STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

PETITION NO. 1598 – Windsor Solar One, 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 3.0-megawatt AC solar photovoltaic	Petition No. 1598
electric generating facility located at 445 River	
Street, Windsor, Connecticut, and associated	
electrical interconnection.	
	February 1, 2024
	• · ·

Petitioner Windsor Solar One, LLC ("WSO") hereby submits the following responses to

the Interrogatories that were directed to Windsor Solar One, LLC by the Leslie Harrison on January

25, 2024.

Source Document – Appendix A Site Plans

1. What will the Equipment Pad be made of? I was unable to discern its make-up based upon anything noted in the Legend, nor could I find and details listed on any of the map pages themselves.

The proposed equipment will either be constructed atop a concrete pad or atop piles over crushed stone. Final design/selection will be based upon contractor selection and geotechnical investigation.

2. Will there only be a single Equipment Pad for the entire site and what are the dimensions of the pad?

It is currently anticipated to have one centrally-located equipment pad serving the project located as depicted on Sheet C-2.0 of Appendix A of the Petition. Final design of electrical equipment and pad will continue to take place based upon the probable use of latest available technology at time of construction; however, it is currently anticipated that the pad is approximately 60 feet by 25 feet in size as indicated on the site plans.

3. Will temporary sediment pond have any odor and if so, what steps will be taken to mitigate?

It is not anticipated that the temporary sediment trap will have any odor, nor is it anticipated that the basin will generally hold any amount of standing water. The only expected contributor to the creation of odor within the temporary sediment trap would be from soil deposition that is already native to the site.

4. What are the complete dimensions of the above ground light poles that will be installed and how many of them will be installed?

The project does not currently propose the installation of any pole-mounted lights.

Page 2, Notes Heading, General Sub-heading

5. Second General Note references a CTDEEP-APPROVED QUALIFED INSPECTOR will be assigned to be responsible for performing inspections and preparing reports. Can you please elaborate on who will make such an assignment and when during the entire timeline of the project will that assignment be made?

It will be the responsibility of the permittee who secures the CTDEEP Stormwater General Permit to ensure that inspecting and reporting for the project as required under this permit is being performed.

6. Also, under this second note, it states that inspections will be required with 24 hours of a rainfall event exceeding 0.5 inches. Please elaborate as to how the named Inspector will know when a rain event has exceeded 0.5 inches at the proposed site?

There are multiple publicly-available websites including, but not limited to, publications by the National Oceanic and Atmospheric Administration (NOAA) which continuously track and present rainfall data for the State. Recently, there has been precedent from CTDEEP that contractor-managed rain gauges are no longer the standard and that the use of online rainfall data is easier to utilize and maintain.

Third General Note references an ENGINEER OF RECORD.

7. Please articulate who selects this Engineer, when will the selection occur and will the reports of the findings be posted somewhere that are available to the general public to read?

By virtue of this Petition, VHB is the project Engineer of Record. The Petitioner commits to retain VHB to prepare Monthly Engineer of Record inspection reports which will be distributed to CTDEEP and the State Conservation District as required. Once these reports are submitted they would then become public record.

Seventh General Note references PRE-CONTRACT MEETING(S).

8. How far in advance of the meeting is notice given and what Windsor Town governing body and/or employee will receive this notice?

There is no required/prescribed timeframe to give notice for the pre-construction meeting nor who must be contacted as it varies Town to Town. It is currently anticipated that the Town Manager would be notified of the meeting at least a week in advance and it would be the Town's discretion as to who would attend the meeting.

9. What entity should be contacted if any of the items detailed under the entire NOTES Heading are abrogated? What format (i.e. email, phone call, US Postal Mail, etc.) should be used to report an abrogated item?

Should a party wish to contact Windsor Solar One with any concerns, it may do so directly by filling out the form found at: <u>https://www.verogy.com/windsor-solar-one/</u>. Should a party have a complaint about Windsor Solar One failing to comply with Siting Council requirements, that party should contact the Siting Council through one of the methods listed at: <u>https://portal.ct.gov/CSC/Common-Elements/Contact-Us</u>.

Page 2, Notes Heading, Demolition Sub-heading

10. Third Demolition Note, references holding harmless the ENGINEER if there is any discovery, presence, removal, abatement or disposal of Hazardous Materials, Toxic Wastes, or Pollutants on the site. Please describe the process, beyond holding the ENGINEER harmless, as to how notification of such hazardous materials, toxic wastes and/or pollutants would be provided to appropriate Windsor Town officials and any Windsor residents in close proximity to the proposed site.

In the unlikely event that hazardous materials, toxic wastes or pollutants are encountered on site that require reporting, such reporting would be made to the Connecticut Department of Energy and Environmental Protection ("DEEP") in accordance with DEEP's regulations.

Page 7, Plant Schedule heading

11. Please elaborate as to what factors were used to determine that 39 was the appropriate number of plantings that should be incorporated?

A registered landscape architect with experience working with plants native to Connecticut and this region assisted in the creation of the project planting plan. There are no prescribed requirements for plant types or minimum number of plantings for project screening and therefore, the project landscape architect and Petitioner have proposed a plan which they believe to be adequate to break up views of the project while also being harmonious with the area.

12. Please also identify who made that determination?

A registered Connecticut landscape architect was engaged in this exercise.

13. Please delineate why there are no plant specimens running the full length, north and south, of the site that border the western part of River Street? Based upon my reading of the plan those parts of the property are devoid of any plant screening.

The Petitioner does not have land control to propose plantings on properties to the west of River Street. There are existing plantings parallel to the road along the eastern side of River Street on the project host parcel which were selected to be endpoints of the proposed plantings.

14. Under the Size column in the Plant Schedule chart, please elaborate as to whether that is the size of the plant specimens that will be installed or if that is simply a measure of the expected full grown expected of the species that is designated to be planted?

The size column denotes the size, either planting height or trunk caliper, at the time of planting.

Page 7, Tree Protection heading

15. Item 3, identifies that a CERTIFIED ARBORIST will make repairs to any existing trees that are damaged. What entity determines if any existing tress are damaged?

The permittee responsible for project development and completion shall inspect the trees for damage upon completion of installation.

16. What entity chooses the CERTIFIED ARBORIST, should any repairs be needed?

The permittee responsible for project development and completion would select the certified arborist.

Page 7, Edge of Woods Clearing heading

17. Please describe what will happen to the plant/vegetation material that needs to be cleared (i.e. will it be transported off the property)?

Final handling of the cleared vegetation will be up to the selected construction personnel, and it is unclear at this time whether the material would be hauled offsite. If the material is not hauled offsite, it will be turned into wood chips and dispersed in the area where trees are being cut down and the stumps will remain.

Page 7, Plant Maintenance Notes heading

18. Item 5 denotes that the CONTRACTOR will replace dead or dying plants at the end of the one-year guarantee period. Please articulate as to when the one-year guarantee period begins and ends?

The one-year warranty period begins upon installation of the plant material and ends after one year.

19. If it is obvious that a planted specimen is dead during the one year guarantee period, cannot it not be replaced before the end of the one year guarantee period or must it only be replaced at the end of the one year guarantee period?

It is feasible that dying or dead plant materials could be replaced within the one-year guarantee period.

20. What if the end of the one-year guarantee period does not fall during a temperature condition that is suitable to replanting, how quickly once the proper planting temperature arrives, should it be expected that a re-planting take place?

It may be necessary to wait for more favorable growing conditions to re-plant, based on ambient temperature and moisture content.

21. Once the end of the one year guarantee arrives, is the Facility Staff required to continue to water the planted specimens using the same metric of required watering when natural rainfall is less than 1 inch per week?

There is no requirement for facility staff to water the planted specimens past the grow-in period; however, it will be a part of the Operations & Maintenance plan to investigate vegetation levels across the site intermittently and respond accordingly.

22. If any of the planted specimens die while under the care of the Facility Staff, will they be required to replant a new specimen of the same species? Will the replacement planting be of similar size to the dead planting?

It is anticipated that every effort will be made to replace a dying specimen in kind; however, it may not always be feasible based upon local nursery offerings at the time.

Page 7, Planting Notes heading

23. Item 6 indicates that the FINAL QUANITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND THE PLANT LABELS PRIOR TO BIDDING. Please delineate to whom the Contractor will report such a discrepancy?

Any discrepancies found by a prospective bidding contractor would be reported to the project owner who is receiving the bids.

24. If a modification to the currently presented plan does increase the number of planting than the currently listed 39, does that mean a new Page 7 would be provided in this Appendix

Any modifications to a plan approved by the Siting Council would need to be approved in advance by the Siting Council before that modification is implemented.

Source Document = Appendix B – Equipment Specifications & TCLP

25. I thought I might have heard that different equipment, other than what is currently specified in Appendix B, might be implement at the proposed site. If that is a correct understanding, when will the new specifications become available for review? If that is not a correct understanding then I have some questions about the existing equipment

It is the Petitioner's intent, and ordinarily the wishes of the Connecticut Siting Council, that the latest technology be used to the extents feasible when solar projects are constructed. It is possible that a condition of approval of this Petition would be that final electrical plans must be submitted to the Siting Council for review and approval prior to installment, and Petitioner would be amenable to that. It is unknown at this time precisely when the project would be constructed or when equipment would be ordered.

26. Am I correct that system that is proposed to be installed would be defined as a "Single Axis Solar Tracking system"? If that is correct definition, could you please delineate where the motors would be attached and provide the specifications of the motors themselves?

Yes, the project will utilize a single-axis solar tracker. Please refer to the Response to Council's Interrogatory No. 29 which indicates that approximately 106 tracker motors would be installed & would be located throughout the array. The final locations will be indicated on final construction plans. Please also see Exhibit A to the Responses to the Interrogatories issued by the Town of Windsor.

27. Page 3 – In the chart on the right hand side of the page, labelled Physical Sizes & Park Numbers, can you please detail exactly which Park Numbers will be used in the proposed installation and how many of each unit will be utilized?

Based on the grid voltage, it is likely two units of Park No. PM 315-25 will be used, subject to final detailed engineering design before construction bids are solicited.

28. Page 5 - In the chart on the right hand side of the page, labelled Physical Sizes & Park Numbers, can you please detail exactly which Park Numbers will be used in the proposed installation and how many of each unit will be utilized?

Based on the grid voltage, it is likely two units of Park No. PM 123-25 will be used, subject to final detailed engineering design before construction bids are solicited.

29. Page 7 - In the chart on the left hand side of the page, just below the Specifications heading, can you please detail exactly which Park Numbers will be used in the proposed installation and how many of each unit will be utilized?

Based on the grid voltage, it is likely two units of either Park No. 155 or 255 will be used, subject to final detailed engineering design before construction bids are solicited.

30. Page 10 – Using the information contained in Table 2, could you please detail which Transformer kVA rows will be utilized in the proposed installation and how many of each unit will be utilized?

Based on the current design, it is anticipated that two 1500 kVA transformers will be installed (5th line in the chart), subject to final detailed engineering design before construction bids are solicited.

31. Page 11 – How many inverters will be needed for this proposed installation?

Please refer to Section 3.2.2 (page 7) of the Petition narrative which indicates that twenty-four of the 125 kW inverters will be needed to support the 3MW AC project.

32. Where will the inverters be located?

It is currently anticipated that the inverters will be located at the "proposed equipment pad" as indicated on Sheet C-2.0 of the site plans found within Appendix A of the Petition. Any alterations to this electrical layout will be provided to the Council for their review and approval.

33. Which wire boxes will be utilized for this proposed installation?

The brand and model of wire boxes has not been selected at this time. That level of detailed design engineering occurs just prior to bidding and submission of applications for building and electrical permits.

34. Page 12 – Please identify which Model Name will be utilized for this proposed installation?

As indicated in Section 3.2.3 (page 7) of the Petition narrative, CPS model SCH125KTL-DO/US-600 will be utilized.

35. Page 14 – Can you please confirm my conversion of mm to feet for the length and width of the panel on the right hand side of the page in the chart labelled Mechanical Description.

2200 mm = 7 feet 2.6 inches long

1215 mm = 3 feet 11.8 inches wide

WSO states that it agrees with these conversions.

36. Can you please confirm my conversion of kg to pounds for the weight of the panel?

39.7 kg = 87.5 pounds

WSO states that it agrees with these conversions.

37. Pages 16-34 – Can you please help me understand why this Analytical Report for a client based in Perrysburg OH is included in this Appendix. Is it merely informational because this Perrysburg OH client used the same panels that are scoped for use in the Windsor project or is there some other reason that is not evident to me?

The Analytical Report in question was included as reference of the Toxicity Characteristic Leaching Process (TCLP" testing performed on the same panels that are proposed for the Windsor Solar One project.

Source Document = Appendix C Operations and Maintenance Documentation

Page 5, 5. Monitoring

38. Please elaborate and detail as to how exactly 7 X 24 monitoring will be accomplished (i.e. who/what receives alarm notifications, how quickly can an onsite response occur, will appropriate Windsor town officials be notified for every alert/malfunction, etc.)

Petitioner intends to be the operations and management (O&M) provider for the facility and utilize remote monitoring of the project, as it does with many of its projects. The nature of any alert will dictate the appropriate response party and timeframe. Petitioner will generally address regular maintenance or repair-related issues, as noted. Town emergency personnel will have direct access to the site and locked gates and would be notified in event of emergency. Response times would be dictated by the Town's emergency personnel.

39. Please delineate the names (company and/or individuals) of the sub-contractors that will be dispatched if onsite maintenance is required.

As stated in the Response to Interrogatory 38, the Petitioner intends to by the O&M provider for the project, so the Petitioner will be dispatched if maintenance is required.

Page 6, 6.3.3 Snow Maintenance

40. Please elaborate as to why there will be no snow removal from panels?

It is anticipated that snow will slide off the smooth surface of the panels naturally and due to the varying tilt angles. In addition, it should be noted that the tracking motors have an algorithm included that senses when snow is one the panels and tilts the panels to dump the snow off of them.

41. Heavy wet snow weighs quite a bit, as does ice, so does the panel manufacturer and the manufacturer of the motor that tilts the panel (if not one in the same) provide information and certification that both the panels and the motors can function properly with the extra weight?

See response to #40 above indicating that the accumulation of snow and ice on the panels is not a concern. Regardless, the manufacturers of the panels and motors are aware that their product is installed in northern climates where snow & ice can routinely form and would not specify their use is acceptable in these climates of this was a concern.

Page 8, 7. Emergency Response

42. Please elaborate on why and how the Town of Glastonbury Police and Fire officials will be contacted when this proposed installation is documented for installation in Windsor and the contact list contains information about Windsor Police and Fire Marshall names & phone numbers

This was a scrivener's error. The Town of Windsor Emergency Responders will be contacted in the event of an emergency.

43. Please elaborate as to how many locked entrance gates will be incorporated on the proposed site and where they are located.

It is currently proposed to install a single locked entrance gate at the western portion of the facility as indicated on Sheet C-2.0 of the site plans in Appendix A.

Source Document = Appendix D Decommissioning and Restoration Plan

44. I understand that per this Appendix it is the responsibility of the "OWNER" at the time of decommissioning to cover all the costs. Given my review of some of Windsor Solar One / Verogy's other CT solar installations, it is extremely likely that neither Windsor Solar One, nor Verogy will be the OWNER of this project at the time of decommissioning. Can there be some kind of upfront financial agreement put into place as part of this petition, perhaps a bond, that would protect the Town of Windsor and it's taxpayers, from having to provide funds and project management, if the current OWNER of the proposed site was unable provide the financial resources for decommissioning (i.e., if the OWNER had been declared bankrupt, or had some other financial hardships)?

Ordinarily, such bonds are not required for projects that are approved through the petition process at the Siting Council. In addition, WSO would note that WSO will be providing financial assurance for proper stormwater controls through the DEEP Stormwater General Permit process and financial assurance to the property owner for proper decommissioning through the site lease. Although no determination has been made as to whether the WSO project will be sold to another entity at this time, if such a transfer were to happen, it would be done in accordance with the applicable Siting Council regulations, including, but not limited to, an affirmative statement from the acquiring entity that it would abide by all Siting Council rules and regulations and any requirements imposed on the project through this petition process.

Page 2, Overview Heading

45. Please provide documentation of the facts you are utilizing to back up your statement that "The Project is designed for an operational life of at least 35 years"?

Solar panels are warrantied for at least 30 years (see data sheet in Appendix B of the Petition). Per WSO's Response to the Siting Council's Interrogatory No. 12, the project holds a lease with property owner for 20 years with the option for up to three additional five-year extensions.

In Appendix B on page 13, the panels are listed as having a limited 12 year product warranty and that they will only generate >89% power output after 30 years.

I would submit that currently available solar panels are extremely difficult to recycle, because the cost of recovering the materials outweighs the cost of extracting what can be recycled. Likely most of the panels currently in use today, will end up in our landfills, which if not properly lined, could allow the toxic chemicals contained in the panels to leech into groundwater.

Questions pertaining to the Sheep Grazing information contained in the November 27, 2023 Department of Agriculture C.G.S. &16-50k Revised No Material Impact to Prime Farmland Determination Letter.

Windsor Solar One believes that the three paragraphs listed between Interrogatories 45 and 46 constitute pre-filed testimony, and should therefore be treated as such.

Page 3, Site Requirements heading

46. Item #2 indicates "Proper soil preparation must take place including preliminary soil testing, followed by repeated testing every 2-3 years and the incorporation of soil amendments as needed." Can you please articulate who is responsible to ensure this testing is done and what entity does the actual testing of the soil? Where will the results of the soil testing be published for general public consumption?

The project owner at time of construction will be responsible for preliminary soil testing, and repeated soil testing will be the responsibility of the project owner at the time such testing is

required. The results of such testing will be provided to the Connecticut Department of Agriculture, but WSO does not know how the Department of Agriculture intends to handle such testing results.

47. Item #4a. states that an eight foot tall chain link fence with a curl back underground and tension wire running along the bottom should be installed around the solar site. Doesn't the site plan call for a 7 foot tall agriculture fence to surround the property? Will there be any issue with the difference in requirements and do you need to obtain some kind of written exception from the CT Department of Agriculture?

The solar grazing requirements indicate "should" not "must" when referencing the eight foot height and chain link style fence. WSO has chosen to utilize agricultural style fence to be more aesthetically pleasing and harmonious with the area and finds the 7 foot height to be sufficient in keeping with applicable electrical and safety standards. If, however, the Siting Council wishes to order WSO to provide for an eight-foot chain link fence, WSO shall not object to such a requirement.

Pg 16 – It clearly documents that the sheep will not overwinter on the site

48. Does that mean that sheep will be on the property 24 x 7 for all the days that are not considered winter?

The sheep will only graze on the property during the time of year when the weather will typically sustain grass sufficient for continued grazing.

49. Can you articulate the estimated calendar months that the sheep will be onsite?

Petitioner assumes the possible presence of sheep on the site between the months of April and October based on the typical time for which grass grows and can therefore sustain grazing activities.

50. Will there be any type of shelter for the sheep to protect them during bad weather, especially during lightening storms?

Please refer to the Petitioner's Response to the Town of Windsor's Interrogatory No. 50.

51. What remedies will be implemented to keep the odor emanating from the sheep to a minimum, so as not to negatively impact the residents that surround the property?

As the property is currently zoned agricultural, it is WSO's understanding that the property owner has the right to graze sheep on the property, regardless whether this project is constructed or not. WSO is not aware of any guidelines for sheep grazing in any capacity that indicate odor as an issue or methods for addressing odor from sheep.

My experience with the odor produced by sheep, most especially "wet sheep" is not a pleasant one and I do not relish being forced to keep my doors and windows shut during the non-winter months.

Windsor Solar One believes that the paragraph listed between Interrogatories 51 and 52 constitutes pre-filed testimony and should therefore be treated as such. To the extent a response is required, Windsor Solar One would note that there is currently no restriction on the raising of sheep or other agricultural animals on the project site. As such, the current owner would be entitled to raise sheep at the site, should the owner so choose.

General Health and Safety question

52. Can you please provide documentation that indicates that installation of a 3 Megawatt Solar farm does NOT pose ANY Health and/or Safety risks to nearby residents, pets and/or wildlife?

No such documentation exists, however, Windsor Solar One is unaware of any documentation that claims that there are unreasonable health and/or safety risks associated with the proper construction, installation, and operation of any solar PV facilities such as what is being contemplated in this Petition.

53. Given that solar technology is so new, if such documentation does NOT exist, then how can Windsor Solar One / Verogy, the CT Siting Council and/or the CT State Government be sure, that it doesn't cause harm and that we will not end up like those people who unfortunately lived close to the new technology of high voltage electric transmission wires and who have developed many documented medical conditions, not the least of which is some level of hearing loss or worse yet cancer, just because at the time of installation there was "no documented health or safety risk".

Windsor Solar One would point out that the Siting Council has done extensive work in the investigation and categorization of any potential health risks associated with electrical projects, including high voltage electric transmission wires. The Council's latest work on the subject, Electric and Magnetic Fields Best Management Practices for the Construction of Electric Transmission Lines in Connecticut, last updated on December 30, 2022, can be found at: <u>https://portal.ct.gov/-/media/CSC/Publications/EMF-BMP-12-30--2022-update_final_s.pdf</u>. Given that the proposed solar array would be anticipated to have significantly less EMF impacts than electric transmission lines, Windsor Solar One reiterates that it does not anticipate any health or safety impacts associated with its project. Windsor Solar One would also note that there are potential adverse impacts associated with the herbicides and pesticides which might be used in

agricultural operations, however, no such chemicals shall be used in the construction or operation of the project.