



# 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](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

VIA ELECTRONIC MAIL

June 28, 2016

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

RE: **PETITION NO. 1234** - SolarCity Corporation petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 2.8 Megawatt Solar Photovoltaic Electric Generating facility located at Becton, Dickinson & Company, 7 Grace Way, North Canaan, Connecticut.

Dear Attorneys Baldwin and Miranda:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than July 11, 2016. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 15 copies to this office, as well as a copy via electronic mail. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

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.

Yours very truly,

Melanie A. Bachman  
Acting Executive Director

MB/MP/lm

c: Nichole Seidell, Director of Environmental Permitting, SolarCity Corporation  
Council Members

**Petition No. 1234**  
**Interrogatories**  
**Set One**  
**June 28, 2016**

**Solar Equipment and Energy Production Questions**

1. SolarCity Corporation's (SolarCity) proposed photovoltaic facility includes a 2.28 megawatt (MW) ground-mounted array and a 0.52 MW roof-mounted array, for a total 2.8 MW. Are these power outputs based on direct current (DC) or alternating current (AC)? If these power outputs are based on DC, provide the MW for each array based on AC.
2. Where would the inverters and transformers, as applicable, be located? What are the estimated heights of the transformers and inverters, as applicable?
3. Provide the specifications sheets for a) proposed inverters and b) solar photovoltaic panels, if available.
4. In general, in the case of fixed solar panels, does orienting your solar panels to the south provide a sort of balance (in terms of sun exposure) between the sun rising in the east and setting in the west and ultimately result in optimizing (or attempting to maximize) your total annual energy production (in kilowatt-hours) and your capacity factor?
5. Is it correct to say that the objective of the project, as proposed, is to maximize annual energy production in kilowatt-hours for economic and environmental benefits (e.g. reducing carbon emissions by causing traditional generation including fossil-fueled plants to "ramp down" as renewable power is added to the grid) as opposed to a solar plant designed for peak load shaving?
6. Would the solar panels provide power directly to serve the Becton, Dickinson & Company? Would the project utilize net metering, or would the solar facility operate in parallel with the grid on the "grid side" of the meter? Explain.
7. If applicable, has SolarCity confirmed that Eversource's distribution system can accept any surplus power output? Is a System Impact Study required for the interconnection process? Does the Petitioner have an Interconnection Agreement and with whom?
8. What is the capacity factor expected of the proposed project to achieve?
9. Would the solar plant have a protection system to shut the plant down in the event of a fault in the feeder(s) that connect(s) the solar plant to the building's electrical system?
10. Approximately how many years is the projected operational life of the facility?
11. Is a battery storage or other type of energy storage system proposed? Describe the function of lithium-ion battery or other type of storage system. (What prediction methods and reports has SolarCity used to assess total capacity and annual energy production in kilowatt-hours for this project, and how are the proposed batteries or other type of energy storage incorporated into those predictions? Are the batteries or other type of energy storage used to "even out" the energy production, charging during the day and discharging at night, or are they charged during off-peak hours to grant more output during peak hours? Are they simply used to function as a power supply backup?)

12. For the ground-mounted solar array, approximately how many feet above grade would the top and bottom edges of the solar panels be?
13. For the rooftop-mounted solar array, approximately how many feet above the rooftop would the top and bottom edges of the solar panels be? Would the rooftop-mounted panels have the same 25 degree tilt as the proposed ground-mounted solar panels or would they be installed at a different angle? Explain.

#### **Environmental Questions**

14. Has a response from the State Historic Preservation Office (SPHO) regarding the May 2016 Cultural Resources Assessment and Reconnaissance Survey been received? If yes, provide a copy of such correspondence.
15. Has the State of Connecticut Department of Agriculture purchased any development rights for the proposed site as part of the State Program for the Preservation of Agricultural Land?
16. Has the Petitioner received a response from the Connecticut Department of Energy and Environmental Protection (DEEP) regarding State-listed species? If yes, provide a copy of such letter and indicate whether SolarCity would comply with any wildlife impact mitigation measures suggested by DEEP.
17. Is the proposed project located near any Important Bird Areas designated by the Connecticut Audubon Society?
18. Would grass be planted in the solar field area? If so, what types? Describe the maintenance of the grass/vegetative surface in the fenced solar field area (e.g. proposed mowing schedule).
19. How would vegetative growth be controlled to keep the solar panels clear?
20. Would the proposed solar panels utilize a "drip edge" to collect and direct stormwater flows?
21. Would the solar panels "heat" rainwater and potentially thermally pollute wetlands?

#### **Construction Questions**

22. Would the tree clearing be performed in stages (e.g. five acres at a time), or would the clearing all be performed together as one stage of construction? (Note: Connecticut Department of Energy and Environmental Protection "DEEP" General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities states that, "Whenever possible, the site shall be phased to avoid the disturbance of over five acres at a time...")
23. Estimate the amounts of cut and fill in cubic yards for the proposed project.
24. How would the mounting posts (that support the racking system) be driven into the ground? What type of posts are proposed, e.g. wide-flange beams?

#### **Maintenance Questions**

25. How would the Petitioner handle potential snow accumulation on the panels and its effects of blocking the sunlight?

26. Has any analysis been conducted to determine structural limits of snow accumulation on the solar panels and steel support structures, assuming heavy, wet snow and or ice? What accumulation of snow could the structures handle? Would the Petitioner clear snow from the panels when it approached the limit? Would the responses be the same for both the ground-mounted and roof-mounted solar panels?
27. Would the installed solar panels require regular cleaning or other, similar, maintenance? How would this be accomplished?