

<p>PETITION NO. 1572 – East Windsor Solar Two, 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 4.0-megawatt AC solar photovoltaic electric generating facility located at 31 Thrall Road, East Windsor, Connecticut, and associated electrical interconnection.</p>	<p>} Connecticut } Siting } Council</p>
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October 12, 2023

Findings of Fact

Introduction

1. On May 5, 2023, East Windsor Solar Two, LLC (EWST) submitted a petition to the Connecticut Siting Council (Council), pursuant to Connecticut General Statutes (CGS) §16-50k and §4-176, for a declaratory ruling for the construction, maintenance, and operation of a 4.0-megawatt AC solar photovoltaic electric generating facility located at 31 Thrall Road in East Windsor, Connecticut, and associated electrical interconnection (Petition or Project). (EWST 1, p. 1)
2. Pursuant to CGS §16-50k, the Council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling any distributed resources facility with a capacity of not more than 65 MW unless the Council finds a substantial adverse environmental effect. (Conn. Gen. Stat. §16-50k (2023)).
3. EWST is a Connecticut limited liability company with its principal office located at 124 LaSalle Road, West Hartford, Connecticut. EWST is a subsidiary of Verogy Holdings, LLC (Verogy). Verogy is a developer and operator of solar generating facilities. (EWST 1, p. 2)
4. The parties to this proceeding are EWST and the Town of East Windsor (Town). (Transcript 1 – September 7, 2023, 2:00 p.m. [Tr. 1], pp. 5-6)
5. EWST would lease the proposed site and own the proposed facility. The host parcel is owned by the Catholic Cemetery Association (CCA). (EWST 1, p. 2, 12; EWST 4, response 5)
6. If EWST transfers the solar facility to another entity in the future, EWST would provide a written agreement as to the entity responsible for any outstanding conditions of the declaratory ruling and quarterly assessment charges under CGS §16-50v(b)(2) that may be associated with the facility, including contact information for the individual acting on behalf of the transferee. (EWST 2, response 8)
7. The proposed Project would be a “grid-side distributed resources” facility under CGS § 16-1(a)(37). (CGS § 16-1(a)(37)(2023); EWST 1, p. 1)
8. The proposed Project would generate renewable electrical energy from solar power. Solar power is considered a Class I renewable energy source. (CGS §16-1(a)(20)(2023))
9. The State legislature established a renewable energy policy under CGS §16a-35k that encourages the development of renewable energy facilities to the maximum extent possible. (CGS §16a-35k)
10. Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over the construction, maintenance and operation of the proposed solar photovoltaic electric generating facility. (CGS §16-50x (2023))

Procedural Matters

11. Upon receipt of the Petition, the Council sent a letter to the Town on May 9, 2023, as notification that the Petition was received and is being processed, in accordance with CGS §16-50k(a), and invited the Town to contact the Council with any questions or comments by June 4, 2023. (Record)
12. Local zoning regulations do not apply to facilities under the exclusive jurisdiction of the Council. Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over solar facilities with a generating capacity greater than 1 MW throughout the state. It shall consider any location preferences provided by the host municipality as the Council shall deem appropriate. (CGS §16-50x (2023))
13. On May 12, 2023, the Town requested party status. During a public meeting held on May 25, 2023, the Council granted the Town's request. (Town 2; Record)
14. Between May 17 and June 2, 2023, the Town; East Windsor residents - Keith Yagaloff, Dawn Dolloff, Robin Cheskey, Kenneth and Lauri Desrosiers; and East Windsor Citizens for Responsible Solar Development - each submitted a request for a public hearing. (Record)
15. On June 8, 2023, during a public meeting, the Council granted the requests for a public hearing. (Record)
16. On June 22, 2023, during a public meeting, the Council approved a public hearing schedule. This extended the public comment period to 30 days following the close of the evidentiary record. The evidentiary record closed on September 7, 2023. The public comment record closed on October 7, 2023. (Record)
17. Public Act (PA) 22-3 took effect on April 30, 2022. It permits public agencies to hold remote meetings under the Freedom of Information Act (FOIA) and the Uniform Administrative Procedure Act. FOIA defines "meeting" in relevant part as "any hearing or other proceedings of a public agency." (Council Administrative Notice Item No. 72; CGS §1-200, *et seq.* (2021))
18. PA 22-3 allows public agencies to hold remote meetings provided that:
 - a) The public has the ability to view or listen to each meeting or proceeding in real-time, by telephone, video, or other technology;
 - b) Any such meeting or proceeding is recorded or transcribed and such recording or transcript shall be posted on the agency's website within seven (7) days of the meeting or proceeding;
 - c) The required notice and agenda for each meeting or proceeding is posted on the agency's website and shall include information on how the meeting will be conducted and how the public can access it any materials relevant to matters on the agenda shall be submitted to the agency and posted on the agency's website for public inspection prior to, during and after the meeting; and
 - e) All speakers taking part in any such meeting shall clearly state their name and title before speaking on each occasion they speak.(Council Administrative Notice Item No. 72)
19. Pursuant to CGS §16-50m, on June 23, 2023, the Council sent a letter to the Town to provide notification of the scheduled public hearing via Zoom remote conferencing. (Record)
20. Pursuant to CGS §16-50m, the Council published legal notice of the date and time of the public hearing via Zoom conferencing in The Journal Inquirer on June 26, 2023. (Record; Transcript 1 – September 7, 2023 – 2:00 p.m. [Tr. 1], p. 5)

21. The Council's Hearing Notice did not refer to a public field review of the proposed site. Field reviews are neither required by statute nor an integral part of the public hearing process. The purpose of a field review is an investigative tool to acquaint members of a reviewing commission with the subject property. (Council's Hearing Notice dated June 23, 2023; Council Administrative Notice Item No. 73 – *Manor Development Corp. v. Conservation Comm. of Simsbury*, 180 Conn. 692, 701 (1980); Council Administrative Notice Item No. 74 – *Grimes v. Conservation Comm. of Litchfield*, 243 Conn. 266, 278 (1997))
22. On June 27, 2023, in lieu of an in-person field review of the proposed site, the Council requested that EWST submit photographic documentation of site-specific features into the record intended to serve as a “virtual” field review of the proposed site. On July 18, 2023, EWST submitted such information in response to the Council's interrogatories. (Record; EWST 2, response 47)
23. Pursuant to CGS §16-50p(g), the Council shall in no way be limited by EWST already having acquired land or an interest therein for the purpose of constructing the proposed facility. (CGS §16-50p(g) (2023); *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))
24. The Council's evaluation criteria under CGS §16-50p does not include the consideration of property ownership or property values nor is the Council otherwise obligated to take into account the status of property ownership or property values. (Tr. 1, pp. 7-8; Tr. 2, p. 6; CGS §16-50p (2023); *Westport v. Conn. Siting Council*, 47 Conn. Supp. 382 (2001); *Goldfisher v. Conn. Siting Council*, 95 Conn. App. 193 (2006))
25. On August 2, 2023, the Council held a pre-hearing conference on procedural matters for parties and intervenors to discuss the requirements for pre-filed testimony, exhibit lists, administrative notice lists, expected witness lists, and filing of pre-hearing interrogatories. Procedures for the public hearing via Zoom remote conferencing were also discussed. (Council Pre-Remote Hearing Conference Memorandum, dated August 9, 2023)
26. In compliance with Regulations of Connecticut State Agencies (RCSA) § 16-50j-21, on August 23, 2023, EWST installed a four-foot by six-foot sign along Thrall Road in the vicinity of the proposed access drive to the site. The sign presented information about the proposed solar facility, the public hearing date and contact information for the Council. (EWST 3; Council Pre-Remote Hearing Conference Memorandum, dated August 2, 2023)
27. Pursuant to CGS §16-50m, the Council gave due notice of a public hearing on September 7, 2023, beginning with the evidentiary session at 2:00 p.m. and continuing with the public comment session at 6:30 p.m. via Zoom remote conferencing. The Council provided information for video/computer access or audio only telephone access. (Council's Hearing Notice dated June 23, 2023; Transcript 1 – September 7, 2023, 2:00 p.m. [Tr. 1], p. 1; Transcript 2 – September 7, 2023, 6:30 p.m. [Tr. 2], p. 1)
28. The 6:30 p.m. public comment session afforded interested persons the opportunity to provide oral limited appearance statements. Interested persons were also afforded an opportunity to provide written limited appearance statements at any time up to 30 days after the close of the evidentiary record. Limited appearance statements in this proceeding, whether oral or written, were not provided under oath nor subject to cross examination. (Tr. 1, pp. 6-7; CGS §16-50n(f) (2023))

29. In compliance with PA 22-3:
- a) The public had the ability to view and listen to the remote public hearings in real-time, by computer, smartphone, tablet or telephone;
 - b) The remote public hearing was recorded and transcribed, and such recordings and transcripts were posted on the Council's website on September 7, 2023 and September 21, 2023, respectively;
 - c) The Hearing Notice, Hearing Program, Citizens Guide for Siting Council Procedures and Instructions for Public Access to the Remote Hearing were posted on the agency's website;
 - d) Prior to, during and after the remote public hearings, the record of the proceeding has been, and remains, available on the Council's website for public inspection; and
 - e) The Council, parties and intervenors provided their information for identification purposes during the remote public hearings.
- (Hearing Notice dated June 23, 2023; Tr. 1; Tr. 2; Record)
30. The purpose of discovery is to provide the Council, parties and intervenors access to all relevant information in an efficient and timely manner to ensure that a complete and accurate record is compiled. (RCSA §16-50j-22a (2023))
31. In an administrative proceeding, irrelevant, immaterial or under repetitious evidence shall be excluded, and an agency has the right to believe or disbelieve the evidence presented by any witness, even an expert, in whole or in part. (CGS §4-178 (2023); *Dore v. Commissioner of Motor Vehicles*, 62 Conn. App. 604 (2001); R.C.S.A. §16-50j-25)
32. Pursuant to C.G.S. §16-50n(f), at the conclusion of the evidentiary hearing session held on September 7, 2023, the Council closed the evidentiary record for Petition 1572 and established October 7, 2023 as the deadline for the submission of briefs and proposed findings of fact. (Record)
33. On October 4, 2023, the Town submitted a post-hearing brief. (Record)

State Agency Comments

34. Pursuant to RCSA §16-50j-40, on June 23, 2023, the following state agencies were requested to submit written comments regarding the proposed facility: DEEP; Department of Agriculture (DOAg); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Emergency Services and Public Protection (DESPP); Department of Labor (DOL); Department of Administrative Services (DAS); Department of Transportation (DOT); the Connecticut Airport Authority (CAA); and the State Historic Preservation Office (SHPO). (Record)
35. No state agencies responded with comment on the Petition. (Record)
36. While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies. (Council Administrative Notice Item No. 77, *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007))

Municipal Consultation

37. During summer 2021, EWST met with the Town First Selectperson to discuss plans for the Project. EWST sent an update on the Project to the Town on April 7, 2023. (EWST 1, p. 13; EWST 2, response 2)

38. On April 6, 2023, EWST provided notice to abutting property owners along with a Project Fact Sheet and other related Project information. (EWST 1, p. 13)
39. EWST established a Project web site at www.verogy.com/east-windsor-solar-two. (EWST 1, p. 13)
40. In a September 21, 2021 letter to the Council, the Town Board of Selectmen and Planning and Zoning Commission (PZC) requested that no further grid scale solar projects be approved on farmland or forestland in East Windsor. (Town 4)
41. In correspondence to the Council dated May 4, 2023, the Town PZC submitted an April 28, 2023 Resolution in opposition to grid scale solar being sited on agriculturally or residentially zoned land as inconsistent with the Town's Plan of Conservation and Development (POCD), and rural/agricultural character. (Town 1; Town 3)
42. In its September 6, 2023 pre-filed testimony, the Town First Selectperson Bowsza indicated that, given other solar projects in East Windsor, the Town is concerned about impacts on the character of the community, its environment and quality of life, including, but not limited to, noise, scenic roads and historic resources. (Town 4; Tr. 1, pp. 122-126)
43. The Town also expressed concerns regarding erosion of farmland, stormwater runoff, groundwater contamination, toxins, fire hazards, and aesthetic degradation, among others. (Town 4)
44. If the Project is approved, the Town would prefer a fence style and landscaping plan that is aesthetically compatible with the surrounding area, natural looking and unobtrusive. (Tr. 1, pp. 123-126)
45. If the Project is approved, the Town supports EWST performing a pre-construction investigation of area wells and providing plans to prevent impacts to such wells. (Tr. 1, pp. 136-137)

State of Connecticut Planning and Energy Policy

46. Section 51 of Public Act (PA) 11-80 requires that DEEP prepare a Comprehensive Energy Strategy (CES) every three years that reflects the legislative findings and policy stated in CGS §16a-35k. As such, this statute consolidated Connecticut's energy planning for the first time. The final version of the state's inaugural CES was published on February 19, 2013 (2013 CES). It advocated smaller, more diversified generation projects using renewable fuels, as well as smaller, more innovative transmission projects emphasizing reliability. (Council Administrative Notice Item No. 41 – Docket No. 505, Finding of Fact #42; CGS §16a-3d (2023))
47. The state CES examines future energy needs and identifies opportunities to reduce ratepayer costs, ensure reliable energy availability, and mitigate public health and environmental impacts. CES Strategy No. 3 is "Grow and sustain renewable and zero-carbon generation in the state and region." The state Integrated Resource Plan assesses the state's future electric needs and a plan to meet those future needs, including, but not limited to, pathways to achieve a 100 percent zero carbon electric supply by 2040. (Council Administrative Notice Item Nos. 49 and 50)
48. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard and Global Warming Solutions Act as a zero emission Class I renewable energy source. (Council Administrative Notice Item No. 49)

49. CGS §16-245a establishes Connecticut's *Renewable Portfolio Standards (RPS)*. Currently, RPS requires that 26 percent of Connecticut's electricity usage be obtained from Class I renewable resources by 2024. These percentage increases annually and reaches 40 percent by 2030. (CGS §16-245a (2023))
50. The Global Warming Solutions Act (GWSA) sets a goal of reducing greenhouse gas (GHG) emissions by 80 percent by 2050. (CGS §22a-200 (2023))
51. The proposed facility will contribute to fulfilling the State's RPS and GWSA as a zero emission Class I renewable energy source. (Council Administrative Notice Item No. 49)

Competitive Energy Procurement

52. The Project bid into the statewide Shared Clean Energy Facility (SCEF) Program, which is a competitive procurement process administered by the state's electric distribution companies to develop utility scale renewable energy. New or incremental Class I renewable generation projects ranging in size from 100 to 5,000 kW* AC are eligible to bid into the SCEF Program for a Tariff Terms Agreement (TTA) with a 20-year term. The first SCEF procurement occurred in 2020.

*Projects selected during Years 1 through 3 ranged in size from 100 kW to 4,000 kW. The size limit was increased to 5,000 kW beginning in Year 4.

(Council Administrative Notice Item No. 70; EWST 1, p. 3, 7)

53. The Project was selected in Year 1 and Year 2 of the SCEF program. EWST was awarded two 20-year contracts: one for 1.0 MW AC and one for 3.0 MW AC. The electricity and renewable energy credits (RECs) produced by the facility would be sold to Eversource in accordance with the TTA. A REC certifies that one megawatt-hour of renewable electrical energy has been generated. (Council Administrative Notice Item No. 43 – Petition 1558 Finding of Fact #50; EWST 1, p. 1; Tr. 1, p. 19)
54. Under the TTA, Eversource would own the capacity rights of the facility. Thus, EWST would not participate in an ISO-New England, Inc. (ISO-NE) Forward Capacity Auction during the term of the TTA. (EWST 2, response 18)

Public Benefit

55. A public benefit exists when a facility is necessary for the reliability of the electric power supply of the state or for the development of a competitive market for electricity. (CGS. §16-50p (2023))
56. The Project would be a distributed energy resource facility as defined in CGS §16-1(a)(49). CGS §16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." (CGS §16-1(a)(49) (2023); CGS §16a-35k (2023))
57. PA 05-1, An Act Concerning Energy Independence, established a rebuttable presumption that there is a public benefit for electric generating facilities selected by the Department of Public Utility Control (DPUC, now known as PURA) in a Request for Proposals. (PA 05-1; CGS§16-50k (2023))
58. Under the SCEF program, approximately 60% of the total facility capacity will be supplied to low-and-moderate-income customers and approximately 40% of the total facility capacity will be supplied to small business customers and other customers identified by Eversource that are eligible for enrollment. (ESWT 2, response 27)

Public Act 17-218

59. PA 17-218 requires, “for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by DEEP in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the DOAg represents, in writing, to the Council that such project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such project will not materially affect the status of such land as core forest.” (Record)
60. By letter dated March 8, 2023, DEEP’s Bureau of Natural Resources determined that the proposed solar facility would not have a material impact on the status of core forest. (March 8, 2023 DEEP CGS §16-50k No Material Impact to Core Forest Determination Letter)
61. By letter dated March 23, 2023, DOAg determined that the proposed solar facility would not have a material impact on the status of prime farmland with the condition that the proposed on-site agricultural co-use to graze sheep is implemented for the life of the Project. (March 23, 2023 DOAg CGS §16-50k No Material Impact to Prime Farmland Determination Letter)
62. PA 17-218 does not confer the Council’s exclusive jurisdiction upon DOAg or DEEP nor does it permit DOAg or DEEP to impose any enforceable conditions on the construction, maintenance and operation of solar photovoltaic electric generating facilities under the exclusive jurisdiction of the Council. (CGS §16-50k and 16-50x (2023))
63. PA 17-218 also requires that the Council not find a substantial adverse environmental effect in its exercise of jurisdiction over facilities eligible to be approved by declaratory ruling under CGS §16-50k. There are no exemptions from this provision of PA 17-218. (CGS §16-50k (2023))
64. PA 23-163 relating to a decommissioning bond and agricultural site restoration requirement does not apply to the proposed solar facility as it was submitted to the Council as a Petition for a Declaratory Ruling rather than an Application for a Certificate. (EWST 2, response 14)
65. If PA 23-163 did apply to the proposed solar facility, restoration of the site for agricultural purposes under the Public Act is not aligned with the property owner’s intended future use of the site. CCA’s intended future use of the site is for a cemetery. (EWST 2, response 14; Tr. 1, pp. 99-101)
66. In coordination with CCT, EWST developed a Decommissioning and Restoration Plan for the site. EWST committed to restore the site to its pre-development condition to facilitate the future use of the site by CCA. (EWST 2, response 13; Tr. 1, pp. 99-101)
67. Upon decommissioning of the facility, use of the site could be returned to an agricultural use. (Tr. 1, pp. 62-63)

Site Selection

68. The host parcel was selected for the solar facility site due to availability; suitability in terms of parcel size and topography; proximity to electrical utilities for interconnection; compatibility with surrounding land use; and overall impacts on the environment and surrounding area. (EWST 1, p. 4)
69. Pursuant to CGS §16-50p(g), the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility. (Council Administrative Notice Item No. 77 - *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007))

Proposed Site

70. Pursuant to RCSA §16-50j-2a(29), “Site” means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. (RCSA §16-50j-2a(29)(2023))
71. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the facility “site.” This includes portions of the host parcel retained by the property owner and portions of the host parcel the property owner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the facility “site.” (CGS §16-50p(g) (2023))
72. Under CGS §16-50p, the Council’s evaluation criteria does not include the evaluation and/or determination of rights under any lease with the property owner of the proposed site nor does it include the evaluation of property values. (Tr. 1, pp. 7-8; Tr. 2, p. 6; CGS §16-50p (2023))
73. Pursuant to a lease agreement with the property owner, EWST proposes to construct the solar facility on an approximate 24.6-acre site on an approximate 35.68-acre parcel at 31 Thrall Road in East Windsor. (EWST 1, pp. 3, 12 and Attachment B, Title Sheet T-1)
74. The host parcel is zoned Residential (R-3) and is currently used for agriculture. (EWST 1, p. 3)
75. Most of the host parcel is open field, formerly used for growing tobacco and currently used for other agricultural purposes such as hay or corn. Existing structures are located in the southwestern corner of the host parcel near Thrall Road including an unoccupied house, several barns and a shed. (EWST 1, p. 3 and Attachment B, Site Plan OP-1)
76. EWST’s site lease does not include the portions of the host parcel occupied by the existing residence, barns and shed. (EWST 4, response 12)
77. Approximately 23.8 acres of the host parcel is leased to a third party for agricultural purposes. (EWST 1, Appendix J; March 23, 2023 DOAg CGS §16-50k No Material Impact to Prime Farmland Determination Letter)
78. The host parcel has frontage on Thrall Road to the south/southeast. A mix of low-density residential and agricultural uses are located to the east and west of the site. Undeveloped forest and forested wetland are located north of the site. (EWST 1, p. 3 and Attachment B, Boundary Survey Drawing)
79. The site slopes gently from the southwest to the northwest, with ground elevations ranging from approximately 236 feet above mean sea level (amsl) in the southwestern portion to approximately 211 feet amsl in the northwestern portion. (EWST 1, Attachment B, Boundary Survey & LIDAR Contours)

Proposed Facility

Solar Array

80. The proposed Project consists of 9,932 mono-facial photovoltaic panels rated at approximately 545 Watts. (EWST 1, p. 7)

81. The panels would be installed on a single-axis tracker system supported by posts. The tracker system would move along the north-south axis to a maximum angle of 60 degrees. At maximum tilt, the panels would be approximately 10 feet 10 inches above grade at the highest point and 3 feet at the lowest point. (EWST 1, p.7 and Attachment B, Site Plan DN-1; EWST 2, response 23)
82. The panels would be arranged in linear rows in a north-south direction, separated by 8.7-foot wide vegetated aisles. (EWST 1, Attachment B, Site Plans SP-1, SP-2, EC-3, and EC-4)
83. Two 17-foot by 14-foot concrete pads located within 53-foot by 16-foot gravel pad areas would be installed on the north side of the site adjacent to the access drive. Each pad area would support the solar inverters, an electrical transformer, and electrical switchgear. (EWST 1, Attachment B, Site Plans OP-1 and OP-2; EWST 2, response 21)
84. The Project would use a total of 32 string inverters attached to a racking system (on top of the concrete pads) extending approximately 3 to 4 feet above grade. (EWST 1, p. 7 and Attachment A, Inverter Specifications Sheet; Tr. 1, p. 34, 52-53)
85. The Project would be enclosed by a 7-foot tall black vinyl chain link fence. The fence would have privacy mesh facing Thrall Road. The fence is located approximately 75 feet from Thrall Road at its closest section. (EWST 1, p. 7 and Attachment B, Site Plan DN-1; Tr. 1, p. 70)
86. If the fence is shifted to approximately 100 feet from Thrall Road, existing vegetation to the north could be impacted. Shifting the panels eastward or westward to accommodate a larger buffer from Thrall Road could negatively impact production due to shading effects. (Tr. 1, pp. 70-72)
87. EWST could install a farm style livestock fence which would have wood posts. However, the privacy mesh associated with the proposed chain link perimeter fence could not be installed with a farm style livestock fence. (EWST 2, response 44; Tr. 1, p. 17)
88. The nearest property line to the solar facility perimeter fence is 42 feet west of the fence corner next to the facility access gate. This property is located at Parcel # 46-60-16 Thrall Road. (EWST 2, response 15)
89. The nearest off-site residence to the solar facility perimeter fence is located 150 feet to the southeast across the street at 44 Thrall Road. (EWST 2, response 15)

Site Access

90. The Project would be accessed by a new 15-foot wide, 920-foot long gravel access drive extending north from Thrall Road to the transformer/switchgear pads. (EWST 1, Attachment A, Title Sheet T-1 and Site Plans OP-1 and OP-2; EWST 2, Attachment A, p. 1; Tr. 1, p. 16)

Electrical Interconnection

91. The Project is comprised of two metered systems with a design capacity of approximately 1.0 MW AC and 3.0 MW AC for a total of 4.0 MW AC. It would interconnect to an existing overhead 23-kV distribution line on Thrall Road. (EWST 1, pp. 1, 3, 7 and Attachment B, Site Plan OP-2; EWST 2, response 16; Tr. 1, p. 15)

92. In 2022, a 2 MW AC project on the same distribution circuit dropped from the ISO-NE interconnection queue, which impacted the interconnection requirements for the Project. (EWST 1, p. 8; Tr. 1, p. 19)
93. The interconnection includes the installation of eight new utility poles west of the access road along the western limits of the host parcel. The new utility poles would be approximately 40 to 45 feet above ground level. (EWST 1, p. 8 and Attachment B, Site Plan OP-2; EWST 2, response 24; Tr. 1, pp. 108-109)
94. From the existing Eversource electrical distribution pole on the north side of Thrall Road, a new overhead interconnection would run north to a proposed Eversource recloser pole and then continue north to a proposed Eversource junction pole. From the junction pole, the distribution line would split into two lines in parallel to serve two primary meter* poles, then two customer switches poles, and two riser poles with customer reclosers. The lines in parallel would re-combine as one line and run underground to the north to reach the equipment pads in the northern portion of the site.
- *EWST is required by Eversource and SCEF Program rules to maintain separate meters because EWST has two SCEF contracts.
- (EWST 2, response 25 and Attachment 2 – Revised Partial Site Plan OP-2)
95. The facility interconnection was reviewed and approved by ISO-NE and Eversource. (EWST 2, response 26)
96. EWST received its final Interconnection Agreement from Eversource on February 2, 2023. (EWST 1, p. 8; EWST 2, response 26)
97. Per EWST's interconnection approval from Eversource, four utility poles would be installed on the customer-side (ESWT-owned) and four utility poles would be installed on the utility-side (Eversource-owned) (Tr. 1, pp. 15, 39-40; EWST 2, response 25 and Attachment 2 – Revised Partial Site Plan OP-2)
98. The total AC power output (or nameplate rating) of the proposed solar facility would be approximately 4.0 MW at the point of interconnection. (EWST 1, p. 3; EWST 2, response 16)
99. The projected capacity factor of the proposed solar facility is 21.6 percent. The power output would decline by roughly 0.5 percent per year. (EWST 1, p. 7; EWST 2, response 19)
100. EWST has no plans to incorporate a battery energy storage system on the Project site at this time. (EWST 2, response 17; EWST 4, response 7)

Cost

101. The estimated construction cost of the Project is \$8.9 million, inclusive of interconnection-related costs. (EWST 2, response 4; Tr. 1, p. 20)
102. The farm style livestock fence would be about 25 to 30 percent lower in cost than the proposed chain link fence. (Tr. 1, p. 17)

Public Safety

103. The proposed facility would be designed to comply with the current Connecticut State Building Code, National Electrical Code, the National Electrical Safety Code (NESC), and the National Fire Protection Association code. (EWST 1, p. 15; EWST 2, response 29)
104. In the event of a fire or other emergency, emergency responders would be able to shut down the facility via a disconnect switch. (EWST 2, response 33)
105. EWST can provide an emergency key box for emergency responders. (EWST 4, response 65b and 65e)
106. EWST would conduct outreach/training to local emergency responders. (EWST 2, response 42)
107. Specialized equipment would not be required to extinguish a solar panel/electrical component fire. Water may be used for fire suppression. (EWST 2, response 33s and 41; Tr. 1, p. 20)
108. The facility would be remotely monitored 24/7 by the Operations & Maintenance (O&M) provider. The O&M provider would analyze performance data and dispatch crews for system maintenance and repair issues. (EWST 1, Attachment D – O&M Plan, p. 5)
109. The site is not within a Federal Emergency Management Agency (FEMA)-designated 100-year or 500-year flood zone. (EWST 1, p. 29)
110. The Federal Aviation Administration (FAA) requires a glare analysis for on-airport solar development at federally-obligated airports. Federally obligated airports are airports that receive federal funding. The FAA recommends that the design of any solar installation at an airport consider the approach of pilot and ensure pilots will not have to face glare that is straight ahead of them or within 25 degrees of straight ahead during the final approach. (Council Administrative Notice Item Nos. 15-18)
111. The nearest federally-obligated airport to the facility is Bradley International Airport in Windsor Locks, located approximately 8.25 miles west-northwest of the site. No glare analysis is required to comply with FAA policy. (Council Administrative Notice Item No. 15-18; EWST 2, response 31)
112. Notice to the FAA would not be required if a crane is utilized at the site during construction. (EWST 2, response 30)
113. EWST would not use pesticides or herbicides at the site. (EWST 2, response 53; EWST 4, response 43)
114. The two proposed transformers would utilize FR3 oil, a non-toxic and biodegradable oil derived from over 95 percent vegetable oil. The 1,000 kVA and 3,000 kVA transformers would contain 354 gallons and 550 gallons of FR3 oil, respectively. (Tr. 1, p. 78; EWST 4, response 67)
115. EWST's design does not currently include a transformer oil leak detection system. EWST is evaluating a possible transformer oil leak detection system and a concrete containment curb design around the equipment pad. (Tr. 1, pp. 38, 78-79; EWST 4, response 67)

Noise

116. The facility would operate during the daytime. (EWST 5, p. 1)

117. The dominant source of noise from the solar facility would be from the inverters. The transformer and tracker motors would emit minor sound sources. (EWST 2, responses 35 and 36)
118. The tracker motors operate intermittently during the day to re-adjust the panels accordingly. As an intermittent and relatively minor source of sound, the tracker motors would not be considered capable of generating sufficient sound to produce a noise nuisance condition at the property lines. (Tr. 1, pp. 14-15; EWST 5, p. 5)
119. Each inverter would produce a sound level of approximately 65 dBA at a distance of 3.3 feet. (Council Administrative Notice Item No. 48; EWST 5, p. 5)
120. An April 26, 2023 Acoustical Design Survey (ADS) commissioned by EWST took into account the 32 power inverters and calculated a projected noise level of 9 dBA at the property line of the nearest residence (19 Thrall Road) approximately 700 feet to the southwest of the inverters. This analysis took into account attenuation effects associated with vegetation. (EWST 1, Attachment L, pp. 1-5; EWST 1, Attachment B, Boundary Survey & LIDAR Contours)
121. Under the DEEP Noise Control Standards, measurements are to be taken at the property boundaries of an emitter noise zone and a receptor noise zone. The proposed facility is an industrial emitter. The abutting properties are residential receptors. (RCSA §22a-69-1, *et seq* (2023); EWST 1, Attachment L)
122. An additional noise analysis known as the Environmental & Community Noise Assessment (ECNA) dated August 31, 2023 was also performed. This analysis does not take into account attenuation effects associated with vegetation. The ECNA determined that the total worst-case projected noise level would be approximately 36.5 dBA at the nearest property line at 17 Thrall Road and 34.4 dBA at the property line of the nearest residence at 19 Thrall Road. (EWST 5, pp. 1-8)
123. Operation of the facility would be in compliance with the DEEP Noise Control Standards for an industrial emitter to a residential receptor (66 dBA day/51 dBA night). (EWST 5, pp. 1-8)
124. Construction noise is exempt from DEEP Noise Control Standards. (RCSA §22a-69-108(g))

Environmental Effects and Mitigation Measures

Air and Water Quality

125. The proposed Project would meet DEEP air quality standards and would not produce air emissions of regulated air pollutants or GHG. (EWST 1, pp. 33, 36)
126. During construction of the proposed Project, air emissions from the operation of machinery would be temporary in nature. (EWST 1, p. 33)
127. As applicable to any proposed jurisdictional facility site, the Council's Filing Guide for a Petition for a Declaratory Ruling for a Renewable Energy Facility requires the submission of plans for erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Erosion and Sedimentation Control (2002 E&S Guidelines); Water consumption and discharge rate; FEMA Flood Zone information and associated flood mitigation plans; Proximity to DEEP Aquifer Protection Areas; DEEP groundwater classification underlying the site; Wetland and Watercourse Analysis Report and map, and associated Wetland and Watercourse Impact Mitigation Plan; Vernal Pool Analysis Report and Map, and associated Vernal Pool Impact Mitigation Plan. (Record)

128. Operation of the facility would not require water use. (EWST 1, p. 29)
129. Groundwater at the site is classified by DEEP as “GA” which indicates groundwater that is presumed to be suitable for human consumption without treatment. No impacts on groundwater quality are anticipated to result from the Project. (EWST 1, p. 29)
130. Private water wells serve the host parcel, existing residential structures and adjacent parcels. Vibrations from the installation of the racking system are not expected to cause sediment releases, and thus, no disruption to well water flow or quality is expected. (EWST 2, response 34)
131. Sheep grazing at the site is not expected to impact nearby wells. (EWST 4, response 36)
132. The site is not located within a DEEP-designated Aquifer Protection Area. (EWST 1, p. 29)
133. No on-site fuel storage is proposed during construction or operation. (Tr. 1, p. 38)
134. EWST has a Petroleum Storage and Spill Prevention Plan (PSSPP) that includes, but is not limited to, refueling vehicles or machinery at least 100 feet from wetlands, spill response procedures, cleanup and containment procedures, and reporting requirements. (EWST 1, Attachment B, Environmental Notes/Resource Protection Measures, Sheet GN-2)
135. EWST would amend its PSSPP to include worker training and contact information including, but not limited to, regulatory agencies, spill cleanup contractors, and local responders. (Tr. 1, pp. 38-39)
136. The sheep grazing program would be managed with an appropriate number of sheep per acre and rotated throughout the fenced facility to ensure areas are not over grazed. Additionally, the fenced facility would be located over 100 feet from wetlands, leaving a significant riparian buffer to help filter stormwater runoff in addition to protecting water quality that would be managed by the stormwater basin. Thus, water quality is not expected to be affected by grazing sheep. (EWST 2, response 45 EWST 4, response 36)

Stormwater

137. Pursuant to CGS Section 22a-430b, DEEP retains final jurisdiction over stormwater management and administers permit programs to regulate stormwater discharges. DEEP regulations and guidelines set forth standards for erosion and sedimentation control, stormwater pollution control and best engineering practices. (CGS §22a-430b; DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. (DEEP-WPED-GP-015)
138. The DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) requires implementation of a Stormwater Pollution Control Plan (SWPCP) to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a proposed project after construction is complete. In its discretion, DEEP could require an Individual Permit for discharges and hold a public hearing prior to approving or denying any General or Individual Permit (Stormwater Permit) application. (CGS Section 22a430b; CGS Section 22a-430(b))
139. The SWPCP incorporates project designs consistent with the 2002 E&S Guidelines and the *2004 Connecticut Stormwater Quality Manual* (2004 Stormwater Manual). (DEEP-WPED-GP-015)

140. DEEP has the authority to enforce proposed project compliance with its Individual or General Permit and the SWPCP, including, but not limited to, the installation of site-specific water quality protection measures in accordance with the 2002 E&S Guidelines and 2004 Stormwater Manual. (CGS Section 22a-430b)
141. The Council may impose a condition that requires subsequent compliance with DEEP standards and regulations. (Council Administrative Notice Item No. 75 – *FairwindCT, Inc. v. Connecticut Siting Council*)
142. The project would require a DEEP-issued Stormwater Permit prior to commencement of construction activities as defined in the General Permit. (CGS Section 22a-430b)
143. The General Permit requires the designing qualified professional to conduct the SWPCP Implementation Inspection that confirms compliance with the General Permit and the initial implementation of all SWPCP control measures for the initial phase of construction. The SWPCP also requires a qualified inspector to inspect the work areas at least once per week and within 24-hours after a rain event that meets certain permit criteria. The qualified soil erosion and sediment control professional or a qualified professional engineer would inspect the area and confirm stabilization and compliance with the post-construction stormwater management requirements. (DEEP-WPED-GP-015)
144. An existing stormwater basin is located on-site. The equipment pads can be shifted approximately 25 to 50 feet to the south so they would be completely outside of the stormwater basin. (EWST 2, response 49; Tr. 1, pp. 79-80)
145. EWST submitted an application to DEEP for a Stormwater Permit on June 20, 2023. (EWST 2; response 50)
146. The Project would be constructed in two main phases:
 - a) Phase 1 includes the installation of the construction entrance, perimeter erosion and sediment controls, access drive, conduit, racking posts, and solar panels, followed by seeding of disturbed areas.
 - b) Phase 2 includes completion of remaining site work, as well as the installation of landscape plantings, and fencing, followed by seeding and mulching remaining disturbed areas and removal of erosion and sedimentation controls after final site stabilization.(EWST 1, Attachment B, p. 22, Site Plan EC-1)
147. The existing stormwater basin within the northern portion of the site that would serve as a temporary sediment basin during construction. The basin would be cleaned of deposited sediment as necessary during construction. Upon final site stabilization, the basin would be restored and utilized as a permanent stormwater management basin. (EWST 1, p. 9)
148. Post-construction stormwater would be controlled by the existing stormwater basin. The management system is designed to maintain and/or reduce post-development flows to off-site areas during 2, 25, 50, and 100-year storm events. (EWST 1, p. 9 and Attachment C – Stormwater Management Report, pp. 1-3)

149. The Inland Wetlands and Watercourses Act (IWWA), CGS §22a-36, *et seq.*, contains a specific legislative finding that the inland wetlands and watercourses of the state are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed, and the preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. (CGS §22a-36, *et seq.*)
150. The IWWA grants regulatory agencies with the authority to regulate upland review areas in its discretion if it finds such regulations necessary to protect wetlands or watercourses from activity that will likely affect those areas. (CGS §22a-42a)
151. The IWWA forbids regulatory agencies from issuing a permit for a regulated activity unless it finds on the basis of the record that a feasible and prudent alternative does not exist. (CGS §22a-41)
152. Under the IWWA:
 - a) “Wetlands” means land, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service of the United States Department of Agriculture;
 - b) “Watercourses” means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border the state; and
 - c) Intermittent watercourses are delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation. (CGS §22a-36, *et seq.*)
153. Wetland inspections on the site were performed on May 13, 2021. EWST identified one wetland (Wetland 1) located along the northwestern site boundary. Wetland 1 consists of a broad interior emergent swamp system. (EWST 1, p. 22)
154. The construction limit of disturbance (LOD) would be approximately 169 feet southeast of Wetland 1 at its closest point. (EWST 1, p. 23 and Attachment A, Site Plans OP-1 and OP-2)
155. In compliance with Stormwater Permit Appendix I, the Project would maintain a wetland buffer of at least 50 feet to stormwater control features and a wetland buffer of at least 100 feet to the solar panels. (DEEP-WPED-GP-015; EWST 1, Attachment A, Site Plans OP-1 and OP-2)
156. On April 19, 2023, EWST conducted an inspection of Wetland 1 to determine if any vernal pools were present. Two potential vernal pools (PVPs) were identified within Wetland 1 and although no evidence of breeding vernal pool obligate species was found, EWST conservatively treated PVP1 and PVP2 as Tier I vernal pools in its analysis. (EWST 1, pp. 24-25)
157. Construction of the Project would not be within the vernal pool envelope, an area within 100 feet around a vernal pool, of PVP1 or PVP2. (EWST 1, p. 27)
158. Post-construction, the amount of development within the Critical Terrestrial Habitat (CTH), an area within 100 to 750 feet around the PVPs, would be approximately 19 percent for PVP1 and 15 percent for PVP2, below the 25 percent development area threshold recommended by the 2015 U.S. Army Corps of Engineers Vernal Pool Best Management Practices. (EWST 1, p. 27)

159. Potential vectors of migration of obligate species from the PVPs are expected to be to the north, east and west of the PVPs into forested terrestrial habitat and forested wetland habitat. Vernal pool species would most likely avoid the open field areas to the south, where the proposed project is located. (Council Administrative Notice No. 86 – 2015 US Army Corps of Engineers New England District’s Vernal Pool Best Management Practices; Tr. 1, pp. 50-51)
160. The Project would be consistent with the 2015 U.S. Army Corps of Engineers New England District’s Vernal Pool Best Management Practices. (Council Administrative Notice No. 86 – 2015 US Army Corps of Engineers New England District’s Vernal Pool Best Management Practices; EWST 1, p. 26)
161. EWTS would implement vernal pool best management practices (BMPs) during peak amphibian movement periods such as March 1 through May 15; and July 15 through September 15. With implementation of the vernal pool BMPs, the Project is not likely to result in an adverse impact to vernal pool resources. (EWST 1, pp. 28-29)

Forests and Parks

162. There would be about 0.1 acre of tree removal and/or trimming near the existing farm buildings to accommodate the electrical interconnection. (EWST 1, p. 18; EWST 4, response 40)
163. There are no state parks or forests within one mile of the site. (EWST 1, Attachment N – Viewshed Map; Council Administrative Notice Item No. 101)
164. Pierce Memorial Park is a Town park located approximately 0.18-mile southwest of the proposed site at 175 Windsorville Road. There is significant tree buffer between the park and the facility site. However, views of the facility through the trees during leaf-off conditions are possible. (EWST 1, p. 34 and Attachment N – Viewshed Map; Tr. 1, pp. 22-24; EWST 1, p. 34 and Attachment N – Viewshed Map; EWST 4, response 34)

Scenic, Historic and Recreational Values

165. A Phase 1A Cultural Resources Assessment Survey Report (Phase 1A Report) dated June 2021 determined that there are no properties listed on the National Register of Historic Places (NRHP) or State Register of Historic Places within 1 mile of the site and that the proposed site retains a moderate to high potential to yield intact archaeological deposits. (EWST 1, Attachment K – Phase 1A Report, pp. 17, 21)
166. Two tobacco sheds and a barn located in the southwestern portion of the host parcel may retain historic significance, but they would not be directly impacted by the facility construction. (EWST 1, Attachment K – Phase 1A Report, p. 21)
167. A Phase 1B Cultural Resources Reconnaissance Survey (Phase 1B Survey) was performed and determined that no impacts to significant cultural resources are anticipated to result from the Project construction, and no additional archaeological investigation of the Project site is warranted. (EWST 1, Attachment K – Phase 1B Report, p. i)
168. Off-site visibility to the north would be obscured by existing mature vegetation. Areas to the south and east are expected to have some visibility of the top of the utility interconnection poles located in the southwestern corner of the site. Seasonal (or leaf-off) views may be possible in areas to the south, southwest, northwest and northeast. (EWST 1, p. 36)

169. To provide screening along Thrall Road to the south/southeast, EWST intends to install two rows of evergreen plantings (approximately 10 feet center to center spacing) along the exterior southwestern fence line. A total of 170 evergreen trees would be planted with a staggered formation. The plantings would be 6 to 8 feet tall at planting and would reach a mature height of 15 to 20 feet. (EWST 1, Attachment B, Site Plan OP-2; Tr. 1, pp. 82-84, 90)
170. To provide additional screening along the southern and eastern portions of the Project, EWST proposes privacy mesh facing Thrall Road would begin at the entrance gate/access drive and continue counterclockwise along the chain link fence to the far northeastern corner of the fence. The privacy mesh would provide additional screening for areas that do not have existing vegetative screening and/or areas where existing vegetation is not maintained. (EWST 1, Attachment B, Site Plan OP-2; Tr. 1, pp. 21-22)
171. Installing a berm under the landscape plantings would require soil to be brought to the site because there is no net cut material proposed for the Project. Additionally, installation of a berm would increase the amount of disturbance and the number of construction trucks required to visit the site. (Tr. 1, pp. 93-94; EWST 1, Attachment B, Title Sheet T-1; EWST 4, response 17)
172. A natural berm occurs along the northern backside of the host parcel between the limits of disturbance and the wetlands to the north. The natural berm varies in elevation. (Tr. 1, pp. 45-46)
173. Landscape plantings would be replaced if there is die off. Plantings would initially be inspected approximately monthly. Once the plantings are established, inspections would occur per the routine site inspections per the Operations and Maintenance (O&M) Plan. (Tr. 1, p. 22; EWST 1, Attachment D)
174. There are no town or state designated scenic roads within one mile of the site. The nearest scenic road is a portion of Route 74, located approximately 5.7 miles southeast of the Project in the Town of Tolland. The facility would not be visible from that location. (EWST 1, p. 34; EWST 4, response 35)
175. The Town has not developed a scenic road ordinance but expressed concern about disruption to the aesthetics of a scenic road loop, envisioned in its 2016 POCD, that is approximately 16 miles located along portions of the following roads, including, but not limited to: Scantic Road, Route 191, Route 140, East Road, Chamberlain Road, Clark Road, Thrall Road, Wapping Road, and Plantation Road. (Town 4; Tr. 1, pp. 123-124; Town POCD)
176. The Town POCD recommends the development of Village Plans. The conceptual Windsorville Village District plan area is adjacent to the site and does not include the site parcel. (Tr. 124-125; Town POCD)
177. Visibility of the Project from the conceptual Windsorville Village District is not expected to be significant. Limited seasonal visibility is possible, but the facility would be difficult to discern between the trees outside of the immediately vicinity of the Project. (Tr. 1, p. 24)
178. There are no “blue-blazed” hiking trails maintained by the Connecticut Forest and Park Association within one mile of site. (EWST 1, Attachment N – Viewshed Map; Council Administrative Notice No. 96)
179. No comments were received from OPM or DEEP regarding impact to scenic quality or resources. (Record)

180. The Project would be consistent with the State Plan of Conservation and Development as it would be a Class I renewable zero emissions electric generation facility that is compatible with state goals for environmental protection and minimization of potential impacts to historic, agricultural and scenic resources. (Tr. 1, 20; Council Administrative Notice No. 62, p. 15)

Fish, Aquaculture and Wildlife

181. EWST reviewed the most recent DEEP Natural Diversity Database (NDDB) mapping for the site area which determined that no NDDB buffered areas overlapped the site, thus, no consultation with the DEEP NDDB program is required. (EWST 1, p. 21 and Attachment I; DEEP-WPED-GP-015 - Appendix A)
182. EWST consulted with the U.S. Fish & Wildlife Service's (USFWS) Information, Planning and Consultation (IPaC) service regarding federally-listed species that may be present within the Project area. The IPaC report identified the northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species. Per USFWS NLEB guidance, EWST utilized the USFWS NLEB planning tool which determined the Project would not likely have an adverse effect on or incidental take of NLEB. Additionally, there are no known NLEB maternity roost trees within 150 feet of the Project site, and the nearest NLEB habitat resource is located over 10 miles to the northwest in the Town of East Granby. (EWST 1, pp. 21-22 and Appendix I, UWSFS & NDDB Compliance)
183. The Monarch butterfly is a candidate species under the Federal Endangered Species Act. The proposed facility is not anticipated to adversely affect the butterfly and the seed mix for site restoration includes common milkweed, which is a host plant for butterfly egg laying. (EWST 4, response 52)
184. The proposed chain link fence would not have a wildlife gap at the bottom to provide protection and containment of the sheep. (EWST 2, response 44)

Agriculture

185. According to mapping by DEEP, surficial materials at the site are classified as deposits of sand and deposits of sand and gravel. (EWST 1, p. 30)
186. The statutory mission of the Governor's Council for Agricultural Development (GCAD) is to develop a statewide plan for Connecticut agriculture. In 2012, GCAD recommended DOAg create an agriculture-friendly energy policy that includes, but is not limited to, on-farm energy production to reduce costs and supplement farm income, agricultural net metering for power production and transmission, and qualification of agricultural anaerobic digestion projects for zero-emissions renewable energy credits. (Public Act 11-189; GCAD First Annual Report December 2012)
187. Agriculture in Connecticut is likely to be adversely impacted by climate change. It is most affected by changes in temperature and both the abundance and lack of precipitation. The top five most imperiled agricultural products are maple syrup, dairy, warm weather produce, shellfish and apple and pear production, but there are opportunities for production expansion with the future climate, including, but not limited to, biofuel crops, witch hazel and grapes. (Council Administrative Notice Item No. 66 – Climate Change Preparedness Plan)
188. Adaptation strategies for climate change impacts to agriculture include promotion of policies to reduce energy use, conserve water and encourage sustainability. (Council Administrative Notice Item No. 66 – Climate Change Preparedness Plan)

189. Pursuant to CGS §22-26aa, *et seq.*, DOAg administers the Statewide Program for the Preservation of Agricultural Land, a voluntary program to establish a land resource base consisting mainly of prime and important farmland soils. A permanent restriction on non-agricultural uses is placed on the deed of participating properties, but the farms remain in private ownership and continue to pay local property taxes. The host parcel is not enrolled in this program. (CGS §22-26aa, *et seq.*; EWST 2, response 12)
190. PA 490 is Connecticut's Land Use Value Assessment Law for Farm Land, Forest Land and Open Space Land that allows land to be assessed at its use value rather than its fair market or highest and best use value for purposes of local property taxation. The host parcel is not enrolled in the PA 490 Program. (EWST 2, response 11)
191. Prime Farmland Soils are defined by the United States Department of Agriculture National Resources Conservation Service as the most suitable land for producing food, feed, fiber, forage, and oilseed crops. (Council Administrative Notice Item No. 14)
192. The host parcel contains 18.1 acres of mapped prime farmland soil, of which 11.2 acres are within the site. (EWST 1, Attachment J, DOAg CGS §16-50k No Material Impact to Prime Farmland Determination Letter dated March 23, 2023 and EWST Letter to DoAg, dated January 24, 2023)
193. DOAg's March 23, 2023 No Material Impact to Prime Farmland letter for the proposed facility references sheep grazing within the fenced solar array. (March 23, 2023 DOAg CGS §16-50k No Material Impact to Prime Farmland Determination Letter)
194. EWST's agricultural co-use plan for the proposed facility site includes sheep grazing within the solar array perimeter fence. Grazing would not be permitted in areas outside of the perimeter fence. (EWST 1, Attachment J, Sheep Grazing Plan)
195. EWST would maintain the agricultural co-use for the life of the Project. (Tr. 1, pp. 24-25)
196. Sheep grazing would be conducted by establishing four temporary paddocks of approximately 4.9 acres each within the solar array, isolated by temporary electric fencing. Signs would be installed at the front gate of the solar facility alerting emergency personnel of the use of the facility for grazing and the use of temporary electric fencing. The sign would also include contact information for the solar grazing entity to assist emergency personnel regarding removal of the electric fence equipment and sheep, if necessary. (EWST 1, Attachment J, Sheep Grazing Plan)
197. The electric fence would be powered by a 12-volt battery attached to a solar charger that is independent of the proposed solar electric generating facility. (EWST 2, response 40)
198. It is anticipated 43 sheep would be on-site, rotating among four temporary paddocks established by the sheep grazer. Sheep would graze in one temporary paddock for 15 days, then would be moved to another temporary paddock depending on forage conditions. Thus, each paddock would "rest" for approximately 45 days due to the livestock rotation pattern. (EWST 1, Attachment J, Sheep Grazing Plan)
199. Water would be delivered to the site via cart or truck and placed in troughs for the sheep. The troughs would be refilled every two to three days or re-supplied by a temporary storage tank that would automatically gravity fed into the troughs as necessary via a float valve. (EWST 2, response 37)

200. The solar array would be seeded with a mix (e.g. Fuzz & Buzz or equivalent) that provides sufficient forage for livestock and promotes pollinator species. (EWST 2, response 43; EWST 1, Attachment J, Sheep Grazing Plan, pp. 1-7; EWST 1, Attachment B, Landscaping Details, Sheet DN-2)

Facility Construction

201. If the Project is approved by the Council, the following permits would be required for construction and operation:
- a) DEEP Stormwater Permit;
 - b) Town Building Permit; and
 - c) Town Electrical Permit.
- (EWST 2, response 3)
202. Existing grades would be maintained for the Project, and minimal grading expected to be necessary. (EWST 1, p. 11)
203. Construction of the facility would not require cut or fill. The only proposed excavation is limited to trenching and access road construction. Any soil from the limited excavation would be spread on-site. (EWST 1, Attachment B, Title Sheet T-1; EWST 4, response 17; Tr. 1, pp. 58-59, p. 94)
204. Site construction would disturb an approximate 24.7-acre area. (EWST 1, Attachment B, Title Sheet T-1)
205. The racking posts would be driven to a depth of approximately 10 feet depending on the location and specific geotechnical conditions. The posts would typically be driven into the ground utilizing pile driving equipment. If there is subsurface resistance (e.g. ledge), EWST could drill through such resistance or utilize a concrete pad near the surface to reduce the depth required. (EWST 2, response 48; Tr. 1, pp. 16-17)
206. Construction of the facility is expected to take 6 months. (EWST 1, p. 11)
207. Construction hours would be Monday through Friday from 7:00 AM to 6:00 PM and Saturday from 8:00 AM to 5:00 PM. (EWST 1, p. 11)

Traffic

208. During construction, 16 trucks per day would visit the site daily over an approximately two to three week period. This would consist of approximately 5 flatbed semi-trucks for delivery of racking equipment; 7 trucks with approximately 40-foot long containers for solar modules; and 4 flatbed semi-trucks for transformers, inverters, wire rolls and other equipment. (Tr. 1, pp. 77-78)
209. Construction workers would park on the site along the proposed access drive. (Tr. 1, p. 18)
210. Once operational, the site would be visited a few times per year for maintenance purposes and as necessary for any repairs. (Tr. 1, p. 18)
211. The sheep farmer would visit the site during the sheep grazing season of approximately May through October. Site visits would vary from daily to 2 to 3 times per week during the grazing season. (Tr. 1, pp. 18-19)

Facility Operations and Maintenance

212. EWST provided a post-construction O&M Plan that includes, but is not limited to, provisions for remote monitoring, equipment maintenance, and site safety and security. (EWST 1, p. 11 and Attachment D)
213. The main topics of the post-construction O&M Plan include, but are not limited to, the following:
- a) Site safety;
 - b) System operation and monitoring;
 - c) System maintenance;
 - d) Facility maintenance; and
 - e) Emergency response and site access.
- (EWST 1, Attachment D)
214. To maintain vegetation within the solar facility perimeter fence, EWST proposes to implement a rotational sheep grazing plan within the fenced solar array area. When sheep are not maintaining vegetation, mowing and trimming may be necessary. (EWST 1, Attachment J, Sheep Grazing Plan, pp. 1-7; EWST 1, Attachment D – O&M Plan, p. 5)
215. No manual snow removal from the solar panels is expected. The tracker system can detect snow, causing the tracker to orient the panels at the steepest angle possible (~55 degrees) allowing snow to slide off. The tracker system can also reverse direction and move the panels to ~55 degrees facing the opposite direction to further release snow. (EWST 1, p. 12 and Attachment D – O&M Plan, p. 4; Tr. 1, pp. 41-42)
216. When necessary, the solar panels would be washed using water and soft bristle brooms. No chemicals would be used. (EWST 1, Attachment D – O&M Plan, pp. 4-5)
217. EWST would conduct annual inspections of the stormwater control features. (EWST 1, Attachment D – O&M Plan, pp. 5)

Decommissioning

218. The facility has a design life of approximately 35 years. (EWST 1, Attachment E, Decommissioning and Restoration Plan, p. 1)
219. At the end of the Project's lifespan, it will be fully decommissioned and removed from the property. The site would be restored to its original condition. Access road, fencing and stormwater management system may remain if requested by the property owner. (EWST 1, Attachment E, Decommissioning and Restoration Plan, pp. 2-3; EWST 2, response 52)
220. The property owner will retain land development rights. (EWST 1, Attachment J - EWST Letter to DoAg, dated January 24, 2023)
221. Pursuant to CGS §16-50p(g), the Council has no authority to evaluate, amend and/or determine rights under any lease with the property owner of the proposed site, including, but limited to, the restoration of the soils to prime farmland status. (CGS §16-50p(g) (2023))
222. The lease agreement with the property owner includes provisions related to decommissioning and site restoration at the end of the Project's useful life. (EWST 1, p. 12)

223. EWST intends to recycle Project materials, including solar panels, to the maximum extent practicable. Project materials that cannot be recycled would be removed from the site and disposed of at a licensed disposal facility. (EWST 1, Attachment E)
224. EWST selected solar panels for the Project that meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria¹ for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life. (EWST 1, p. 7; EWST 4, response 69)

Neighborhood Concerns

225. Based on neighborhood concerns regarding noise, EWST modified the proposed facility by conducting a noise study, selecting a different inverter model, and locating inverters in the middle of the arrays at least 300 feet from any property line. With respect to neighborhood visibility concerns, EWST also included plans for landscaping plantings and fence privacy mesh. (EWST 4, responses 2 and 42; EWST 1, p. 7 and Attachment B, Site Plan DN-1)
226. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public comment session on September 7, 2023 at 6:30 p.m. via Zoom remote conferencing. (Record; Tr. 2, p. 1)
227. During the public comment session, 13 members of the public made oral limited appearance statements about the proposed facility. Concerns include, but are not limited to, the following;
- site is near residences;
 - visibility;
 - water quality;
 - noise; and
 - loss of farmland.
- (Record; Tr. 2, pp. 8-41)
228. The Council received 7 written limited appearance statements regarding the proposed facility. (Record)

¹ <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-C/section-261.24>

Figure 1 – Site Location



- Legend**
- Site
 - Project Area
 - Municipal Boundary

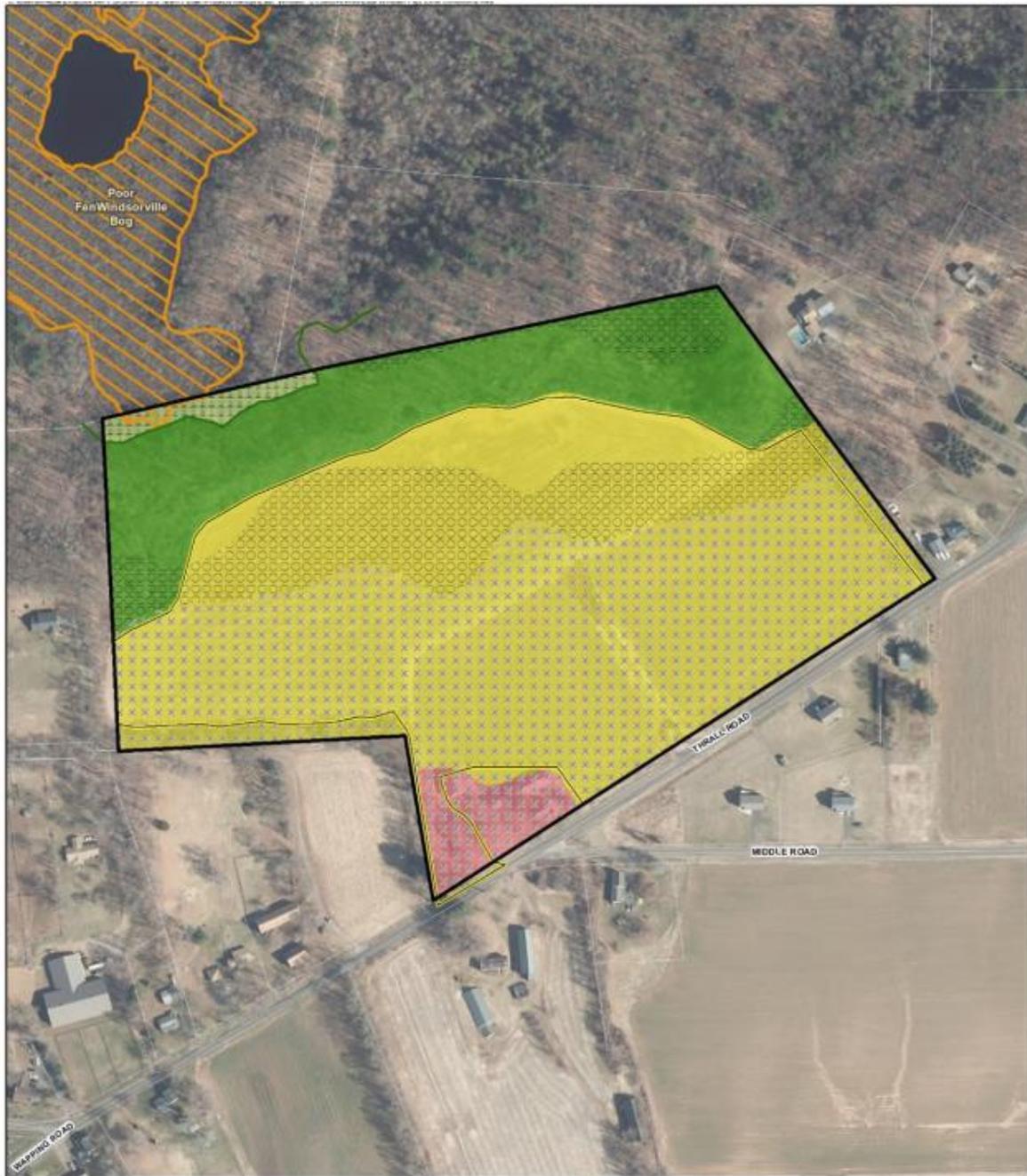
Map Notes:
Base Map Source: USGS 7.5 Minute Topographic
Quadrangle Maps, Broad Brook, CT (1984) and
Mechanic, CT (1982)
Map Scale: 1 inch = 2,000 feet
Map Date: March 2022



**Figure 1
Site Location Map**
Proposed Solar Energy Facility
East Windsor Solar Two
31 Thrall Road
East Windsor, Connecticut



Figure 2- Existing Conditions



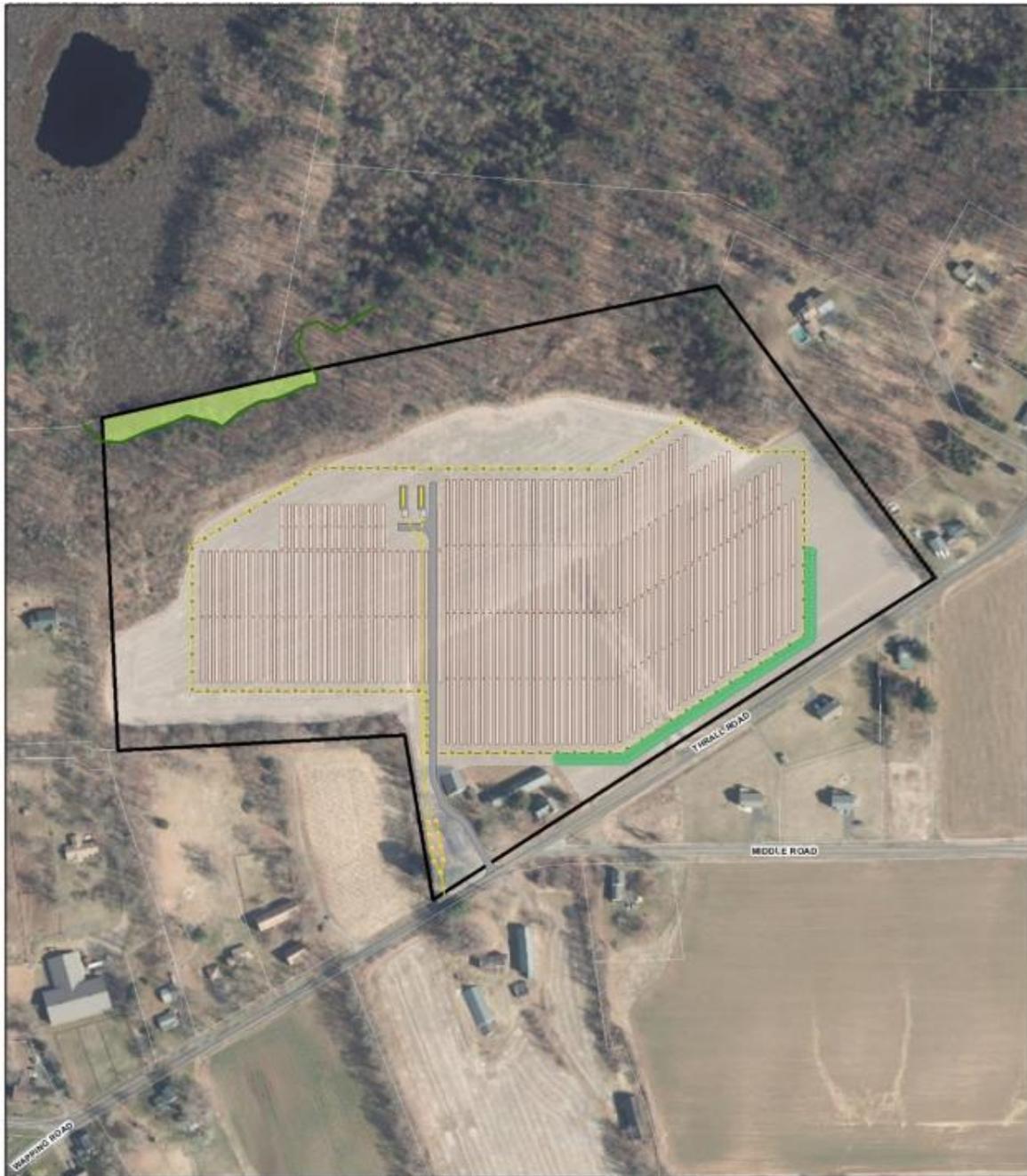
**Figure 2
 Existing Conditions**
 Proposed Solar Energy Facility
 East Windsor Solar Two
 31 Thrall Road
 East Windsor, Connecticut

- Legend**
- Site
 - Project Area
 - Delineated Wetland Boundary
 - Wetland Area
 - Critical Habitat (CTDEEP, Oct 2019)
 - Farmland Soils**
 - Prime Farmland Soils
 - Statewide Important Farmland Soils
 - Habitat**
 - Developed
 - Mixed Field
 - Upland Forest
 - Wetland Forest

Map Notes:
 Base Map Source: 2019 Aerial Photograph (CTBCI)
 Map Scale: 1 inch = 300 Feet
 Map Date: March 2023



Figure 3 – Proposed Facility Conditions



- Legend**
- Site
 - Approximate Parcel Boundary
 - Delineated Wetland Boundary
 - Wetland Area
 - Landscape Plantings
 - + Utility Pole
 - Fence
 - Underconnection Path
 - Underground Electrical Utility
 - Equipment
 - Solar Modules
 - Concrete Equipment Pad
 - Gravel Access Drive
 - Limit of Disturbance

**Figure 3
 Proposed Conditions**
 Proposed Solar Energy Facility
 East Windsor Solar Two
 31 Thrall Road
 East Windsor, Connecticut

Map Note:
 Base Map Source: 2019 Aerial Photographs (CTECC)
 Map Scale: 1 inch = 300 feet
 Map Date: March 2023

