Page 17 of the Petition notes that sheep grazing would be used as the lead vegetative control measure. Please respond to the following regarding the proposed sheep grazing plans:
- a) Is livestock grazing an integral component of the project, or can the project proceed without livestock grazing?
 - b) Has the Petitioner consulted with any interested sheep farmers for this project?
 - c) Did the Petitioner consult with the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) regarding a suitable quantity of sheep to host at the site? If yes, approximately how many sheep (in total) would be located at the site?
 - d) During approximately which months of the year would sheep be located at the site?
 - e) Would sheep be located within all five fenced solar array areas?
 - f) Is the specified seed mix for the solar array area specific to livestock grazing?
 - g) Would sheep be grazing adjacent to residences? Were area residences notified that livestock grazing would occur at the site?
 - h) Should noise from livestock become an issue, could the locations where sheep are located at the site be modified in the future?

- i) Are any sheds or shelters necessary/proposed for the site? If so, where would they be located?
 - j) Would livestock manure affect water quality in any downgradient wetlands/watercourses? How would such effects be mitigated?
33. Are there any 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?
34. Referencing page 15 of the Petition, the Petitioner notes that, "Some hazardous substances are required to be used or stored on Site during construction or operation of the Project, including gasoline or diesel-powered equipment during construction activities, requiring fuel storage." Identify the proposed fuel storage location(s).
35. Referencing page 16 of the Petition, a Spill Prevention, Control, and Countermeasure Plan (SPCC) would be implemented at the site. Please provide a copy of the SPCC.
36. 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?
37. Would the proposed project be consistent with the 2015 U.S. Army Corps of Engineers Vernal Pool Best Management Practices?
38. What is the host municipality's setback regulation from wetlands?
39. Referencing page 28 of the Petition, the Petitioner notes that, "The Site is located within an Aquifer Protection Zone." Is the site located within a municipal aquifer protection zone? Explain.
40. Referencing page 7 of the Petition, the Petitioner notes that, "Panel foundations would be secured using either a driven pile technology or ground screws." Would pile-driven posts be used as the primary method with ground screws as a secondary/backup method or vice versa?
41. What is the length of the posts or ground screws (as applicable), and to what depth would they be driven into the ground? Are any impacts to groundwater quality anticipated? If so, how would the Petitioner manage and/or mitigate these impacts?
42. Where is the nearest parcel used for publicly accessible recreational purposes? Describe the visibility of the proposed project from this parcel.
43. 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

44. Referencing page 14 of the Petition, the Petitioner met with DEEP on two different dates to discuss various aspects of the project. On which date(s) did the Petitioner discuss stormwater design with DEEP? Please describe any recommendations, comments or concerns about the project provided by the Stormwater Division. What is the status of the Stormwater Permit?
45. Did the Petitioner discuss with DEEP Stormwater Division the possibility of hosting sheep at the site and any potential impacts to stormwater and the stormwater permitting process? If yes, what was the outcome?
46. Would the project comply with Section 2(a) of Appendix I – Stormwater Management at Solar Array Construction Projects – of the DEEP General Permit? If yes, please describe in detail how it would comply. Section 2(a) is as follows:

- (2) (a) Prior to commencing construction activities, the Permittee shall ensure that the following setback and buffer shall be delineated and maintained on the site:
- (i) No solar panel associated with a solar array shall be located within one-hundred (100) feet of any wetland or waters ("the 100-foot setback") that, prior to or after construction, is located downgradient of such construction activity or within fifty (50) feet of any property boundary ("the 50-foot setback") that, prior to or after construction, is located downgradient of such construction activity; and
 - (ii) Except as provided in section 2(a)(iii), there shall be an undisturbed buffer of at least fifty (50) feet between any construction activity at a site and any wetland or waters that, prior to or after construction, is located downgradient of such construction activity ("the 50-foot buffer"). Such buffer shall be comprised of existing dense herbaceous vegetative ground cover (e.g. not forested area). If the entirety of such buffer is not comprised of existing dense herbaceous vegetative ground cover, such buffer shall be at least one-hundred (100) feet ("the 100-foot buffer").
 - (iii) There shall be an undisturbed buffer of at least ten (10) feet between any construction activity at a site associated with an access road or the electrical interconnection necessary for the solar array and any wetland or waters that, prior to or after construction, is located downgradient of such construction activity ("10-foot buffer"), except if the access road or electrical interconnection passes between two wetland or waters and the undisturbed buffer cannot be achieved. Any crossing through a wetland or waters for an access road or electrical interconnection is exempt from such buffer requirement.
- (b) Notwithstanding section 2(a)(ii), the 50-foot buffer or 100-foot buffer, as applicable, may be reduced, only where necessary, but by no more than fifty percent (50%), only if all of the following have been demonstrated to the satisfaction of the commissioner by approval of a Registration:
- (i) Stormwater control measures for managing stormwater discharges that will enter or be received by a wetland or waters shall be designed and installed in accordance with the following conditions:
 - (A) a minimum sediment load reduction of ninety percent (90%) shall be achieved before such discharges enter or are received by a wetland or waters. The required sediment load reduction shall be calculated based solely on the stormwater controls used; no sediment load reduction from conditions on the site (i.e., from any remaining buffer) shall be considered when calculating the sediment load reduction from such stormwater controls. The sediment load reduction may be calculated using a range of available models that are available to facilitate this calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent independent third party model or method acceptable to the commissioner;
 - (B) those portions of a solar array from which stormwater discharges enter or will be received by a wetland or waters shall be deemed effective impervious cover for the purposes of calculating Stream Channel Protection in accordance with Section 7.6.1 of the Stormwater Quality Manual, even if those portions of such array are less than one (1) acre; and
 - (C) the buffer into which stormwater discharges shall have a slope of less than or equal to fifteen percent (15%)

47. With regard to earthwork required to develop the site, provide the following:

- a) Will the site be graded? If so, in what areas?
- 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) Estimate the amounts of cut and fill in cubic yards for the access road(s)
- f) Estimate the amounts of cut and fill in cubic yards for solar field grading.
- g) If there is excess cut, will this material be removed from the site property or deposited on the site property?

48. What is the minimum road width required for post-construction use?

49. Has a comprehensive geotechnical study been completed for the site to determine if site conditions support the overall project design? If yes, provide the report if available. If not, has the Petitioner anticipated and designed the project with assumed subsurface conditions? What are these assumed conditions?

Maintenance/Decommissioning

50. Provide a post-construction Operations and Maintenance Plan (O&M Plan) that includes, as applicable, site and equipment inspections/repairs; snow removal procedures; and panel washing procedures and indicate if only water would be used for panel washing.

51. 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?

52. Has the manufacturer of the proposed solar panels conducted Toxicity Characteristic Leaching Procedure (TCLP) testing to determine if the panels would be characterized as hazardous waste at

the time of disposal under current regulatory criteria? Please submit the specifications that indicate the proposed solar panels would not be characterized as hazardous waste. If the project is approved, would the Petitioner consider installing solar panels that are not classified as hazardous waste through TCLP testing?

53. Referencing Tab D of the Petition, the Project Decommissioning Plan did not mention the stormwater management system. Provide information as to what procedures, if any, would be used to remove the stormwater management system.