

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE: :  
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 :  
 A PETITION FOR A DECLARATORY RULING : PETITION NO. 1572  
 THAT A CERTIFICATE OF ENVIRONMENTAL :  
 COMPATIBILITY AND PUBLIC NEED IS NOT :  
 REQUIRED FOR THE CONSTRUCTION, :  
 OPERATION AND MAINTENANCE OF A 4.0 :  
 MW AC SOLAR PHOTOVOLTAIC PROJECT AT :  
 31 THRALL ROAD, EAST WINDSOR, :  
 CONNECTICUT : AUGUST 31, 2023

**RESPONSES OF EAST WINDSOR SOLAR TWO, LLC AND VCP, LLC  
D/B/A VEROGY TO INTERROGATORIES FROM THE TOWN OF EAST WINDSOR**

On August 24, 2023, the Town of East Windsor (“Town”) issued Interrogatories to East Windsor Solar Two, LLC and VCP, LLC d/b/a Verogy (“Petitioner” or “EWST”), relating to Petition No. 1572. Below are Petitioner’s responses.

**Notice**

**Question No. 1:**

Describe outreach efforts to project abutters. Have any abutters requested further information? Were right-of-way (ROW) restoration measures described during public outreach?

**Response:**

A description of EWST’s Public Outreach efforts is provided in Section V. of the Petition. There is no work proposed within the public right-of-way for the EWST project that would necessitate restoration work.

**Project Development**

**Question No. 2:**

Has East Windsor Solar Two, LLC (EWST) received any comments since the petition

was submitted to the Connecticut Siting Council (Council)? If yes, summarize the comments and how these comments were addressed.

Response:

Please refer to the Petitioner's response to Siting Council ("Council") Interrogatory No.1 dated July 18, 2023. A vast majority of the Public Comment focused on design elements and complaints related to the solar facility approved by the Council in Petition No. 1426, for DG Connecticut Solar III, LLC ("DG Solar"). Of note, many public complaints focused on the issue of noise from the inverters at the DG Solar facility. The EWST project responded to these concerns by selecting a different inverter for use at the EWST facility and by locating its inverters in the middle of the solar array, separated from adjacent property lines a minimum of 300 feet. As indicated in the Brooks Acoustics Corporation study (Petition - Appendix L) and the WSP Noise Assessment dated August 31, 2023, the EWST facility will comply with all appropriate and required noise standards.

Question No. 3:

Identify the status of EWST obtaining the following permits: (a) Connecticut Department of Energy and Environmental Protection, General Permit for the Discharge of Stormwater and Dewatering Wastewater from Construction Activity; (b) Town of East Windsor, Building Permit; and (c) Town of East Windsor, Electrical Permit. Identify any additional permits necessary for completion and operation of the facility and which entity will hold the permit(s)?

Response:

EWST has not yet applied for any Town of East Windsor permits and won't do so until the Siting Council approves the Petition. As discussed in its response to Council Interrogatory No. 50, EWST filed its stormwater general permit with the Connecticut Department of Energy

and Environmental Protection (“DEEP”) on June 20, 2023. The application remains under review.

Question No. 4:

Has EWST met with the DEEP Stormwater Division? If yes, when? Please describe any recommendations, comments, or concerns about the Project from the Stormwater Division.

Response:

Please refer to EWST’s response to Council Interrogatory No. 49. EWST did request a preapplication meeting with DEEP but was told that such a meeting was not necessary prior to submission to DEEP for a stormwater permit.

Question No. 5:

Has EWST applied for a stormwater permit? If yes, what is the status of said permit?

Response:

See EWST’s response to Interrogatory No. 3 above.

Question No. 6:

If a Declaratory Ruling is issued for the proposed facility, does EWST plan to construct, or partially construct, the facility and transfer it to another entity?

Response:

Please refer to EWST’s response to Council Interrogatory No. 7.

Question No. 7:

Have there been any new plans to incorporate a battery energy storage system (“BESS”) on the project site? 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 SCEF Agreement.

Response:

Please refer to EWST's response to Council Interrogatory No. 17.

Question No. 8:

Identify any proposed new and/or replacement structures that are pending Federal Aviation Administration obstruction evaluation. Are any of the existing structures that would be replaced currently marked/lighted?

Response:

Please refer to Section K (p. 34) and Appendix M of the Petition regarding FAA compliance.

Question No. 9:

Has EWST considered designing any production agriculture on the site, in concert with the solar project (e.g., providing space and access for beehives and/or grazing animals)? If so, please provide additional information.

Response:

As discussed in Section VI. F. and in Appendix J of the Petition, and in its responses to Council Interrogatory Nos. 37, 38, 44, 45, and 55, EWST has proposed, and the Connecticut Department of Agriculture ("DoAG") has approved an Agricultural Co-Use Plan to allow for sheep grazing on the property during facility operations. With the implementation of this co-use plan, the DoAG determined that the facility "will not materially affect the status of the Site as prime farmland".

Question No. 10:

Referencing Appendix A, the product warranty for the panels is 12 years and the linear performance warranty is 25 years, who is responsible for the obligations after the respective warranties expire?

Response:

EWST will be responsible for obligations beyond any respective product warranties.

Question No. 11:

How do the trackers work? What are the maintenance requirements for the trackers? Do the trackers emit any audible noise? How do the trackers adjust in bad weather? Do they only move up and down or do they also move side to side? How is this monitored?

Response:

The trackers support the panels along the north-south axis and allow the panels to tilt in an east to west direction over the course of the day for maximum sunlight capture. Routine maintenance includes periodic inspection of the system and maintenance or replacement of equipment, as necessary, to ensure proper operation. The tracker system motors emit noise of 51 dBA at three (3) feet from the source, which is less than the DEEP limits of 61 dBA at the nearest property line. In extreme wind conditions, the panels are programmed to revert to a “stow” position. As mentioned above, the panel movement is limited to tilting in an east-west direction. All solar facility operations are monitored remotely. Please also refer to EWST’s response to Council Interrogatory No. 23 and Attachment 1 for product information.

Question No. 12:

Referencing the Petition, there is an existing vacant residence on the property. Is EWST willing to subdivide the property to sell the house that is currently located on site? If not, who will be responsible for maintaining the house, so it does not fall into disrepair?

Response:

The property is owned by the Catholic Cemetery Association (“CCA”). EWST leases only that portion of the property associated with the EWST facility, which does not include the

portion of the parcel occupied by the existing residence and barns. EWST has no right to subdivide or sell a portion or all the Property. Maintenance of the buildings not on the leased premises is the responsibility of the CCA.

Question No. 13:

Referencing Appendix J, what happens to the land and barns currently being leased to Cohen Farms for broad leaf tobacco, if Cohen Farms discontinues their operation on site? What is EWST's maintenance plan for the barns located at the site? How will they be monitored and enforced so they do not fall into disrepair?

Response:

Please refer to EWST's response to Interrogatory No. 12 above. Maintenance of these structures is the responsibility of the CCA.

Question No. 14:

Will a construction and maintenance bond be obtained for the work to be performed? If so, in what amount?

Response:

Please refer to EWST's response to Council Interrogatory No. 14.

Question No. 15:

Department of Transportation scenic roads state: to meet the criteria of a scenic highway shall have a minimum length of 1 mile and shall abut development which is compatible with its surroundings. Has EWST considered downsizing the facility in order to establish a larger natural and appealing buffer that will allow the Town to seek recognition of the roadway to be scenic?

Response:

Thrall Road is not currently designated as a Scenic Road by the State Department of Transportation. EWST did not consider downsizing the facility as it is obligated to provide 4.0 MW of clean renewable energy to the State's low- and moderate-income customers under the Shared Clean Energy Facility Program (SCEF).

Question No. 16:

The new proposal will be in the R3 Zone. Putting utility scale solar in a residential zone is not compatible with the Town's Plan of Conservation & Development. Have alternative sites been explored that are not in residential zones? If so, which alternative sites? Will the facility be aesthetically compatible with the surrounding area in the R3 Zone?

Response:

As discussed in Section VI. B. of the Petition, both the Plan of Conservation and Development and zoning regulations reflect a commitment on the Town's part to promote local sustainable initiatives including of solar energy development and production. The proposed EWST site was selected by DEEP as an appropriate location for the project through the SCEF program. No alternative sites were presented to DEEP or considered. As for aesthetics, the EWST solar array will maintain the existing natural buffer on all sides of the project site where it exists today. The EWST facility design also calls for the establishment of a double row of evergreen plantings along Thrall Road to minimize views into the property from the south where a natural vegetated buffer does not currently exist. (*See Attachment B, Plan Sheet OP-2*).

Question No. 17:

Quantify the amounts of cut and fill that would be required to develop the proposed facility. If there is excess cut, will this material be removed from the site or deposited on the site?

Response:

As indicated on Sheet T-1 of the plans submitted with the Petition, 0 yards of cut and 0 yards of fill are required to develop the proposed facility.

Question No. 18:

Referencing Appendix F, construction is scheduled to begin in winter 2023-2024.

Provide the estimated typical construction hours and days of the week (e.g. Monday through Friday 8 AM to 5PM)? What challenges are present with commencing construction during the colder winter months? What is EWST's plan to combat these challenges?

Response:

Please refer to Section III. D. iv. Of the Petition for typical hours of construction. EWST will follow all customary procedures for site work undertaken during winter months and will adhere to applicable requirements for proper erosion control.

Question No. 19:

What time interval is anticipated to achieve stabilization of disturbed areas?

Response:

The time intervals to achieve stabilization of disturbed areas will vary depending on the work being performed and the activity in the project area. Stabilization through the application of the appropriate seed mixtures will occur when disturbance of an area is no longer necessary.

Question No. 20:

If EWST transfers the facility to another entity, would EWST provide the Town with a written agreement as to the entity responsible for any outstanding conditions of the Declaratory Ruling and quarterly assessment charges that may be associated with this facility, including contact information for the individual acting on behalf of the transferee?



Response:

Please refer to the EWST response to Council Interrogatory Nos. 7 and 8.

Question No. 21:

Will the Owner of the site be willing to offer an agricultural easement across other land it owns in Town in the equivalent amount of acreage of the project site?

Response:

EWST is unaware of any plans by the site owner to offer agricultural easements across other lands it may own in East Windsor.

**Energy Output**

Question No. 22:

How will the communications from the facility be dispatched and by whom?

Response:

EWST objects to this question on the grounds that it is vague and ambiguous. It is unclear what “communications” the Town is referring to. Operations at the EWST facility will be monitored remotely by the Petitioner.

Question No. 23:

What distribution system benefits (ex. resiliency of critical infrastructure, reliability of the electric system, etc.) would be provided by the facility? How does the facility meet the objectives of the state Energy Storage Solutions Program?

Response:

The EWST facility will import clean renewable energy into the electric distribution system which, overall will help the State meet its renewable energy objectives. As discussed in the Petition, EWST facility will also participate in the Connecticut Shared Clean Energy Facility

program bringing clean renewable energy to low- and moderate-income customers and low-income service organizations. There is no energy storage proposed as a part of the EWST facility. The objectives of the State's Energy Storage Solutions Program do not apply.

Question No. 24:

Is the facility required to reserve any battery storage capability for backup power? Where would the backup power be used and by whom?

Response:

As mentioned in its response to Question No. 7 above, the EWST facility will not include a BESS as a part of the project.

Question No. 25:

How long will it take for the facility to obtain full output from when it is completed and placed in service?

Response:

The achievement of full output is dependent on the time of year the facility is placed in service and the subsequent weather conditions (i.e. amount of sunlight). However, EWST expects the facility to be fully operational in the third quarter of 2024.

Question No. 26:

How is the proposed facility consistent with the objectives of the state Conservation & Load Management Plan?

Response:

The Connecticut Conservation and Load Management Plan (C&LM Plan) is an energy efficiency and demand management program administered by the State's public utilities. The C&LM Plan develops programs and initiatives to help Connecticut residents and businesses

become more energy efficient. The current C&LM Plan speaks extensively about the important role renewable energy plays in the State's overall energy planning initiatives. The C&LM Plan does not however specifically address the SCEF program under which the EWST facility will operate.

Question No. 27:

Is it the intention that the entire output of the facility will be sold to the grid?

Response:

No. As stated in the Petition, the EWST facility was selected to participate in the State's SCEF program. Under this program, power produced by this facility will be sold to Eversource and made available to low- and moderate-income customers and/or low-income service organizations in the State.

**Environmental**

Question No. 28:

Provide a copy of the wetland and vernal pool assessments specific to the site.

Response:

A thorough discussion of the wetland and vernal pool investigations and associated assessment of the Facility's potential effect to these resources was provided in Section D (starting on p. 22) of the Petition.

Question No. 29:

Would the proposed gravel access road serve as a barrier to wood frog and mole salamander migration? If yes, what measures can be taken to enhance migratory corridors?

Response:

The proposed gravel access road, located approximately 490 feet south of Potential Vernal Pool 1 (PVP1) and approximately 450 south of Potential Vernal Pool 2 (PVP2), would not be a barrier to wood frog and mole salamander migration. As noted in Section D of the Petition, which includes a discussion of vernal pool migratory corridors, the agricultural field where the proposed gravel access road would be located is considered suboptimal terrestrial habitat for obligate vernal pool species. Furthermore, the proposed Facility including the proposed gravel access road would not interrupt the principal vernal pool migratory vectors that link PVP1 and PVP2 to adjacent optimal forested wetland and terrestrial habitats to the north, east, and west, all located north of the Project. Please refer to Exhibit 1 to these responses which includes an revised Figure 6: Vernal Pool Analysis Map, which has been updated to depict the principal migratory vectors. In summary, neither the proposed gravel access road nor the proposed Facility would represent a barrier to obligate vernal pool species migration.

Question No. 30:

Which stormwater basins would have permanent isolation barriers to prevent access by obligate vernal pool amphibians? Provide a Site Plan detail of the isolation barrier.

Response:

Only one stormwater basin, which exists currently, is proposed. The proposed Facility will utilize the existing stormwater management basin to treat stormwater as part of the proposed Stormwater Management Plan (*See* Petition Appendix B – Project Plans and Appendix C – Stormwater Management). The current form and function of the basin does not appear to sustain inundation for a sufficient period to serve as a potential “decoy pool”. In addition, this basin does not intercept principal vernal pool migratory vectors, is located within suboptimal terrestrial

habitat, and is approximately 270 feet from the nearest vernal pool habitat. The stormwater basin will function post-construction as it currently does and as such is not anticipated to create a ‘decoy pool’. Therefore, no permanent isolation barrier is proposed.

Question No. 31:

Please provide details of the maintenance plan over the useful life of the facility.

Response:

Please refer to Section III.D.v. of the Petition.

Question No. 32:

What is the distance from the limit of disturbance to the nearest wetland boundary for each solar array area and associated stormwater management features (excluding gavel access roads)?

Response:

The nearest wetland boundary is approximately 169 feet northwest of the project limits of disturbance. There is only one solar array, and the limit of disturbance encompasses the single stormwater management feature, which consists of an existing basin.

Question No. 33:

What is the distance of the nearest 100-year flood zone from the facility?

Response:

The nearest 100-year flood zone is located approximately 1,025 feet south of the EWST facility fence.

Question No. 34:

Where is the nearest publicly accessible recreational area from the proposed site? Describe the visibility of the proposed project from this recreational area, if any.

Response:

Please refer to Section VI. L and Appendix N of the Petition. The nearest publicly accessible recreational area is Pierce Memorial Park, located at 175 Windsorville Road approximately 0.18 mile southwest from the proposed facility. As shown on the viewshed maps provided in Appendix N to the Petition, seasonal visibility (when the leaves are off the deciduous trees) may be experienced from the park or portions thereof.

Question No. 35:

Where is the nearest national, state and/or locally designated scenic road or area from the proposed site? Describe the visibility of the proposed facility from these areas, if any.

Response:

Please refer to Section VI. L and Appendix N of the Petition. The nearest scenic road is a portion of State Route 74 approximately 5.7 miles southeast of the EWST facility. No visibility of the proposed facility would be experienced from that location. There is no designated scenic area within the vicinity of the EWST facility.

Question No. 36:

Referencing Appendix D, what potential negative impact will the sheep grazing program have on water quality in the nearby wells?

Response:

Please refer to EWST's response to Council Interrogatory No. 45. EWST does not expect sheep grazing to impact nearby wells.

Question No. 37:

Referencing Appendix J, if the sheep grazing program ceases with Natalie Cohen of Hillview Farm, what alternatives are in place to address the overgrown vegetation on site?

Response:

If the program with Hillview Farm were to cease, EWST would seek to secure an alternate vendor to provide grazing services.

Question No. 38:

Were subsurface soils evaluated for hazardous contaminants? If so, please provide us with the results of the evaluation. Will excavated soils require disposal at a hazardous materials facility?

Response:

A Phase I ESA has not been completed for the project site. Any soil displaced as a result of the construction of the EWST facility will remain on site and be managed in accordance with applicable regulation and industry standards.

Question No. 39:

Will the project require a U.S. Army Corps of Engineers permit/notification for work within wetlands/watercourses?

Response:

The proposed Facility will not result in direct impacts to any wetlands or watercourses. Therefore, since the Facility will not impact Federal Waters of the United States, there is no jurisdiction by the U.S. Army Corps of Engineers under the Federal Clean Water Act and no permit/notification is required.

Question No. 40:

Referencing Appendix I, will any trees be cut down at the site? If so, how many acres? How would tree clearing affect the acreage? Provide an aerial photograph that depicts pre- and post-construction acreage.

Response:

The proposed fenced Facility does not require any tree removal. However, the electrical interconnection from Thrall Road located near the southwest corner of the subject property does require some limited tree removal and/or trimming of no more than approximately one-tenth of an acre near the existing farm buildings. With respect to the Northern Long-eared Bat Determination Key (“DKKey”) findings as provided in Appendix I: USFWS & NDDDB Compliance, dated March 26, 3023, USFWS determined the proposed action is in an area where NLEB is not likely to occur. The no effect determination was not predicated on whether or how much tree clearing was associated with the proposed action.

See Figures 3, 4 and 5 in the Petition for aerial photographs.

Question No. 41:

Can the project be revised to include larger wetland buffers, including but not limited to relocation of array areas to other portions of the property or the use of higher wattage panels?

Response:

The nearest point of the Facility is approximately 169 feet southeast of Wetland 1. The East Windsor Inland Wetlands & Watercourse Agency Regulations regulates a 150-foot upland review area from the edge of wetlands and watercourses. The Facility’s limit of disturbance will be confined to the existing cleared field edge and will not result in any clearing of the mature forested uplands that currently buffer the field from nearby wetlands. Therefore, the proposed 169-foot minimum wetland buffer is considered more than sufficient to protect and maintain the current functions and values of these nearby wetland resources.



Question No. 42:

Will any residences have year-round views of the solar array areas/fencing? Can landscaping be installed to mitigate views?

Response:

As shown on the viewshed maps provided in Appendix N to the Petition, year-round visibility is predicted to the south and east of the proposed facility. The Petitioner's proposal includes evergreen plantings along the facility fence line where it parallels Thrall Road and along portions of the southern and eastern fence lines. (See Plan Sheet OP-2 in Appendix B). Photo-simulation 1 included in Appendix N depicts the mitigation provided by the proposed landscaping.

Question No. 43:

What, if any, fertilizers, or pesticides are expected to be used during the of the solar project, and for what reason(s)?

Response:

Please refer to EWST's response to Council Interrogatory No. 53 indicating that no fertilizers or pesticides will be used.

Question No. 44:

Were more environmentally friendly alternatives explored for supporting the solar panels to be installed at the site? Please explain how the choices were selected.

Response:

No. The proposed solar panels will comply with all applicable environmental standards.

Question No. 45:

Will topsoil, subsoil, and substratum soil material be stockpiled for reuse? Where will this be located and how will it be stabilized? What mechanisms are in place to ensure these materials will stay on site?

Response:

Because development of the proposed facility does not require any significant grading, there is no need for stockpiling of soil for later reuse is involved in project development. (See EWST's response to Interrogatory No. 47 below).

Question No. 46:

Were any samples taken and georeferenced to determine existing soil physical and chemical properties to use as a baseline? If so, please provide results of the baseline study.

Response:

No.

Question No. 47:

Will there be a soil scientist on site [sic] during soil disturbance activities to assist in directing trenching and grading to correctly separate and replace soil horizons and stockpiling?

Response:

As part of the proposed Resource Protection Measures provided in the Petition, Appendix B – Project Plans, Sheet No. GN-2, an Environmental Monitor will perform routine inspections to ensure specified protection measures are implemented properly. As part of these inspections, all grading activities and temporary stockpiling will be closely monitored to ensure proper erosion and sedimentation controls are installed and maintained. It is not anticipated that significant grading activities will be required for construction of the Facility thereby minimizing

potential impacts to existing soil horizons/structures. The following note will be added to the Sedimentation & Erosion Control Notes (Sheet No. EC-1) in Appendix B – Project Plans:

*During utility trenching work, the contractor shall properly segregate topsoil (A horizon) from subsoil (B and C horizons) during excavation and reestablish these soil horizons during backfilling operations to ensure the original thickness of topsoil (A horizon) is replaced.*

Question No. 48:

What inspections will be conducted pre-construction, during construction and post-construction? Who will be responsible for said inspections and screening of the facility?

Response:

Prior to construction, the site will be inspected, and erosion control measures will be implemented prior to the start of construction activities. During construction the erosion control measures will be routinely inspected to ensure compliance with that permit. Any inspections deemed necessary by subsequently obtained building & electrical permits will also be conducted. Post construction, inspections will continue to ensure that final site stabilization has been achieved & is being properly maintained. All of the aforementioned inspections will occur by the various parties as deemed necessary by the applicable permitting authority.

Environmental monitoring and inspections are described in the response to Interrogatory 47, above. Stormwater (SWPCP) monitoring and inspections will be performed in accordance with the DEEP General Permit, including Appendix I. The Applicant/Permittee is responsible for performance of inspections.

Question No. 49:

What impact will the facility have on adjacent vernal pools and wetlands?

Response:

Please refer to Section VI. D of the Petition (pp. 22-29) and Interrogatory Question No. 29 above.

Question No. 50:

There is no public water supply in the area immediately surrounding the project site. Will EWST perform regular testing of the wells to ensure no contamination has occurred? If contamination is detected, will EWST agree to remediate the contamination? How will EWST protect the wells and/or water quality from potential construction and operational impacts? Will there be a reconstruction baseline testing of the aquifer?

Response:

EWST has not performed, nor does it intend to perform any work that would cause “contamination” of the subject parcel or any wells in the area.

Question No. 51:

Eighteen acres of prime farmland will be used for this project. Will there be an agreement to put aside an agricultural easement on other land so it can remain agriculture in perpetuity?

Response:

No. As stated in its March 23, 2023, the letter to the Council, the DoAG has determined that with the successful implementation of the agricultural co-use plans described, the EWST facility “will not materially affect the status of project land as prime farmland”.

Question No. 52:

Referencing Appendix I, USFWS-NDDDB Compliance report makes mention of the “monarch butterfly *Danaus plexippus* Candidate”, please advise as to any communication or

information received from the agency to determine whether the action will affect this critical species. Are there any additional NDDDB species of special concern that may be impacted by the site?

Response:

Monarch butterfly (*Danaus plexippus*), a Candidate species, has no current protections under the Federal Endangered Species Act and there is no requirement to consider project impacts or to consult with USFWS for a Candidate species. The proposed Facility is not anticipated to adversely affect the monarch butterfly; to the contrary, the seed mix proposed to reestablish permanent vegetation within the Facility includes common milkweed (*Asclepias syriaca*), a host plant for monarch butterfly egg laying. This seed mix also includes other pollinator friendly species that are utilized by the monarch butterfly and other butterfly species for nectar and as a result will enhance habitat for the monarch butterfly.

As noted in Appendix I, the Facility is not located within any known areas of state-listed endangered, threatened, or special concern species, and therefore consultation with DEEP NDDDB is not required in accordance with their review policy.

Question No. 53:

Has EWST explored using safer solar panels sourced from the United States? If yes, please describe how the decision was made. If not, why not?

Response:

EWST is not aware of any evidence to support the inference that solar panels sourced from the United States are “safer” than others. As stated in Section III.D.i. of the Petition, the solar panels EWST intends to use pass the required TCLP testing.

## Public Safety

### Question No. 54:

Could the construction or operation of the proposed facility impact or interfere with any existing utilities or infrastructure within the surrounding area? If so, identify any measures that would be employed to protect existing utilities or infrastructure from impact or interference.

### Response:

No. The EWST facility interconnection plans were reviewed and approved by Eversource and a final Interconnection Agreement is in place.

### Question No. 55:

Will a crane be required for construction? If yes, would notice to the Federal Aviation Administration be required for the temporary use of a crane?

### Response:

Please refer to EWST's response to Council Interrogatory No. 30.

### Question No. 56:

Will the solar facility have a protection system to shut the facility down in the event of a fault within the facility or isolate the facility during abnormal grid disturbances or during other power outage events?

### Response:

See EWST's responses to Council Interrogatory Nos. 20, 32 and 33. The solar facility has both automatic and manual protection systems that can be operated by either EWST or the utility (Eversource) to respond appropriately during abnormal grid disturbances. In the event of a power outage, the equipment is designed, to automatically cease generation.

Question No. 57:

Will the project comply with the National Electrical Code, the National Electrical Safety Code and any applicable National Fire Protection Association codes and standards?

Response:

Please refer to EWST's response to Council Interrogatory No. 29.

Question No. 58:

Referencing Appendix L, the sound study for Solar One Facility by Brooks Acoustics Corp. April 26, 2023, says that acoustical engineering evaluation was based on calculations conducted on May 14, 2022, at the existing Solar One Facility in Town. What methodology was used for that study? Have subsequent noise studies been conducted, including studies over the project life? If so, please provide copies. If not, why not?

Response:

The Appendix L, BAC acoustical study report states: "The acoustical engineering calculations [in the April 26, 2023, BAC report] are based on sound measurements of the proposed CPS Model electrical power inverter for the project, which were conducted on May 14, 2022, at the existing Solar One facility in East Windsor." The CPS product data sheet provided specifies that the CPS inverter produces audible noise level less than 65 dBA (ea.) at 1 meter and 25 °C. Additional field sound level testing was performed on a recently installed CPS inverter by BAC on May 14, 2022 to aid in the noise assessment for the EWST facility.

In July of 2023, EWST asked WSP USA Environment & Infrastructure ("WSP") to provide professional consulting services related to a follow-up acoustical assessment of the EWST photovoltaic solar energy system. The goals of this subsequent assessment were to better understand the sound environment (i.e., background community sound levels) in the area,

quantify the sound levels associated with the EWST project, re-evaluate the predicted sound levels at the property lines surrounding the EWST project site because of the daytime operation of the solar array, and potentially identify opportunities for sound attenuation, if deemed necessary.

As part of its scope of work, WSP reviewed the field-testing data supplied in the BAC acoustical engineering study dated April 26, 2023. WSP determined that this data was collected appropriately and in good agreement with the manufacturer's (i.e., CPS') data sheet (i.e., <65 dBA).

The WSP environmental and community noise assessment report (the "WSP Report") concludes that broadband and tonal sound levels from the proposed facility are expected to be in full compliance with State of Connecticut Noise Control Regulations (i.e., RCSA §22a-69) at all residences surrounding the project site. A copy of the WSP Report was filed, under separate cover, in the Petition No. 1572 matter.

Question No. 59:

Referencing Appendix A, panels had been flagged for lead. Have any PFAS tests been conducted on the panels? Is there a concern for potential contamination to PVP1 and PVP2 and/or the ground?

Response:

No PFAS tests have been conducted on the solar panels as PFAS is not customarily used in solar panel production. See Exhibit 2 attached - <https://graham.umich.edu/media/pubs/Facts-about-solar-panels--PFAS-contamination-47485.pdf>. Likewise, as indicated in the TCLP report, there is no concern for PVP1 or PVP2 contamination.



Question No. 60:

Referencing Appendix D, under what circumstances would the panels require treatment/maintaining with chemicals? If chemicals are used, what types of chemicals would be used and what potential environmental and safety risk do they have?

Response:

Please refer to the Petition, Appendix D, Section 6.3.2 which indicates that “no chemicals will be used” for cleaning solar panels.

Question No. 61:

Have glare impact analysis been conducted from the variable angled panels? If so, please provide the results of said analysis.

Response:

A glare impact analysis has not been conducted.

Question No. 62:

Are there contamination concerns with water pooling and drainage contaminating the Windsorville Pond? What is EWST’s stormwater runoff plan?

Response:

There are no contamination concerns with regards to water pooling and drainage as there are no hazardous materials being used on site. Please refer to Appendix C of the Petition - the Stormwater Management Report.

Question No. 63:

Would the proximity of any existing or proposed structures present a fire safety or other hazard (ex. Lightning strike)? Would the proximity of any existing or proposed structures present a hazard in relation to the electric generating equipment?

Response:

No.

Question No. 64:

What type of media/special equipment would be necessary to extinguish a battery storage/electrical component fire? Specifically, based on any history of fires at installed battery systems, is there specialized firefighting equipment necessary to extinguish a Lithium-ion battery fire? Is there a concern with runoff and cleanup caused by fire extinguishment?

Response:

As previously indicated, no BESS is proposed as a part of the EWST project.

Question No. 65:

Referencing Appendix D, regarding emergency response:

- a. Is outreach and/or training necessary for local emergency responders in the event of a fire or other emergency at the site?
- b. How would site access be ensured for emergency responders?
- c. In the event of a brush or electrical fire, how would EWST mitigate potential electric hazards that could be encountered by emergency response personnel?
- d. Could the entire facility be shut down and de-energized in the event of a fire? If so, how?
- e. Would there be an emergency key box for first responders to access the site for shutdown purposes?

Response:

- a. Please refer to EWST's response to Council Interrogatory No. 32.
- b. If requested by East Windsor Emergency Service providers, EWST can provide an emergency key box.
- c. Please refer to EWST's response to Council Interrogatory No. 33.
- d. Please refer to EWST's response to Council Interrogatory No. 33.
- e. Yes. *See* response 65. b. above.

Question No. 66:

What layers of protection will be included to prevent “Thermal Runaway?” For example, please respond to the following:

- a. Would explosion vent panels be installed on the top of battery energy storage system?
- b. Would a fast-acting gaseous agent system be installed to potentially put any Class C fire out before it can turn into a Class B fire that involves battery cells?
- c. Would thermal imaging be employed?

Response:

As previously indicated, no BESS is proposed as a part of the EWST project.

Question No. 67:

Does the transformer have a containment system in the event of a leak? Can the SCADA system detect an insulating oil leak?

Response:

No. The transformer does not have a leak containment system. EWST will use FR3 fluid in the Transformers which is derived from over 95% renewable vegetable oil and is non-toxic.

Question No. 68:

Referencing Appendix D, the Owner does not intend on removing snow from panels. Would the current design cause snow/and or ice to accumulate and stay in place during prolonged incidents of cold weather? Is there a plan to remove snow/ice to prevent ice fall hazard? If yes, describe snow/ice removal methods and site access.

Response:

No, the panel’s tracker system is designed to dump any snow that may accumulate on the panels. There is no need or plan to remove snow or ice from the panels. EWST does not foresee any ice fall hazard as the panels are low to the ground.

## Facility Maintenance/Decommissioning

### Question No. 69:

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? If so, submit information that indicates the proposed solar modules would not be characterized as hazardous waste. If not, would EWST agree to install solar panels that are not classified as hazardous waste through TCLP testing?

### Response:

According to the TCLP report included in Appendix A of the Petition, the proposed solar panels are not characterized as hazardous waste.

### Question No. 70:

Would project decommissioning include stormwater management features? If yes, how would the stormwater management system be removed?

### Response:

Please refer to EWST's response to Council Interrogatory No. 52.

### Question No. 71:

Would the underside of any panels have the potential to act as shelters or nesting areas for wildlife? Would nests/droppings be periodically removed from under the panels?

### Response:

The panels will act as a shelter for the sheep when they are on site. Due to the daily movement of the panels, it is unlikely that wildlife would shelter or nest on the underside of the

panels. In the unlikely event that this were to occur, nests would only be removed if it is determined that they might pose a risk or hazard to normal facility operations.

Question No. 72:

Referencing Appendix E, provide a preliminary Health and Safety Plan associated with decommissioning the site to minimize and eliminate all possible risks and hazards. Include a Job Hazard Analysis that will analyze each step of construction for hazards, along with any hazardous materials that may be used on site.

Response:

The development of a Health & Safety Plan for the decommissioning of the EWST Facility would occur immediately prior to the commencement of decommissioning activities, likely thirty years, or more, from the commencement of commercial operation of the EWST Facility. Any such plan would need to be compliant with standards and requirements in place at that time. It is, therefore, premature to prepare such a plan.

Question No. 73:

Will a decommissioning bond be obtained for the decommissioning work? If so, please explain the details of the planned decommissioning bond.

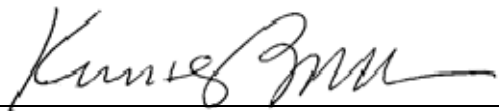
Response:

Please refer to EWST's response to Council Interrogatory No. 14.

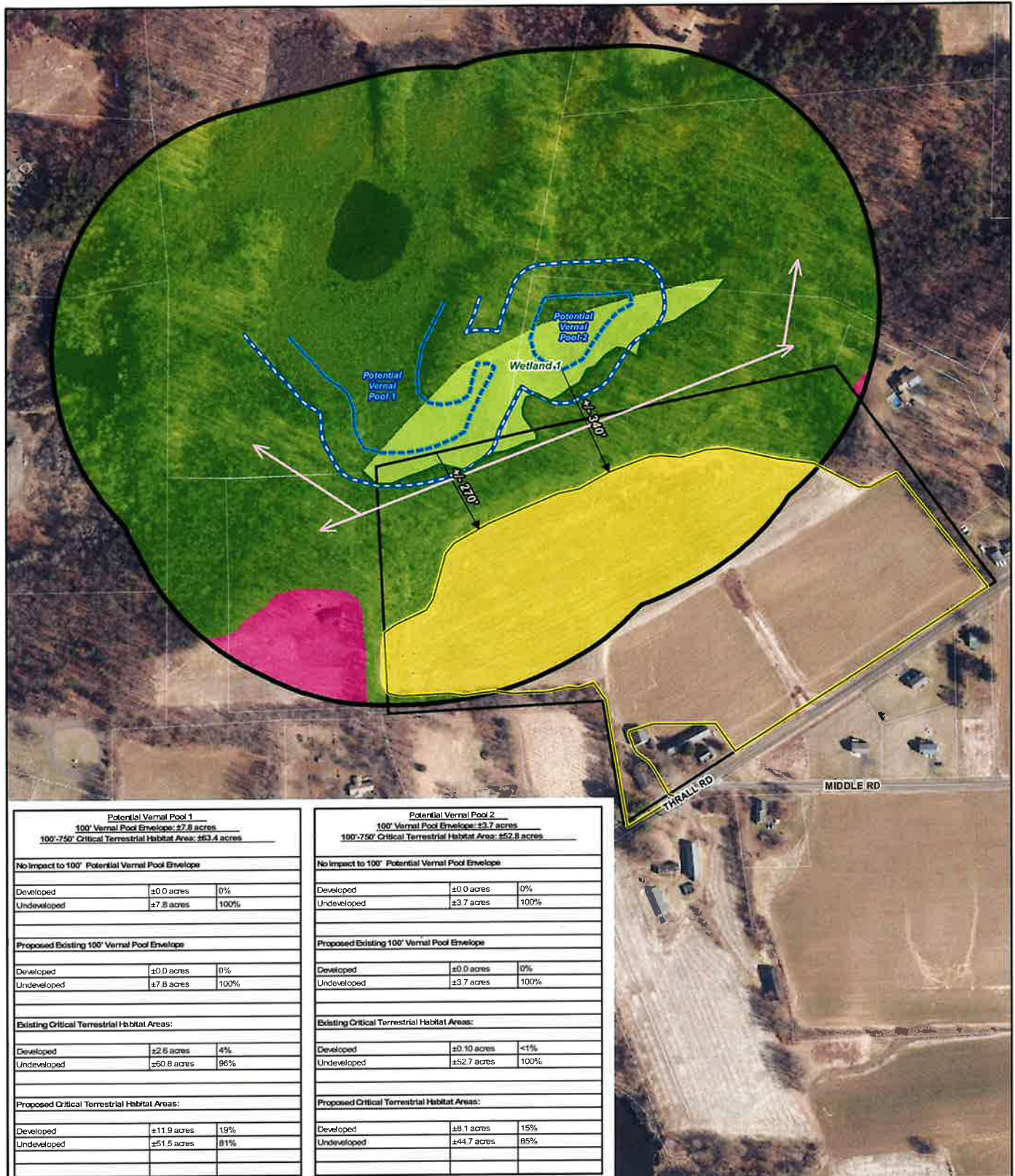
**CERTIFICATE OF SERVICE**

I hereby certify that on August 31, 2023, a copy of the forgoing was mailed and/or delivered electronically to:

Updike, Kelly and Spellacy, P.C.  
Goodwin Square  
225 Asylum Street, 20<sup>th</sup> Floor  
Hartford, CT 06103  
Attn: Robert M. DeCrescenzo, Esq.  
[bdecrescenzo@uks.com](mailto:bdecrescenzo@uks.com)

By:   
Kenneth C. Baldwin

# **EXHIBIT 1**



Potential Vernal Pool 1		
100' Vernal Pool Envelope: ±7.8 acres		
100'-750' Critical Terrestrial Habitat Area: ±63.4 acres		
No Impact to 100' Potential Vernal Pool Envelope		
Developed	±0.0 acres	0%
Undeveloped	±7.8 acres	100%
Proposed Existing 100' Vernal Pool Envelope		
Developed	±0.0 acres	0%
Undeveloped	±7.8 acres	100%
Existing Critical Terrestrial Habitat Areas:		
Developed	±2.6 acres	4%
Undeveloped	±60.8 acres	96%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±11.9 acres	19%
Undeveloped	±51.5 acres	81%

Potential Vernal Pool 2		
100' Vernal Pool Envelope: ±3.7 acres		
100'-750' Critical Terrestrial Habitat Area: ±52.8 acres		
No Impact to 100' Potential Vernal Pool Envelope		
Developed	±0.0 acres	0%
Undeveloped	±3.7 acres	100%
Proposed Existing 100' Vernal Pool Envelope		
Developed	±0.0 acres	0%
Undeveloped	±3.7 acres	100%
Existing Critical Terrestrial Habitat Areas:		
Developed	±0.10 acres	<1%
Undeveloped	±52.7 acres	100%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±8.1 acres	15%
Undeveloped	±44.7 acres	85%

- Legend**
- Site
  - Project Area
  - Approximate Parcel Boundary
  - Delineated Wetland Boundary
  - Approximate Potential Vernal Pool Limits
  - 100' Vernal Pool Envelope
  - 100'-750' Critical Terrestrial Habitat Area
  - Approximate Wetland Area
  - Principle Migratory Vectors
  - Habitat Type**
  - Undeveloped
  - Agricultural Field
  - Developed

Map Notes:  
 Base Map Source: 2019 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 400 feet  
 Map Date: May 2023



**Figure 6**  
**Vernal Pool Analysis Map**

Proposed Solar Energy Facility  
 East Windsor Solar Two  
 31 Thrall Road  
 East Windsor, Connecticut





# **EXHIBIT 2**



"Clean Energy in Michigan" Series, Number 12

# Facts about solar panels: PFAS contamination

By Dr. Annick Anctil, Michigan State University

## Q: Do solar panels contribute to PFAS contamination?

Multiple states have raised concerns about PFAS contamination from solar farms, largely citing academic research on how PFAS could *potentially* be used in photovoltaic (PV) solar panels.<sup>1</sup> The fact is that PFAS is *not* customarily used in solar panels because safer, effective alternatives have already been developed and commercialized. Moreover, no studies have shown the presence or leaching of PFAS from PV panels—either while they are in active use or at the end of their life (e.g., in a landfill).

## Anatomy of a solar panel

These three parts of a solar panel cause confusion about the presence of PFAS.

### Self-Cleaning Coat

A self-cleaning coating on the top of a solar panel helps reduce dust, pollen, and snow adhesion, extending both the power output and the lifetime of the panel.<sup>2</sup> Multiple self-cleaning coating options are available on the market, many of which make use of non-hazardous silicon-based chemistry.<sup>3</sup> Confusion comes from the fact that some other commercialized self-cleaning coating options do make use of PFAS-based chemicals, although even those do not degrade under normal use.

### Adhesives

PV panels are sealed from the elements to maximize power output and lifetime. While PFAS chemicals are found in certain adhesives, such as carpentry glues, they are not typically used in sealant adhesives for solar panels.<sup>4</sup> Instead, solar adhesives are based on silicone polymers, which are well known for their lack of negative health impacts and remarkable stability.<sup>5</sup>

### Substrate

PV modules are housed in a weather-resistant substrate that offers additional protection from the elements. Thin-film PV units use glass as the substrate, while crystalline silicon PV units use a polymer substrate, which has led to the rumors of

Solar Panels. Photo by Mariana Proenca on Unsplash

### Acknowledgement

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The Clean Energy in Michigan series provides case studies and fact sheets answering common questions about clean energy projects in Michigan.

Find this document and more about the project online at [graham.umich.edu/climate-energy/energy-futures](http://graham.umich.edu/climate-energy/energy-futures).

potential PFAS use in solar panels. The most common polymer used in silicon PV units is Tedlar, a weather resistant polymer that is not a PFAS compound itself and makes no use of PFAS during its manufacturing process.<sup>6</sup> Far more common materials, like those used in construction projects and weather resistant fabrics, present a higher risk of PFAS exposure than PV. In fact, a recent study found that these more common materials release PFAS under conditions where solar panels do not, indicating that PFAS exposure risk may be higher sitting on outdoor furniture, for example, than living next to a solar farm.<sup>7</sup>

## What is PFAS anyway?

Per/Poly Fluoro-Alkyl Substances, PFAS for short, are a class of chemical compounds. PFAS are used in several industries for their unique properties, notably their ability to create coatings that are highly water repellent.

PFAS are extremely persistent within the environment, not breaking down over time. Certain PFAS compounds have been linked to human health issues—notably low infant birth weights, increased risk of certain cancers, and thyroid issues. As a result of their persistence and toxicity, those PFAS compounds that pose a significant risk have been banned from use and production, and subsequently replaced with safer alternatives.

It's important to note that not all PFAS compounds are dangerous. Some PFAS compounds, such as Teflon, are much more stable and present no risk to human health under normal conditions of use.<sup>8</sup>

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- 1 S. Maharjan *et al.*, "Self-cleaning hydrophobic nanocoating on glass: A scalable manufacturing process," *Mater. Chem. Phys.*, vol. 239, Jan. 2020.; . Son *et al.*, "A practical superhydrophilic self cleaning and antireflective surface for outdoor photovoltaic applications," *Sol. Energy Mater. Sol. Cells*, 2012.; H. C. Han *et al.*, "Enhancing efficiency with fluorinated interlayers in small molecule organic solar cells," *J. Mater. Chem.*, vol. 22, no. 43, 2012.
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  - 3 "Say Goodbye To Solar Panel Cleaning | Ultimate Efficiency | Solar Sharc®." [Online].
  - 4 "Electronics Product Catalog | Dow Inc." [Online]; B. J. Henry *et al.*, "A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers," *Integrated Environmental Assessment and Management*, vol. 14, no. 3. pp. 316–334, May-2018.
  - 5 "Electronics Product Catalog | Dow Inc."; "Properties of Silicones." [Online]; A. M. Bueche, "The curing of silicone rubber with benzoyl peroxide," *J. Polym. Sci.*, vol. 15, no. 79, pp. 105–120, Jan. 1955.
  - 6 M. H. Alaaeddin, S. M. Sapuan, M. Y. . Zuhri, E. . Zainudin, and F. M. AL-Oqla, "Polyvinyl fluoride (PVF): Its Properties, Applications, and Manufacturing Prospects," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 538, p. 012010, Jun. 2019.
  - 7 R. M. Janousek, S. Lebertz, and T. P. Knepper, "Previously unidentified sources of perfluoroalkyl and polyfluoroalkyl substances from building materials and industrial fabrics," *Environ. Sci. Process. Impacts*, vol. 21, no. 11, pp. 1936–1945, Nov. 2019.
  - 8 "Per- and Polyfluoroalkyl Substances (PFAS) | US EPA." [Online]; B. J. Henry *et al.*, "A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers"