DOCKET NO. 524 – Greenskies Clean Energy, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 4.625-megawatt-AC solar photovoltaic electric generating facility and associated equipment located at Fawn Meadow Lane (Parcel No. 029-018D), Woodbury, Connecticut and associated electrical interconnection.

November 15, 2024

DRAFT Findings of Fact

Introduction

- 1. Pursuant to the Public Utility Environmental Standards Act (PUESA), Connecticut General Statutes (CGS) §16-50g et seq., on July 11, 2024, Greenskies Clean Energy, LLC (GCE) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 4.625-megawatt (MW) AC solar photovoltaic electric generating facility and associated equipment located at Fawn Meadow Lane (Parcel No. 029-018D), Woodbury, Connecticut and associated electrical interconnection (Project). (GC1 1, p. 3)
- 2. Pursuant to CGS §16-50k, no person shall commence the preparation of a site for a facility that may, as determined by the Council, have a substantial adverse environmental effect without obtaining a Certificate issued with respect to such facility by the Council. (CGS §16-50k (2024)).
- 3. The Council's purpose under PUESA is to provide for the balancing of the need for adequate and reliable public utility services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values. (CGS §16-50g (2024))
- 4. The Council has exclusive jurisdiction over electric generating facility sites throughout the state. A facility site is defined as 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. (CGS §16-50i(a)(3); CGS §16-50x (2024); Regulations of Connecticut State Agencies (RCSA) §16-50j-2a(29) (2024))
- 5. Pursuant to §16-50x, the Council has exclusive jurisdiction over the construction, maintenance and operation of the proposed solar photovoltaic electric generating facility. (CGS §16-50x (2024))
- 6. Under CGS §16-50p, the Council shall render a final decision on an application for an electric generating facility not later than 180 days after the filing of an application. The 180-day deadline for the Council's final decision on this application under CGS §16-50p is January 7, 2025. The Council may extend the final decision deadline by not more than 180 days with the consent of the applicant. (CGS §16-50p (2024))
- 7. In its final decision, the Council shall find and determine:
 - a. A public benefit for the facility;
 - b. The nature of the probable environmental impact of the facility alone and cumulatively with other existing facilities, including a specification of every significant adverse effect, including, but not limited to, (i) electromagnetic fields that, whether alone or cumulatively with other effects, impact on, and conflict with the policies of the state concerning the natural environment, (ii)

- ecological balance, (iii) public health and safety, (iv) scenic, historic and recreational values, (v) agriculture, (vi) forests and parks, (vii) air and water purity, and (viii) fish, aquaculture and wildlife; and
- c. Why the adverse effects or conflicts referred to above are not sufficient reason to deny the application.
 (CGS §16-50p (2024))
- 8. In its evaluation of an application for an electric generating facility under PUESA, the Council shall also consider neighborhood concerns, including public safety. (CGS §16-50p (2024))
- 9. GCE is a limited liability company with its principal place of business at 127 Washington Ave, North Haven, Connecticut. It is a developer and operator of solar electric generating facilities. (GCE 1, pp. 5-6)
- 10. The party to this proceeding is GCE. (Record)
- 11. Under Regulations of Connecticut State Agencies (RCSA) §16-50j-16, the Council may add parties and intervenors at any time during the pendency of a proceeding. Any person granted status is responsible for obtaining and reviewing all materials for the proceeding. (RCSA §16-50j-16 (2024))
- 12. The purpose of the proposed Project is to contribute to the state's efforts to promote the deployment of clean renewable energy sources. (GCE 1, p. 4)
- 13. GCE has a 21-year lease for the proposed site with options for up to four additional five-year lease extensions. There is no option for GCE to purchase the host parcel. (GCE 2, response 14)
- 14. If GCE transfers the solar facility to another entity in the future, GCE would provide a written agreement as to the entity responsible for any outstanding conditions of the Certificate 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. (GCE 2, response 12)
- 15. The proposed Project would be a "grid-side distributed resources" facility under CGS §16-1(a)(37). (CGS § 16-1(a)(37)(2024)
- 16. 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)(2024))
- 17. 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)
- 18. Pursuant to CGS §16-50*l* (b), GCE provided public notice of the filing of the application to the Council that was published in the Waterbury Republican on July 16 and July 18, 2024. (GCE 2, response 1)
- 19. On June 27, 2024, GCE provided notice of the application to all abutting property owners by certified mail and to all federal, state and local officials and agencies pursuant to CGS §16-50*l* (b). (GCE 1, p. 14, Appendix O)

Administrative Procedures

- 20. Hearings shall be held at times and locations specified by the Council. (CGS §16-50m (2024); RCSA §16-50j-20 (2024))
- 21. CGS §1-225a 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." (CGS §1-225a (2024); CGS §1-200, et seq. (2024))
- 22. CGS §1-225a 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.

(CGS §1-225a (2024))

- 23. On July 12, 2024, the Council sent a letter to the State Treasurer, with a copy to the Chief Elected Official of the Town of Woodbury (Town) and the Town of Bethlehem, which is located within 2,500 feet of the proposed facility site (municipalities) stating that \$25,000 was received from GCE as payment to the Municipal Participation Fund (MPF) and deposited in the Office of State Treasurer's department account. The MPF is available for the municipalities to apply for reimbursement to defray expenses incurred by the municipalities if they participate as a party in the proceeding, pursuant to CGS §16-50bb. The municipalities did not participate as parties in the proceeding. (Record; CGS §16-50bb (2024)).
- 24. During a regular Council meeting on August 1, 2024, the application was deemed complete pursuant to RCSA §16-50*l*-1a and the public hearing schedule was approved by the Council. (Record; Council August 1, 2024 Meeting Minutes)
- 25. Pursuant to CGS §16-50m, on August 2, 2024 the Council sent a letter to the municipalities to provide notification of the scheduled public hearing via Zoom remote conferencing and to invite the municipalities to participate. (Record)
- 26. 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 (2024))
- 27. Pursuant to CGS § 16-50m, the Council published legal notice of the date and time of the public hearing in the Voices on August 7, 2024. (Record)

- 28. 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 August 2, 2024; Council Administrative Notice Item No. 78 Manor Development Corp. v. Conservation Comm. of Simsbury, 180 Conn. 692, 701 (1980); Council Administrative Notice Item No. 79 Grimes v. Conservation Comm. of Litchfield, 243 Conn. 266, 278 (1997))
- 29. On August 15, 2024, in lieu of an in-person field review of the proposed site, the Council requested that GCE submit photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the proposed site. On September 5, 2024, GCE submitted such information in response to the Council's interrogatories. (Record; GCE 2, response 77)
- 30. On August 28, 2024, 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, as well as the order of party and intervenor appearances and cross examination during the hearing. GCE participated in the pre-hearing conference. Procedures for the public hearing via Zoom remote conferencing were also discussed. (Council Pre-Hearing Conference Memorandum, dated August 23, 2024)
- 31. On September 22, 2024, in compliance with RCSA §16-50j-21, GCE installed a four-foot by six-foot sign in the vicinity of the proposed site access drive. The sign presented information about the proposed solar facility, the public hearing date and contact information for the Council. (Council Pre-Hearing Conference Memorandum, dated August 23, 2024; GCE 4; Transcript 1 October 3, 2024- 2:00 p.m. [Tr. 1], p. 5)
- 32. On September 26, 2024, pursuant to CGS §16-500, GCE filed a Motion for Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site. (Record)
- 33. At the public hearing held on October 3, 2024, the Council issued a Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site, pursuant to CGS §1-210(b) and consistent with the Conclusions of Law adopted in Council Docket 366. (Record)
- 34. Pursuant to CGS §16-50m, the Council gave due notice of a public hearing to be held on October 3, 2024, 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 August 2, 2024)
- 35. 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; Transcript 2 October 3, 2024- 2:00 p.m. [Tr. 2], p. 7; CGS §16-50n(f) (2024))
- 36. During the public comment session of the Council's hearing held on October 3, 2024, five persons made oral limited appearance statements about the proposed facility. (Tr. 2, pp. 9-20)

- 37. In compliance with CGS §1-225a:
 - a) The public had the ability to view and listen to the public hearing(s) in real-time, by computer, smartphone, tablet or telephone;
 - b) The public hearing was recorded and transcribed, and such recordings and transcripts were posted on the Council's website on October 3, and October 18, 2024, 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 public hearing, 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 public hearing.

(Hearing Notice dated August 2, 2024; Tr. 1; Tr. 2; Record)

- 38. 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 (2024))
- 39. 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 (2024); *Dore v. Commissioner of Motor Vehicles*, 62 Conn. App. 604 (2001); RCSA §16-50j-25 (2024))
- 40. The Council's experience, technical competence, and specialized knowledge may be used in the evaluation of evidence. (CGS §4-178 (2024))
- 41. GCE's witnesses in this proceeding prepared, supervised and/or assisted in the preparation of exhibits. During the evidentiary hearing session, the Council cross examined GCE's witness panel on their respective exhibits. (Record; Tr. 1)
- 42. Pursuant to CGS §16-50n(f), at the conclusion of the evidentiary hearing session held on October 3, 2024, the Council closed the evidentiary record for Docket 524 and established November 2, 2024 as the deadline for public comments and the submission of briefs and proposed findings of fact by the parties and intervenors to the proceeding. (Tr. 2, pp. 20-21)
- 43. GCE did not submit a post hearing brief or proposed findings of fact. (Record)
- 44. Pursuant to CGS §16-50p(g), the Council shall in no way be limited by GCE already having acquired land or an interest therein for the purpose of constructing the proposed facility. (CGS §16-50p(g) (2024); Council Administrative Notice Item No. 82 Corcoran v. Conn. Siting Council, 284 Conn. 455 (2007))
- 45. 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. (CGS §16-50p (2024); *Woodbridge Newton Neighborhood Env't Trust, et al v. Conn. Siting Council*, 2024 Conn. LEXIS 163 (2024); *Goldfisher v. Conn. Siting Council*, 95 Conn. App. 193 (2006))

46. Constitutional principles permit an administrative agency to organize its hearing schedule so as to balance its interest in reasonable, orderly and non-repetitive proceedings against the risk of erroneous deprivation of a private interest. It is not unconstitutional for the Council, in good faith, to balance its statutory time constraints against the desire of a party, intervenor or CEPA intervenor for more time to present their objections to a proposal. (*Concerned Citizens of Sterling v. Conn. Siting Council*, 215 Conn. 474 (1990); *Pet v. Dept. of Public Health*, 228 Conn. 651 (1994); *FairwindCT, Inc. v. Conn. Siting Council*, 313 Conn. 669 (2014))

Municipal Consultation

- 47. Pursuant to CGS §16-50*l*(e), GCE began consultation with the municipalities on May 2, 2024. GCE provided the municipalities with Project information and development plans on May 3, 2024. (GCE 1, p. 13)
- 48. GCE met with Town officials on May 6, 2024 to discuss the Project. The Town provided comments including but not limited to, lack of a turnaround area where Fawn Meadow Lane abuts the host parcel, site screening, universal key box, underground interconnection, noise attenuation, exterior lighting, and wetland mapping. (GCE 1, pp. 13-14)
- 49. Fawn Meadow Lane is a Town road. The terminus of Fawn Meadow Lane that abuts the host parcel is not part of the proposed facility site and therefore not under the jurisdiction of the Council. (GCE 1, Appendix A; GCE 1, Bulk file exhibit 1a Town of Woodbury Zoning Regulations; GCE 2, response 2)
- 50. On June 4, 2024, in response to the Town's comments, GCE provided a revised site plan and correspondence addressing the Town's comments. (GCE 1, p. 14)
- 51. On September 24, 2024, the Town Zoning Commission submitted comments¹ to the Council regarding wetlands and watercourses, noise, farmland soil, stormwater management, setbacks, screening and visual impact. These comments, among other public health and safety and environmental concerns, are addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record)
- 52. On October 1, 2024, the Town First Selectperson submitted comments² to the Council regarding stormwater management, groundwater and Electric and Magnetic Fields (EMF) testing, tree clearing, turnaround area, noise and blasting. These comments, among other public health and safety and environmental concerns, are addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record)

¹https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do524/proceduralcorrespondence/do524-woodburyzoningcommission_a.pdf?rev=df8e1d6393fa4cddb4caec3e46cbe6cb&hash=FF019B2B38B1D3CA6FFD304_E66F33E86

²https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do524/stateagencyofficialtownandordeterminations/do524-woodburyfirstselectman_a.pdf?rev=cb55b020932d427988edc6cb884586ea&hash=77307E7139C4E74F9AE0DF34DE8FD8DD

- 53. On October 2, 2024, the Town Conservation Commission submitted comments³ to the Council regarding wetlands and watercourses, farmland soil, and stormwater management. These comments, among other environmental concerns, are addressed in the Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record)
- 54. On October 28, 2024, the Town Inland Wetlands and Watercourses Agency submitted comments⁴ regarding wetlands and stormwater management. These comments, among other environmental concerns, are addressed in the Environmental Effects and Mitigation Measures sections of this document, pursuant to CGS §16-50p. (Record)
- 55. CGS § 22a-20a and Department of Energy and Environmental Protection's (DEEP) Environmental Justice Guidelines require applicants seeking a permit from DEEP or the Council for a new or expanded facility defined as an "affecting facility" that is proposed to be located in an environmental justice community to file an Environmental Justice Public Participation Plan (EJPPP). The proposed solar facility is not an "affecting facility" under CGS § 22a-20a because it uses non-emitting and non-polluting renewable sources. Thus, Environmental Justice does not apply to the facility, and an EJPPP is not required. (CGS § 22a-20a (2024))

State Agency Comments

- 56. Pursuant to CGS §16-50j(g), on August 2, 2024, the following state agencies were solicited by the Council to submit written comments regarding the proposed facility by September 26, 2024: DEEP; Connecticut 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)
- 57. On July 24, 2024, the Council received comments from CEQ related to farmland soil, wetlands, erosion control and spill prevention, noise and visibility. These comments, among other environmental concerns, are more specifically addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures section of this document, pursuant to CGS §16-50p. (Record; CGS §16-50p (2024)
- 58. On October 30, 2024, the Council received comments from DEEP related to wetland impact, stormwater management, visibility and noise. These comments, among other environmental concerns, are more specifically addressed in the Public Health and Safety and Environmental Effects and Mitigation Measures section of this document, pursuant to CGS §16-50p. (Record; CGS §16-50p (2024)
- 59. No other state agencies responded with comment on the application. (Record)

³https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do524/proceduralcorrespondence/do524-woodburyconservationcommission_a.pdf?rev=6c5f5a82fbee489b9eebaad173ca9b6f&hash=7E4DA3976B0F3FD04592F07AA00B33B2

⁴ https://portal.ct.gov/-/media/csc/1_dockets-medialibrary/1_media_do500_600/do524/stateagencyofficialtownandordeterminations/do524-woodburyinlandwetlandandwatercoursesagency_a.pdf?rev=930a690e002449cca584a9bd32f8f8b9&hash=7814326774ABAB9F1ADDABF38D606D93

- 60. 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. 75, Corcoran v. Conn. Siting Council, 284 Conn. 455 (2007))
- 61. The Council cannot delegate its statutory authority to any other entity. (CGS §16-50x (2024); *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))

Public Act 17-218

- 62. Pursuant to Public Act (PA) 17-218, codified at CGS §16-50k(a), the Council shall approve by declaratory ruling ... the construction or location of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as: (i) Such project meets air and water quality standards of DEEP, (ii) the Council does not find a substantial adverse environmental effect, and (iii) *for a solar photovoltaic facility with a capacity of two or more megawatts*, to be located on prime farmland or forestland, 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. (Emphasis added) (CGS §16-50k(a) (2024)).
- 63. PA 17-218 does not confer the Council's exclusive jurisdiction over the construction, maintenance and operation of solar photovoltaic electric generating facilities throughout the state upon DOAG or DEEP. CGS §16-50k(a) (2024); CGS §16-50x (2024))
- 64. PA 17-218 does not 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(a) (2024)).
- 65. PA 17-218 does not require agricultural activity at solar photovoltaic electric generating facility sites. (CGS §16-50k(a) (2024))
- 66. At any time within the discretion of the applicant or under circumstances when a proposed solar photovoltaic facility with a capacity of two or more megawatts is unable to obtain written correspondence from DOAG or DEEP as to any material affects to the status of core forest or prime farmland, the proposed facility may be submitted as an application for a Certificate with the Council even if it has a generating capacity of less than 65 megawatts. (CGS §16-50*l* (2024)).
- 67. There is no prohibition on the submission of an application for a Certificate to the Council for a proposed solar electric generating facility of *any generating capacity*. A letter from DEEP or DOAG under PA 17-218 is not required. (Emphasis added.) (CGS §16-50*l* (2024)
- 68. GCE initially planned to submit the Project to the Council as a Petition for a Declaratory Ruling (petition) pursuant to CGS §4-176 and §16-50k as it would have a generating capacity of more than 2 megawatts, but less than 65 megawatts. (CGS §16-50k(a) and §16a-3k (2024); GCE 1, p. 12)
- 69. By letter dated April 16, 2024, and in accordance with PA 17-218, GCE secured written confirmation from DEEP's Bureau of Natural Resources that the proposed 4.625 MW solar facility would not have a material affect on the status of core forest. (April 16, 2024 DEEP CGS §16-50k No Material Impact to Core Forest Determination Letter)

- 70. On April 1, 2024, GCE requested a review of the Project by DOAG to secure written confirmation that the proposed solar facility would not have a material affect on the status of prime farmland. (GCE 1, p. 12)
- 71. Due to the presence of prime farmland soils at the site, GCE proposed to implement crop production as an agricultural activity. The proposed crop production agricultural activity plan is similar to previous agricultural activity plans approved by DOAG that were submitted to the Council with petitions for declaratory rulings and acceptable to DOAG in 2023, located in the Towns of Durham and Winchester. (GCE 1, p. 12; Council Petition No. 1597; Council Petition No. 1608)
- 72. On April 8, 2024, DOAG informed GCE that revised Agrivoltaics Requirements, Farm Plan, and Solar Grazing documents were issued on December 30, 2023. (GCE 1, p. 12, Appendix L; GCE 2, response 64)
- 73. GCE's April 1, 2024 request to DOAG included a crop production and sheep grazing agricultural activity plan. (GCE 1, p. 12, Appendix L)
- 74. Projects selected in the Non-Residential Renewable Energy Solutions (NRES) Program are not required to adhere to DOAG agrivoltaics co-use requirements. (Council Administrative Notice Item No. 75)
- 75. DOAG did not establish a grandfathering clause for implementation of the December 30, 2023 Agrivoltaics Requirements, Farm Plan, and Solar Grazing documents. (Council Docket 522- Record, Finding of Fact #74)
- 76. The NRES Program requirements and DOAG's Agrivoltaics Guidelines are not permits or regulations issued under the provisions of the Uniform Administrative Procedure Act. (CGS §4-166, et seq. (2024)
- 77. DOAG took no action on GCE's request. (GCE 1, p. 12, Appendix L)
- 78. GCE determined DOAG's Revised December 2023 Agrivoltaics requirements were overly burdensome given that projects with similar agricultural activity plans were previously approved by DOAG. DOAG also will not meet with developers to discuss potential agricultural activities at sites containing prime farmland soil. (GCE 1, p. 12, Appendix L; GCE 2, response 64)
- 79. Given that NRES projects must meet contractual energy obligations within three years of bid selection, GCE opted to submit an application for a Certificate with the Council for the proposed solar electric generating facility. Applications for a Certificate are exempt from the provisions of PA 17-218. (CGS §16-50k (2024); GCE 1, p. 12, Appendix L; GCE 2, response 64)
- 80. The lease agreement with the property owner does not contain specific provisions for agricultural activities at the site, but it does not prohibit agricultural activities at the site. (GCE 2, response 15; GCE September 24, 2024 Motion for Protective Order, GCE Redacted Lease Agreement)

Public Act 23-163

81. Pursuant to PA 23-163, codified at CGS §16-50k(a), the Council shall not issue a Certificate for a solar electric generating facility with a capacity of more than 2 megawatts unless the applicant furnishes a bond to cover all costs associated with the decommissioning of the facility and the restoration of prime farmland soil. (CGS §16-50k(a) (2024))

- 82. PA 23-163 does not require an agricultural activity at solar photovoltaic electric generating facility sites. (CGS §16-50k(a) (2024))
- 83. PA 23-163 does not designate a timeframe/deadline for applicants to furnish a bond. (CGS §16-50k(a) (2024))
- 84. Common financial mechanisms for solar facility decommissioning are:
 - a. Decommissioning provisions in land lease agreements;
 - b. Decommissioning trusts or escrow accounts and/or letters of credit; and
 - c. Removal or surety bonds.

(Council Administrative Notice Item Nos. 89 and 90)

- 85. GCE would obtain a bond to comply with the requirements of PA 23-163. (GCE 2, response 89)
- 86. It is industry standard to require a decommissioning clause in a solar facility site lease agreement. (Council Docket 522 Record Finding of Fact #83)
- 87. It is generally recognized in the industry that a solar facility is comprised of components that will remain valuable at the time of decommissioning. GCE expects there would be salvage value of the solar facility components at the end of the Project's useful life. (GCE1, Appendix D; Council Docket 522 Record Finding of Fact #84)
- 88. PA 23-163 applies to the restoration of prime farmland soil. It does not differentiate between restoration of prime farmland soil currently used to support agricultural activities from those that are not used to support agricultural activities. (CGS §16-50k(a) (2024))
- 89. Agricultural restoration includes, but is not limited to, reclamation of grown-over pastures and meadows, installation of fences to manage wildlife and livestock outside of restoration areas, and climate-smart agriculture. (CGS §22-6d (2024))
- 90. DOAG does not regulate soil testing for the sufficiency of livestock grazing. (Council Docket 522 Record Finding of Fact #88)
- 91. DOAG does not know the current estimated cost to restore an acre of prime farmland soil and does not know what inflationary mechanism should be used to determine the cost of an acre of prime farmland soil 30 years from now. (Council Docket 522 Record-Finding of Fact #89)
- 92. DOAG does not have the authority to reimburse costs to farmers to restore agricultural land. (Council Docket 522 Record Finding of Fact #90)
- 93. DOAG receives bonds from milk processors to secure payments due to milk producers, but it does not have authority to issue bonds. (Council Docket 522 Record Finding of Fact #91)
- 94. GCE developed a Decommissioning Plan for restoration of the site at the end of the Project's useful life, in accordance with the terms of the site lease. All Project components would be removed including subgrade structures/components. Disturbed areas would be restored to conditions similar to preconstruction. (GCE 1, Appendix D; GCE 2, response 85)
- 95. Under the terms of the site lease, GCE has six months to remove the solar facility and to restore the site to conditions similar to pre-construction. (GCE September 24, 2024 Motion for Protective Order)

- 96. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the Project "site." This includes portions of the parcel retained by the property owner and portions of the parcel the property owner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the Project "site." (CGS §16-50x (2024)).
- 97. DOAG has no authority to dictate the use of a solar electric generating facility site. (CGS §16-50x (2024); Council Docket 522 Record Finding of Fact #96)
- 98. DOAG has no enforcement authority over any conditions imposed by the Council in a final decision on an application for a Certificate. (Council Docket 522 Record Finding of Fact #97)

State of Connecticut Planning and Energy Policy

- 99. Section 51 of 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 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. (CGS §16a-3d (2024))
- 100. The 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. 53 and 54)
- 101. 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. 53)
- 102. CGS §16-245a establishes Connecticut's *Renewable Portfolio Standards (RPS)*. RPS requires that 40 percent of Connecticut's electricity usage be obtained from Class I renewable resources by 2030. (CGS §16-245a)
- 103. The Global Warming Solutions Act (GWSA) sets a goal of reducing greenhouse gas (GHG) emissions by 80 percent by 2050. (CGS §22a-200 (2024))
- 104. Governor Lamont's Executive Order No. 3, issued in September 2019, established a 100 percent zero carbon emission goal for the electricity sector by 2040. (PA-22-5)
- 105. 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. 53)

Competitive Energy Procurement

106. Solar facilities of certain generating capacities are eligible to bid into statewide renewable energy programs established by PURA that include, but are not limited to, the NRES Program and the Shared Clean Energy Facility (SCEF) Program. (PA 18-50; PA 19-35, Section 3(a); Council Administrative Notice Item No. 75)

- 107. The NRES Program is a competitive procurement process established by PURA in June 2021, that is administered by the state's electric distribution companies to develop the state's Class I renewable energy objectives and to encourage participation by customers in underserved and environmental justice communities. The NRES Program is a successor program to the Low Emission Renewable Energy Credit and Zero Emission Renewable Energy Credit (LREC/ZREC) and Virtual Net Metering (VNM) programs. (PA 19-35, Section 3(a); Council Administrative Notice Item No. 75)
- 108. New or incremental Class I renewable generation projects ranging in size from 100 to 5,000 kW (AC) are eligible to bid into the NRES Program for a Tariff Terms Agreement (TTA) with a 20-year term. The electricity and renewable energy credits produced by the facility are sold to the electric distribution company in accordance with the TTA.
 - *Projects selected during Year 1 ranged in size from 100 kW to 2,000 kW. The size limit was increased to 5,000 kW beginning in Year 2.
 - (PURA Dockets 21-08-03, 22-08-03, 23-08-3, record; PA 22-14)
- 109. The SCEF Program is a competitive procurement process established by PURA in December 2019 (Docket No. 19-07-01), that is administered by the state's electric distribution companies to develop utility scale renewable energy with capacity to be supplied to low-and-moderate-income customers, small business customers and other customers identified by the electric distribution companies that are eligible for enrollment. (PURA Docket No. 19-07-01, record)
- 110. 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 TTA with a 20-year term. The electricity and renewable energy credits produced by the facility are sold to the electric distribution company in accordance with the TTA. (PURA Docket No. 22-08-04, record; PA 22-15)
- 111. The NRES Program and the SCEF Years 1-4 procurements do not require integration of an agrivoltaics or dual-use for a solar electric generating facility site to qualify for a bid. (PURA Docket 23-08-3, record; PURA Docket No. 22-08-04, record; Council Administrative Notice Item No. 75)
- 112. PURA defines agrivoltaics as "the practice of dual use of farmland to integrate solar energy generation and farming on the same piece of land," and defines dual use as "the construction of solar generating units while using land under and/or between panels for production agriculture of crops and livestock grazing." (PURA Docket No. 23-08-04, record)
- 113. The Project bid into the statewide NRES Program. The Project was selected and in accordance with NRES Program requirements, has a contractual in-service date of July 19, 2026. (GCE 1, p. 3)
- 114. The electricity, capacity 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. 75)
- Once the TTA expires, GCE may seek other revenue sources for the energy produced by the facility. (GCE 2, response 11)

Public Benefit

- 116. Pursuant to CGS §16-50p(c), 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. Public benefit exists if the Council finds and determines a proposed electric generating facility contributes to forecasted generating capacity requirements, reduces dependence on imported energy resources, diversifies state energy supply mix and enhances reliability. (CGS §16-50p(c); *Preston v. Connecticut Siting Council*, 20 Conn. App. 474 (1990); *Preston v. Connecticut Siting Council*, 21 Conn. App. 85 (1990); Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #55)
- 117. Created by the Federal Energy Regulatory Commission (FERC) in 1997, ISO-NE is the independent, not-for-profit corporation responsible for the reliable operation of New England's electric power generation and transmission system, overseeing and ensuring the fair administration of the region's wholesale electricity markets, and managing comprehensive regional electric power planning. (Council Administrative Notice Item No. No. 37 Docket No. 514, Finding of Fact #56)
- 118. ISO-NE operates the power system and the competitive wholesale electric markets so that the lowest cost resources are used first to meet consumer demand. However, ISO-NE's primary responsibility is electric reliability. (Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #57)
- 119. ISO-NE is fuel and technology neutral and takes no position on any proposed energy projects. ISO-NE does not own any transmission or distribution lines or power plants. (Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #58)

Resource Adequacy

- 120. ISO-NE holds an annual forward capacity market auction (FCA) to acquire the power system resources needed to meet projected demand for the New England region in three years' time. The FCA is held approximately three years before each capacity commitment period to provide time for new resources to be developed. Capacity resources can include traditional power plants, renewable generation, imports, and demand-side resources, such as load management and energy efficiency measures. Resources clearing in the auction will receive a monthly payment during the delivery year in exchange for their commitment to provide power or curtail demand when called on by ISO-NE. (Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #59)
- 121. According to ISO-NE's 2023 Regional System Plan (2023 RSP), "Sufficient resources to meet the resource adequacy planning criterion are projected for New England through the 10-year planning horizon, assuming no additional retirements, the successful commercialization of all new resources that have cleared the Forward Capacity Market (FCM) in Forward Capacity Auction 17, and the installation of Sponsored Policy Resources. However, it is important to note that the pending Resource Capacity Accreditation project could significantly change how the New England resource mix's contribution toward resource adequacy is assessed. This planning analysis accounts for new resource additions that have responded to market improvements and state policies, and resource retirements. The ISO is committed to procuring adequate demand and supply resources through the FCM and expects the region to install adequate resources to meet the physical capacity needs for future years." (Council Administrative Notice Item No. 21 2023 RSP, p. 117)

Generating Capacity Retirements in New England

122. ISO-NE estimated that more than 5,200 MW of oil, coal and nuclear power plants retired during 2013-2022 and anticipates another 5,000 MW of remaining coal and oil generators are at risk of retirement. (GCE 2, response 4a)

New England Reliability

- 123. New England's electric power grid is planned and operated as a unified system of transmission owners and market participants. The New England system integrates resources with the transmission system to serve all regional load regardless of state boundaries. Most of the transmission lines are relatively short and networked as a grid. The electrical performance in one part of the system affects all areas of the system. Thus, Connecticut and the rest of the ISO-NE region are inextricably interconnected and rely on each other for a reliable electricity system. (Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #62)
- 124. In addition to ISO-NE's winter energy concerns, system reliability is comprised of two aspects: resource adequacy and transmission security. Resource adequacy means having sufficient resources to meet load at all times. Transmission security means having a system than can withstand contingencies such as the loss of a transmission line, or successive losses of multiple transmission lines, or the loss of a major generating plant, during a time of high system load. (Council Administrative Notice Item No. 37 Docket No. 514, Finding of Fact #63)

Solar Facility Benefit

GCE's FCA Participation

125. Under the TTA, Eversource would own the energy, capacity rights, and renewable energy credits of the facility. Thus, GCE would not participate in an ISO-NE FCA during the term of the TTA. (Council Administrative Notice Item No. 75; GCE 2, response 36)

Competitive Markets Benefit

126. The NRES program is a competitive bid program whereby the renewable energy projects with the lowest costs are selected. The Project is therefore necessary to ensure a competitive renewable electricity generation market. (GCE 2, response 4b)

Forecast Capacity Benefit

127. ISO-NE forecasts a significant need for the development of additional renewable electric generating capacity. The facility would contribute to ISO-NE's forecasted renewable generating capacity requirements. (GCE 2, response 4c)

Domestic Energy Supply Benefit

128. The proposed Project would reduce dependence on imported energy resources because it would utilize solar energy, and no imported energy resources would be required. (GCE 2, response 4d)

Fuel Diversity Benefit

129. The proposed facility will assist in diversifying the state's energy supply mix. Currently, solar energy projects make up nine percent of the ISO-NE generator interconnection queue. (GCE 2, response 4e)

Electric Reliability Benefit

130. The proposed facility would enhance reliability because it would generate the bulk of its electricity during times that are typically peak demand times in Connecticut, such as the late spring and summer months. Additionally, the facility would serve to reduce net peak loads. (GCE 2, response 4f)

Economic Benefit

131. The proposed facility was selected in a competitive bidding program. The NRES Program selects renewable energy projects with the lowest costs. (GCE 2, response 4b)

Alternative Sites

- 132. GCE selected the host parcel for the solar facility site based on availability, suitability, environmental compatibility, and proximity to electrical utilities for interconnection. (GCE 1, p. 7)
- 133. GCE examined alternative locations including but not limited to, carports, landfills, and other parcels. Sites that were not pursued lacked suitable Project attributes such as viable electrical infrastructure. Other sites were pursued and bid into the competitive bid NRES Program but were not selected. (GCE 2, response 8)
- 134. Based on NRES Program rules, specific bids for a specific site do not have alternative locations. (GCE 2, response 10)

Proposed Site

- 135. 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)(2024))
- 136. 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. (CGS §16-50p (2024) *Woodbridge Newton Neighborhood Env't Trust, et al v. Conn. Siting Council*, 2024 Conn. LEXIS 163 (2024))
- 137. 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. 75 Corcoran v. Conn. Siting Council, 284 Conn. 455 (2007))
- 138. Pursuant to a lease agreement with the property owner, GCE proposes to construct the solar facility on an approximate 20-acre site on an approximate 36.8-acre host parcel at Fawn Meadow Lane (Parcel No. 029-018D), Woodbury (refer to Figure 1). (GCE 1, p. 3, Appendix A)
- 139. The host parcel is located at the end of Fawn Meadow Lane. A gravel road extends from the end of Fawn Meadow Lane into the host parcel. (GCE 1, Appendix A)

- 140. The host parcel was previously approved by the Town for a multi-lot subdivision in January 2005. The subdivision approval has since expired. (GCE 2, response 25, Exhibit B)
- 141. The host parcel is zoned Open Space Residence District 100 and consists of a mix of fields and forest. (GCE 1, pp. 7-9, Figure 5)
- Portions of the host parcel are currently used for hay production by a third-party farmer, subject to an annual renewal with the property owner. (GCE 1, p. 8; GCE 2, response 19)
- 143. The proposed facility site would be located mostly in the open field area in the central portion of the host parcel (refer to Figure 2). (GCE 1, Figure 6)
- 144. Land use surrounding the site includes forested areas to the west, narrow open space parcels to the southwest, south and east, residential to the east and south, and a transmission right-of-way and a farm to the north. (GCE 1, pp. 9-10, Figures 4 & 9, GCE 1c, p. 19)
- 145. The site is located on a hill that slopes southeast and southwest at grades ranging from 5 to 15 percent. Ground elevations range from approximately 790 feet to 680 feet above mean sea level (amsl). (GCE 1, Appendix E)

Proposed Facility and Associated Equipment

Solar Array

- 146. The proposed Project consists of 9,906 photovoltaic panels rated at 520-540 Watts (refer to Figures 3 & 4). (GCE 1, p. 8, Appendix B)
- 147. The panels would be installed on a tracking system supported by posts. The tracker system would include 138 motors to enable solar panel rotation. (GCE 1, Appendix A, Appendix N)
- 148. The expected maximum angle for the tracking system rotation is 60 degrees. The panels would be approximately 10.5 feet above grade at the highest point and 3 feet above grade at the lowest point. (GCE 1, Appendix A; GCE 2, response 29, response 30)
- 149. The panels would be arranged in linear rows in a north-south direction, separated by six-foot wide vegetated aisles. (GCE 1, Appendix B; GCE 2, response 72)
- 150. Two 12-foot by 25-foot concrete pads and associated gravel areas would be installed; one in the eastern section of the site and one in the southwest corner of the site. The pads would support two transformers, switchgear, and meter/monitoring equipment. The gravel areas next to the pads would support a total of 37 inverters installed on posts. (GCE 1, Appendix B; GCE 2, response 32, response 33)
- 151. Panel row wiring would generally extend along the racking system within protective covers to reduce potential damage from weather events, maintenance activities or animals. In areas where wiring is not run along the racking, it would be installed within underground conduit. (GCE 2, response 31)
- 152. The Project would be enclosed by a 7-foot tall chain link perimeter fence with a six-inch gap on the bottom to allow for small wildlife movement. (GCE 1, p. 8, Appendix A)

153. The nearest property line to the solar facility perimeter fence is approximately 79 feet to the west at Lot 029-015E. The nearest residence from the fence is 510 feet to the south at 31 Church Hill Road. (GCE 1, Figure 4; GCE 2 response 2)

Site Access

- 154. The Project would be accessed by a new 15-foot wide, 2,080-foot long gravel access drive extending north from Fawn Meadow Lane to perimeter areas of the array and the electrical pads. (GCE 1, p. 10; GCE 2, response 27)
- 155. An existing 460-foot long gravel drive on the host parcel extends from the end of Fawn Meadow Lane, across the base of the hill before turning uphill to the hayfield. GCE would utilize the existing gravel drive, upgrading it where necessary. (GCE 1, Appendix A)
- 156. The average slope of the access drive is approximately 5 percent. The steepest portion of the access drive along the lower portion of the hill reaches a slope of 16 percent. The Town requires a maximum slope of 15 percent for new roads. GCE would consult with the Town to determine if the 16 percent slope is acceptable. (GCE 1, Appendix A; GCE 2, response 23; Tr. 1, pp. 74-76)
- 157. An existing gravel turnaround area is located on the north side of Fawn Meadow Lane, east of the property line of the host parcel and south of the existing stormwater basin constructed as part of the existing Fawn Meadow Estates subdivision. It serves as a turnaround for the public. Due to the sloping hillside, it is not possible to construct a turnaround area where Fawn Meadow Lane ends at the host parcel boundary. (GCE 1, Appendix A; GCE 2, response 26; Tr. 1, pp. 29-30)
- 158. At the request of the Town, GCE could pave a 240-foot long portion of the existing host parcel gravel drive and construct a hammerhead turnaround area at the base of the hill. The paved portion of the access drive on the host parcel would be designed to a width of 20 feet to comply with Town subdivision road design criteria (Local Rural). (GCE 1, p. 10, Appendix A; GCE 1a- Acceptance of Streets standards; Tr. 1, pp. 25-27)
- 159. The paved portion of the access drive and turnaround area were not included in the Town's 2005 subdivision approval. (GCE 2, response 25 Attachment C)
- 160. The paved portion of the access drive is located on the host parcel. It is unclear if the host parcel owner, GCE or the Town would own and/or maintain it. (Tr. 1, pp. 26-27)
- 161. The paved portion of the access road and turnaround is of no benefit to the Project. (Tr. 1, pp. 25-27)
- 162. Construction of the paved portion of the access drive on the host parcel would require the filling of a small wetland to install curbing. (Tr. 1, pp. 18-19)
- 163. It would cost approximately \$50,000 to construct the turnaround area and pave the access drive up to the turnaround area. (GCE 2, response 27)
- 164. The paved portion of the access drive and turnaround area would allow public access onto the host parcel. A gate is not proposed at the end of the paved portion of the access drive with the turnaround area. (GCE 1, Appendix A; GCE 2, response 26)

Electrical Interconnection

- 165. The Project is comprised of one metered system with a design capacity of approximately 4.625 MW AC. It would interconnect to an Eversource three phase electric distribution line on Orchard Avenue. (GCE 1, p. 10; GCE 2, response 4; Tr. 1, pp. 88-90)
- 166. The interconnection requires a new feeder to be installed underground by Eversource within Fawn Meadow Lane for a quarter mile and approximately three quarters of a mile south along Orchard Avenue to connect to a 23-kV distribution circuit on Orchard Avenue. The existing circuit connects to Eversource's Carmel Hill 11S Substation. (GCE 1, p. 10; GCE 2, response 41, response 42; Tr. 1, pp. 88-92)
- 167. The Eversource and customer-side meter and recloser equipment would be pad mounted. (Tr. 1, pp. 88-89)
- 168. The facility interconnection impact study was approved by Eversource. Although no formal review by ISO-NE is necessary, Eversource consults with ISO-NE during the study. (GCE 2, response 39, response 40; Tr. 1, pp. 89-90)
- 169. Eversource is currently reviewing the facility interconnection study to determine the final design of the interconnection. (Tr. 1, pp. 89-92)
- 170. The projected capacity factor of the proposed solar facility is 17 percent, accounting for losses from wiring, inverters, switchgear, transformer, and other protective equipment. The power output would decline by approximately 0.5 percent on an annual basis. (GCE 2, response 37, response 38)
- 171. GCE has no plans to incorporate a battery energy storage system at the site at this time. (GCE 2, response 34; Tr. 1, p. 81)

Cost

- 172. The estimated construction cost of the Project is over \$8 million. (GCE 2, response 6)
- 173. Neither the Project nor any portion thereof is proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant. GCE is a private entity. (GCE 2, response 7)
- 174. The Project would decrease electric rates by displacing older, more costly resources from dispatching to the grid during times of peak energy usage. (GCE 2, response 2f)

Public Health and Safety

- 175. 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. (GCE 2, response 43)
- 176. In the event of a fire or other emergency, the facility can be disconnected from AC power remotely or by manual switches. (GCE 1, p. 10, Appendix C)
- 177. Emergency responders would be provided access to the site via a universal key box at the facility access gate. (GCE 1, pp. 13-14)

- 178. Prior to commencement of operation, GCE would meet with local emergency responders and provide training and information regarding facility operations and equipment. Access and the types of equipment required to response to an emergency would also be discussed. (GCE 2, response 44; Tr. 1, pp. 76-78)
- 179. A solar panel/electrical component fire would be contained using methods prescribed by the fire department. Typically, fires are allowed to burn out while keeping the fire from spreading to adjacent areas. (GCE 2, response 45)
- 180. There are no fire hydrants near the site. The fire department would have to utilize tanker trucks to bring water to the site, if necessary. (GCE 2, response 46)
- 181. An existing fire tank easement in favor of the Town abuts the host parcel boundary to the south. (GCE 1, Appendix A)
- 182. The facility would be remotely monitored 24/7 by a data acquisition system, including but not limited to, site operation and performance and local weather conditions. Remote monitoring is conducted by a third-party vendor. (GCE 1, pp. 10-11, Appendix C)
- 183. No permanent lighting of the facility is proposed. (GCE 1, Appendix O)
- 184. The site is not within a Federal Emergency Management Agency (FEMA)-designated 100-year or 500-year flood zone. (GCE 1, Appendix E)
- 185. 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. (Council Administrative Notice Item Nos. 17 & 18)
- 186. The nearest federally-obligated airport is Waterbury-Oxford Airport, located approximately 7.5 miles south of the proposed site. The proposed facility, and the use of a temporary crane to construct the facility, would not be a hazard to air navigation. A glare analysis is not required. (GCE 1, p. 18, Appendix J; GCE 2, response 50)
- 187. The Project transformers would be insulated with mineral oil, seed oil, or silicone oil depending on the manufacturer at the time of transformer procurement. The ability for oil level monitoring would be determined by the specific manufacturer. Secondary containment is not proposed. (GCE 2, response 48; Tr. 1, p. 82)
- 188. To protect against lightning strikes, the facility would be grounded in compliance with the National Electrical Code and installation best management practices. (GCE 2, response 51)

Noise

- 189. Noise emissions from the solar facility would be from the daytime operation of the 37 inverters, 2 transformers and 138 tracking motors. The facility would not operate at night. (GCE 1, Appendix N)
- 190. A noise analysis determined the operation of the facility would produce a sound level of 46.9 dBA at the nearest property line, an open space parcel (Lot 29-18-1) owned by the Fawn Meadow Homeowner's Association, approximately 110 feet southwest from noise producing equipment (tracker motor). The facility would produce a sound level of 33.8 dBA at the nearest residential property line

- at 35 Fawn Meadow Lane, approximately 270 feet southeast from noise producing equipment (tracker motor). The Project would be in compliance with state standards. (GCE 1c, p. 19, Appendix A, Appendix N; Tr. 1, p. 66)
- 191. GCE may be able to relocate the southwest inverter/transformer pad to increase the distance and reduce noise to the abutting open space parcel (Lot 29-18-1), approximately 160 feet southwest of the equipment pad. (Tr. 1, pp. 66-68)
- 192. Construction noise is exempt from DEEP Noise Control Standards. (RCSA §22a-69-108(g))

Electric and Magnetic Fields

- 193. Electric fields (EF) and magnetic fields (MF) are two forms of energy that surround an electrical device. Transmission lines, for example, are a source of both EF and MF. (Council Administrative Notice Item No. 30- Petition 754)
- 194. EF is produced whenever voltage is applied to electrical conductors and equipment. Electric fields are typically measured in units of kilovolts/meter. As the weight of scientific evidence indicates that exposure to electric fields, beyond levels traditionally established for safety, does not cause adverse health effects, and as safety concerns for electric fields are sufficiently addressed by adherence to the NESC, as amended, health concerns regarding EMF focus on MF rather than EF. (Council Administrative Notice Item No. 30- Petition 754)
- 195. MF is produced by the flow of electric currents. The magnetic field at any point depends on the characteristics of the source, the arrangement of conductors, the amount of current flow through the source, and the distance between the source and the point of measurement. Magnetic fields are typically measured in units of milligauss (mG). (Council Administrative Notice Item No. 30- Petition 754)
- 196. International health and safety agencies, including the World Health Organization, the International Agency for Research on Cancer (IARC), and the International Commission on Non-Ionizing Radiation Protection (ICNIRP), have studied the scientific evidence regarding possible health effects from MF produced by non-ionizing, low-frequency 60-Hertz alternating currents in transmission lines. Two of these agencies attempted to advise on quantitative guidelines for mG limits protective of health, but were able to do so only by extrapolation from research not directly related to health: by this method, the maximum exposure advised by the International Commission on Electromagnetic Safety (ICES, part of IARC) is 9,040 mG, and the maximum exposure advised by the ICNIRP is 2,000 mG. Otherwise, no quantitative exposure standards based on demonstrated health effects have been set world-wide for 60-Hertz MF, nor are there any such state or federal standards in the U.S. (Council Administrative Notice Item No. 30- Petition 754)
- 197. Operation of the Project would produce EMF from the solar panels, cables connecting the panels to the inverters, the inverters, and transformers. None of this equipment is expected to increase pre-existing EMF levels outside the site boundaries. (GCE 1, pp. 18-19)
- 198. All equipment producing EMF for the project will be at a minimum 112 feet from the host parcel property line. EMF produced by the equipment would decline to background levels within a few feet. All EMF levels at the property lines would be well below ICNIRP and IARC recommended public exposure levels. (GCE 1, pp. 18-19, Appendix M)

199. The proposed Project is designed to interconnect to the existing distribution system rather than a higher voltage transmission system and therefore, the Council's EMF Best Management Practices for the Construction of Electric Transmission Lines in Connecticut and the ICES and ICNIRP MF guidelines would not apply. (Council Administrative Notice Item No. 30- Petition 754)

Environmental Effects and Mitigation Measures

Air Quality

- 200. The proposed Project would meet DEEP air quality standards and would not produce air emissions of regulated air pollutants or GHG. (GCE 1, p. 19)
- 201. During construction of the proposed Project, air emissions from the operation of machinery would be temporary in nature. Dust resulting from construction activities would be controlled through the use water. Equipment air emissions can be reduced by limiting idling times and proper maintenance. (GCE 1, p. 16)

Water Quality

- 202. As applicable to any proposed jurisdictional facility site, the Council's Application Guide for an Electric Generating Facility requires the submission of plans for erosion and sedimentation control consistent with the *Connecticut Guidelines for Erosion and Sediment Control* (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)
- 203. Water would not be used during operation of the facility. (GCE 1, Appendix A)
- 204. The site is not located within a DEEP-designated Aquifer Protection Area or public water supply watershed. (GCE 1, Figure 10, Figure 11)
- 205. Groundwater at the site is classified as GA defined as, "...existing private and potential public or private supplies of water suitable for drinking without treatment...". Installation of the racking posts is not anticipated to have an impact on groundwater and private water wells that may be present in the surrounding area. (GCE 1, Appendix E; GCE 2, response 53)
- 206. A Spill Prevention and Materials Storage Plan has been developed for the Project to protect groundwater and other resources. It includes, but is not limited to, measures for prevention, containment, cleanup and reporting. (GCE 2, Exhibit D)

Stormwater

207. 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)

- 208. 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))
- 209. The SWPCP incorporates project designs consistent with the E&S Guidelines and the *Connecticut Stormwater Quality Manual* (Stormwater Manual). Both of these documents were updated, effective March 30, 2024. (DEEP-WPED-GP-015)
- 210. 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 E&S Guidelines and Stormwater Manual. (CGS Section 22a-430b (2024))
- 211. The Council may impose a condition that requires subsequent compliance with DEEP standards and regulations. (Council Administrative Notice Item No. 80 *FairwindCT*, *Inc. v. Conn. Siting Council*)
- 212. 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)
- 213. 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)
- 214. Per the Stormwater Permit, the contractor has the responsibility to follow the SWPCP and conduct inspections. The Project engineer has the obligation to perform regular inspections of the site and prepare inspection reports. A separate DEEP-approved E&S control inspector will conduct weekly inspections of the site. The regional conservation district would also conduct inspections of the site and document its findings. (DEEP-WPED-GP-015; GCE 1, Appendix A)
- 215. On September 19, 2024, GCE met with the DEEP Stormwater Division to discuss the proposed stormwater management design and E&S control plans for the facility. DEEP determined the three proposed temporary sediment traps were sufficient to control stormwater at the site. (DEEP comments received October 30, 2024; Tr. 1, pp. 46-47)
- 216. GCE's final stormwater analysis for the Project that concluded post-construction site conditions (meadow) would be an improvement over its existing condition (agricultural field) and therefore no permanent stormwater basins were required. Predevelopment drainage patterns would be maintained to the extent feasible. (GCE 1, Appendix A; GCE 2, response 79)

- 217. The stormwater analysis was prepared in accordance with the requirements of DEEP's Stormwater Permit, revised in 2022. The permit requires the analysis of drainage areas and soil types, existing and proposed site conditions, and site runoff rates for the 2-, 25-, 50-, and 100-year storms over a 24-hour period. Rainfall rates used in the analysis were obtained from National Oceanic and Atmospheric Administration data. (GCE 1, Appendix E; Tr. 1, pp. 78-81)
- During construction, GCE would construct three temporary sediment traps. The traps would be backfilled after the site is stabilized. (GCE 1, Appendix A, Appendix E)
- 219. The Project has been designed to comply with DEEP General Permit Appendix I. (GCE 1, Appendix E; GCE 2, response 72)
- 220. A watercourse is located southwest of the site, extending off the host parcel and sharply downgradient towards Church Hill Road. The stream is supported by an approximate 0.9-acre watershed on the host parcel. The stormwater analysis concluded project development would not increase stormwater runoff to the stream. (GCE 1, Appendix E; GCE 2, Exhibit C; Tr. 1, pp. 30-32)

Wetlands and Watercourses

- 221. 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. (2024))
- 222. 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 (2024))
- 223. 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 (2024))
- 224. 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. (2024))
- 225. A wetland inspection of the site and adjacent areas was performed in August 2023. Six wetlands and three watercourses were identified on the host parcel. All of these resources are located towards the perimeter of the host parcel (refer to Figure 5). (GCE 1, Appendix G)

- 226. A small wetland (Wetland 1) measuring 370 square feet is located along the edge of the existing gravel drive on the host parcel, immediately west of the paved portion of Farm Meadow Drive. At the time of the wetland inspection, it contained standing water approximately six inches in depth and supported bullfrog tadpoles. The wetland was formed from excavation activities associated with construction of the former Town-approved subdivision road. (GCE 1, Appendix A, Appendix G; GCE 2, response 66; Tr. 1, pp. 17-18, 47)
- 227. In order to reconstruct the existing gravel drive to a paved road at the end of Fawn Meadow Lane to a width of 20 feet with curbing, per the request of the Town, Wetland 1 must be filled in its entirety (370 square feet). A permit from the US Army Corps of Engineers may be required for this activity. (Tr. 1, pp. 18-20, 47)
- 228. CEQ recommends site construction avoid impacts to Wetland 1 and include installation of E&S controls to prevent sedimentation into the wetland during construction. The Town's Zoning Commission and Conservation Commission support CEQ's recommendation to avoid wetland impact. (CEQ comments dated July 24, 2024; Town Zoning Commission comments dated September 24, 2024; Town Conservation Commission comments dated October 2, 2024)
- 229. Wetland 3 is a forested wetland located in the northeastern portion of the host parcel and would be approximately 50 feet from the construction limit of disturbance (LOD) at its closest point. The LOD in this area occupies a field and no trees would be removed within 100 feet of the wetland. (GCE 1, Appendix A, Appendix G)
- 230. Wetland 6 is a forested wetland along the northwest property line and would be approximately 85 feet from the LOD at its closest point. The LOD in this area occupies a field and no trees would be removed within 100 feet of this wetland. (GCE 1, Appendix A, Appendix G)
- 231. The LOD would be a minimum of 100 feet from the three other wetlands and three streams on the host parcel. (GCE 1, Appendix A, Appendix G)
- 232. In accordance with the DEEP Stormwater Permit Appendix I, solar panels would not be located within 100 feet of any wetland. (Council Administrative Notice Item No. 60; GCE 1 Appendix A)

Vernal Pools

233. A vernal pool survey was conducted on April 5, 2024. No vernal pools were identified on the host parcel. (GCE 1, Appendix G)

Forests and Parks

- 234. Development of the Project would require approximately 0.2 acre of tree clearing to construct the temporary sediment traps. After the temporary sediment traps are removed, these areas would be replanted with tree saplings. (GCE 2, response 58)
- 235. No core forest would be affected by the Project. (GCE 1, Figure 9)
- 236. There are no state parks or forests within one mile of the site. (Council Administrative Notice Item No. 106)

Scenic, Historic and Recreational Values

- 237. GCE performed a Phase 1A and Phase 1B historic and archeological surveys of the site. No evidence of intact cultural features and no resources eligible for listing on the National Register of Historic Places were identified. (GCE 1, pp. 16-17)
- 238. SHPO submitted correspondence to GCE on July 19, 2024, stating that the proposed Project would not affect historic or archeological resources. (GCE 2, Exhibit E)
- 239. The site is surrounded by fields and wooded areas. (Tr. 1, pp. 52-54, 68)
- 240. Based on outreach to residential property owners to the east, at their request, GCE reviewed the visual impact of the facility. GCE determined the Project would have negligible visibility when leaves are on the trees. (Tr. 1, pp. 52-54)
- 241. The facility may be visible to the residential properties to the east when leaves are off the trees. GCE would consult with the residential property owners regarding landscape plantings to mitigate views of the facility. (Tr. 1, pp. 52-55)
- 242. There are no "blue-blazed" hiking trails maintained by the Connecticut Forest and Park Association within one mile of the site. (Council Administrative Notice No. 101)
- 243. No state designated scenic roads are located within one mile of the site. Church Hill Road, approximately 0.15 mile south of the site and Orchard Road, approximately 0.2 mile east of the site, are Town-designated scenic roads. Intervening residential properties and wooded areas are located between these roads and the site. (GCE 1c; Council Administrative Notice Items Nos. 103 & 105)
- No comments were received from OPM or the Town regarding impact to scenic quality or resources. (Record)
- 245. 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. (Council Administrative Notice No. 66, p. 15)

Fish, Aquaculture and Wildlife

- 246. The site is within a DEEP-designated cold-water habitat watershed associated with the Nonnewaug River, a cold-water watercourse in eastern Woodbury. No impact to cold water habitat is expected given that no trees would be cleared within 100 feet of any wetland or watercourse. (GCE 1, Appendix A; Council Administrative Notice No. 61; Tr. 1, pp. 48, 55)
- 247. DEEP Natural Diversity Database (NDDB) maps show approximate locations of state-listed endangered, threatened, and special concern species and are used to find areas of potential conservation concern. (Council Administrative Notice Item No. 97)
- 248. On October 8, 2023, DEEP issued a NDDB Determination Letter for the proposed facility, identifying one special concern species (eastern hognose snake) as potentially occurring in the area of the site. It prefers edge habitat with loose, sandy, gravely soils that are well drained. They travel underground using enlarged passages created by small mammals within fields, open grassy areas adjacent to woods, and open forests. (GCE 1, Appendix H)

- 249. Paved roads may present a barrier to dispersal and connectivity among eastern hognose snake populations. (GCE 1, Appendix H)
- 250. DEEP recommended the implementation of protective measures for the eastern hognose snake that include, but are not limited to, isolation barriers, sweeps of the construction area, vehicle parking restrictions, and performing site construction from April 1 through October 31. (GCE 1, Appendix H)
- 251. GCE would adhere to DEEP's recommended protection measures. (GCE 1, Appendix A; Tr. 1, p. 71)
- 252. The northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species occurs in Connecticut. However, there are no known occurrences of NLEB in Woodbury. (Council Administrative Notice Item No. 99)

Agriculture

- 253. Agricultural land is an economic resource. The terms "agriculture" and "farming" are defined under CGS §1-1q. Agriculture and farming activities are exempt from certain statutes and regulations, including, but not limited to, provisions related to wetlands and nuisance. (CGS §1-1q (2024); CGS §19a-341(2024)(commonly known as "the Right to Farm Law"); CGS §22a-19 (2024); CGS §22a-40 (2024); CGS §7-131d (2024); Red Hill Coalition, Inc. v. Town Plan & Zoning Comm'n, 212 Conn. 727 (1989); Indian Spring Land Co. v. Inland Wetlands & Watercourse Agency of Greenwich, 322 Conn. 1 (2016))
- 254. 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. 70 Climate Change Preparedness Plan)
- 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. 70

 Climate Change Preparedness Plan)
- 256. In 2012, the Governor's Council for Agricultural Development (GCAD) recommended DOAG create a statewide plan for 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)
- 257. DOAG does not develop, oversee or envision the implementation of farm-related energy plans. DOAG refers farmers to federal agencies for farm-related energy plans. (Council Docket 522 Record-Findings of Fact #244)
- 258. DOAG administers the Statewide Program for the Preservation of Agricultural Land (SPPAL), 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. (CGS §22-26aa, et seq.; DOAG 3, response 8)

- 259. The host parcel is not enrolled in this program. (GCE 2, response 21)
- 260. A solar electric generating facility is not a permitted use on land preserved under the SPPAL. (Council Docket 522 Record- Findings of Fact #247)
- 261. DOAG has authority to ensure the integrity of the soils will be retained during public utility construction on land enrolled in the SPPAL. (Council Docket 522 Record- Findings of Fact #248)
- 262. DOAG has no authority to require public utilities to implement agricultural activities, furnish a bond and/or restore facility sites to prime farmland soils except for land that is enrolled in the SPPAL. (Council Docket 522 Record- Findings of Fact #249)
- 263. 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. (CGS §12-107a through 107-f (2024))
- 264. The host parcel is currently enrolled in the PA 490 Program for agricultural land tax abatement. Once constructed, the solar facility site portion of the host parcel would not be eligible for the program. (GCE 2, response 20)

Soils

- 265. Prime Farmland Soils are defined by the United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) as the most suitable land for producing food, feed, fiber, forage, and oilseed crops. (Council Administrative Notice Item No. 14 USDA Soil Survey Manual)
- 266. Statewide Important Farmland Soils do not meet all of the physical and chemical requirements to be considered Prime Farmland Soils, but they are equally as important in the production of food, feed, forage or fiber crops. (Council Administrative Notice Item No. 14 USDA Soil Survey Manual; 7 C.F.R. §657.5 (2016) Identification of Important Farmlands)
- 267. Local Important Farmland Soils do not meet the physical or chemical requirements of either Prime Farmland Soils or Statewide Important Farmland Soils, but they are still used for the production of food or fiber crops and support the local economy due to their productivity. (Council Administrative Notice Item No. 14 USDA Soil Survey Manual; 7 C.F.R. §657.5 (2016) Identification of Important Farmlands)
- 268. 2023 USDA NRCS figures indicate that there are approximately 507,236 acres of prime farmland soil in Connecticut. 2022 USDA census data indicates that there are approximately 372,014 acres of land being farmed that includes prime farmland soils, statewide important farmland soils and local important farmland soils. (Council Docket 522 Record-Findings of Fact #255)
- 269. After the implementation of CGS §16-50k(a) in 2017, DOAG has reviewed numerous projects with an estimated impact to a total of 350 acres of prime farmland soil (up to August 2024). Some projects contained prime farmland soils that were not used to support agricultural activities. (Council Administrative Notice Item No. 25; Council Docket 522 Record- Findings of Fact #256)
- 270. DOAG does not track or hold a registry of farms or acreage in agricultural production throughout the state. (Council Docket 522 Record- Findings of Fact #257)

- 271. DOAG does not maintain a database of the number of prime farmland soils throughout the state that are currently occupied with solar facilities without agricultural activities. (Council Docket 522 Record-Findings of Fact #258)
- 272. DOAG does not maintain a database of the number of acres of prime farmland soils throughout the state that are currently occupied by solar facilities with agricultural activities. (Council Docket 522 Record-Findings of Fact #259)
- 273. Existing soils at the site consist of fine sandy loams, with moderate to slow infiltration rates. (GCE 1, Appendix E)

Proposed Agricultural Activity

- Approximately 1.1 acres of prime farmland soil are located within the 20-acre LOD. The prime farmland soil is located at the northern extent of the site (refer to Figure 6). (GCE 1, p. 3, Figure 7; Appendix A)
- 275. The host parcel currently supports hay production by a third-party farmer through an informal year-to year agreement with the property owner. (GCE 2, response 19; Tr. 1, p. 62)
- 276. The primary use of the site is for the construction, maintenance and operation of a solar electric generating facility that is under the exclusive jurisdiction of the Council. Any other uses within the boundaries of the solar facility site, such as an agricultural activity, would be secondary and subject to the discretion of the Council. (CGS §16-50x (2024); CGS §16-50p (2024); *Indian Spring Land Co. v. Inland Wetlands & Watercourse Agency of Greenwich*, 322 Conn. 1 (2016); Final Decision, Petition 1586)⁵
- 277. GCE is not required to implement an agricultural activity at the site. (PA 17-218; PA 23-163; Council Administrative Notice Item No. 75; GCE 1, p. 8; Tr. 1, pp. 56-58)
- 278. GCE may implement crop production or rotational sheep grazing as potential agricultural activities to maintain the existing agricultural use of the site and, in the case of sheep, to maintain vegetation within the solar array utilizing an on-site feed crop. (GCE 1, p. 13; Tr. 1, pp. 60-61, 69-70)
- 279. DOAG considers livestock grazing an acceptable agricultural activity at solar electric generating facility sites. (Council Docket 522 Record- Findings of Fact #268)
- 280. DOAG does not track the acreage used for livestock grazing in Connecticut. (Council Docket 522 Record- Findings of Fact #269)
- 281. Livestock farmers do not have to be certified by, or registered with, DOAG or any other entity. (Council Docket 522 Record- Findings of Fact #270)
- 282. GCE prefers not to implement an agricultural activity at the site but if an agricultural activity was implemented, prefers to confine the activity to the prime farmland soil area. (Tr. 1, pp. 41-43, 68-70)

⁵ available at DFB33CE3C64FB527DDD8F5F

- 283. If an agricultural activity is not implemented, GCE would seed the prime farmland soil area with perennial plants that have deep root structure to promote soil health and provide habitat beneficial to pollinating insects. (GCE 2, response 60; Tr. 1, pp. 69-70)
- 284. Crop production, if implemented, would be performed by a third-party farmer. GCE had preliminary discussions with a crop farmer regarding plant selection and water use. (GCE 1, Appendix L)
- 285. Crop production, if implemented, would require the low end of the solar panels to be a minimum 36-inches above grade, a foot taller than typical solar installations. This increase in solar panel height would increase project costs by requiring additional project engineering and additional structural support of the solar racking/post system. (GCE 2, response 61; Tr. 1, pp. 39-41)
- 286. Sheep grazing, if implemented, would be conducted in accordance with DOAG's Requirements for Solar Grazing Properties, April 2023 document. (GCE 1, Appendix L; Council Administrative Notice 37- Record- Finding of Fact #207 Requirements for Solar Grazing Properties document)
- 287. Sheep grazing, if implemented, would require a secured eight-foot perimeter fence, installed without any holes or gaps to prevent entry by predators. (Council Administrative Notice 37- Record- Finding of Fact #207 Requirements for Solar Grazing Properties document)
- 288. GCE would purchase additional insurance if sheep grazing was implemented at the site. (GCE 2, response 55)
- 289. The cost of sheep grazing to maintain site vegetation would depend on the size of the grazing activity as well as the number of sheep grazers providing the service. (Tr. 1 pp. 44-45)
- 290. GCE would be the managing authority for any agricultural uses at the site and would be responsible for responding to concerns/complaints. (GCE 2, response 16)
- Water required to support agricultural activities would have to be trucked to the site. (GCE 2, response 62)
- 292. A contact sign would be installed in a central location at the site. DOAG does not require contact signs to be posted at livestock grazing operations. (GCE 2, response 16; Council Docket 522 Record-Findings of Fact #278)
- 293. DOAG responds to complaints regarding livestock animal welfare. (Council Docket 522 Record-Findings of Fact #280)
- 294. The solar array would be seeded with a solar farm seed mix to establish vegetative cover. The exact seed mix composition has not been determined and would depend on if an agricultural activity is implemented at the site. (GCE 1, Appendix A, Appendix L)
- 295. Redesigning the site to avoid prime farmland soils is not possible. Any redesign would encroach upon wetland setbacks or require fewer panels, leading to a reduced energy output. (GCE 1, Appendix L)
- 296. The proposed gravel access drive extends across the north end of the site, through the mapped prime farmland soil area. The access drive serves combiner boxes and provides general access to the north end of the array. GCE would examine the feasibility of removing or relocating the northern access drive to reduce impacts to prime farmland soil. (Tr. 1, pp. 33-34, 93)

297. The temporary sediment traps are not located on prime farmland soil. (GCE 1, Appendix A. Figure 7)

Facility Construction

- 298. 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

(GCE 2, response 5)

- 299. Construction of the site would maintain existing grades, except for the installation of the access drive, temporary sediment traps, and concrete pads. (GCE 1, p. 14, Appendix A)
- 300. Site construction would result in a net cut of 232 cubic yards. Soil removed for construction would most likely be spread on site, although some soil may be removed depending on the construction contractor. Soils removed for construction of the temporary sediment traps would be stockpiled and reused as backfill once the site is stabilized. (GCE 2, response 24; Tr. 1, pp. 70-72)
- 301. Due to the lack of shallow ledge at the site, blasting is not anticipated. (Tr. 1, pp. 49-50)
- 302. The construction LOD is approximately 20 acres. (GCE 1, Appendix A)
- 303. The Project would be constructed in one phase. GCE intends to install E&S controls, then proceed with tree clearing/grubbing where necessary to install the sediment traps, followed by construction of the access drive and then the solar array components. Once installation is complete, the site would be seeded for stabilization. (GCE 1, Appendix A)
- 304. Hardpan soils are within the site area. GCE does not except any issues with the installation of racking support posts within these soils. (Tr. 1, pp. 49-50, 72-73)
- 305. A geotechnical investigation of the site has been completed. A foundation pull test would be conducted prior to facility installation to ensure foundations are adequate for soil conditions. (GCE 2, response 78; Tr. 1, pp. 49-50, 72-73)
- 306. Construction hours would be Monday through Friday from 7:00 AM to 5:00 PM. (GCE 1, p. 15)

Traffic

- 307. Construction vehicles would access the site from Fawn Meadow Lane. (GCE 1, Appendix A)
- 308. Construction vehicles would include worker vehicles, standard construction trucks, small earth moving equipment, and all-terrain forklift equipment, as well as flatbed trucks delivering solar racking, solar panels, electrical equipment, and fencing. (GCE 1, p. 15)
- 309. With exception of construction worker vehicles, construction related traffic would occur in accordance with construction sequencing and material delivery schedules. (Tr. 1, pp. 51-52)
- 310. Once operational, the site would be accessed periodically by maintenance personnel. (GCE 1, Appendix C)

Facility Operations and Maintenance

- 311. GCE provided a post-construction Operations and Maintenance (O&M) Plan that includes, but is not limited to, provisions for remote monitoring, equipment maintenance, vegetation management and site safety and security. (GCE 1, Appendix C)
- 312. Site vegetation would be controlled by mechanical methods 2-3 times per year or by sheep grazing if this agricultural activity is implemented at the site. (GCE 1, Appendix C, Appendix L; GCE 2, response 83)
- 313. The solar panels, inverters and transformers are expected to last the life of the Project. If this equipment fails, it would be replaced as necessary. Replacement equipment would not be stored on-site. (GCE 2, response 81, response 82)
- 314. After installation, equipment would be checked periodically by thermal imagery and physical inspection. (GCE 1, Appendix C)
- 315. O&M activities would be conducted by a third-party contractor. (GCE 1, Appendix C)
- 316. Snow removal, if required, would be the responsibility of GCE. (GCE 3, response 91)

Decommissioning

- 317. The facility has an anticipated life of up to 40 years. (GCE 2, response 14)
- 318. At the end of the Project's lifespan, it will be decommissioned and removed from the property within 150 days after the end of commercial operation. (GCE 1, Appendix D)
- 319. The site would be restored to its existing condition. (GCE 1, p. 9, Appendix D)
- 320. GCE intends to recycle all Project materials, including solar panels, steel and concrete to the maximum extent practicable. (GCE 1, Appendix D)
- 321. No facility equipment, above or below grade, would be left at the site once decommissioning is complete. (GCE 2, response 85)
- 322. Decommissioning also includes restoration of the site, including re-grading where necessary, and site re-vegetation to minimize erosion. The lease does not include a specific ground cover to be planted upon completion of facility component removal. (GCE 1, Appendix D; GCE 2, response 88)
- 323. 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 soils to prime farmland status. (CGS §16-50p(g) (2024))
- 324. The lease agreement with the property owner includes provisions related to decommissioning and site restoration at the end of the Project's useful life. (GCE 3, response 91)

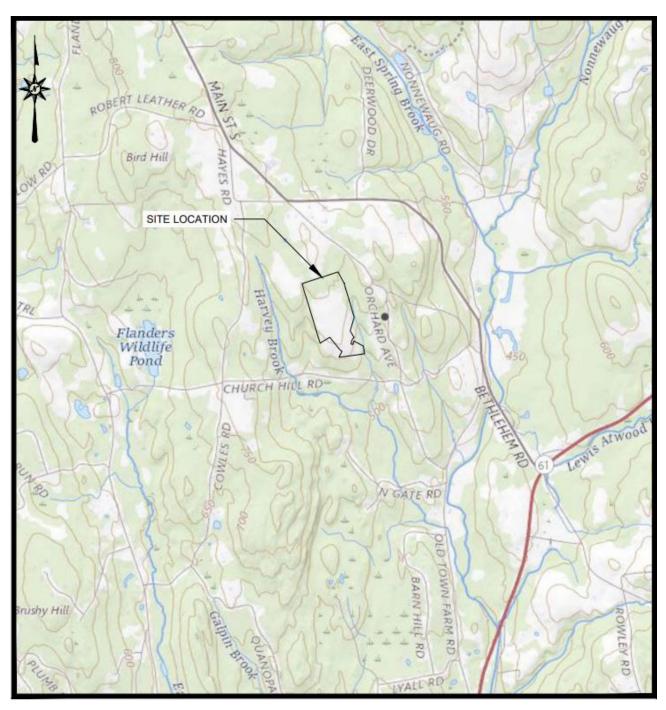
325. GCE selected solar panels (Heliene 144HC M10 Bifacial Modules) for the Project that meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria⁶ for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life. (GCE 1, Appendix B; Petition 1541, Record – Appendix B)

Neighborhood Concerns

- 326. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public comment session on October 3, 2024 at 6:30 p.m. via Zoom remote conferencing. (Record; Tr. 2, pp. 4-5)
- 327. During the public comment session, four members of the public made oral limited appearance statements about the proposed facility. Concerns include, but are not limited to, the following: public benefit, noise, visibility, well water, EMF, agricultural activities, technological advancements, liability, road turnaround area, and property values. (Record; Tr. 2, pp. 9-20)
- 328. The Council received 9 written limited appearance statements regarding the proposed facility. (Record)
- 329. Based on Town concerns regarding the lack of a turnaround area where Fawn Meadow Lane abuts the host parcel, site screening, universal key box, underground interconnection, noise attenuation, exterior lighting, and wetland mapping, GCE revised the Project to include a potential turnaround area on the host parcel, a universal key box for emergency responder access, an underground interconnection to avoid the installation of utility poles, a noise study, visual analysis and wetland survey, and no exterior lighting, (GCE 1, Appendices A, G, I, N & O).
- 330. Based on neighborhood concerns regarding noise, GCE would examine relocating the southwest inverter/transformer pad to reduce noise and would conduct a post-construction noise study to ensure the Project meets state standards. GCE would examine the possibility of removing the northern access drive to preserve farmland soil. (Tr. 1, pp. 25-29, 33-34, 63-64, 87-88)

⁶ https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-C/section-261.24

Figure 1 – Site Location



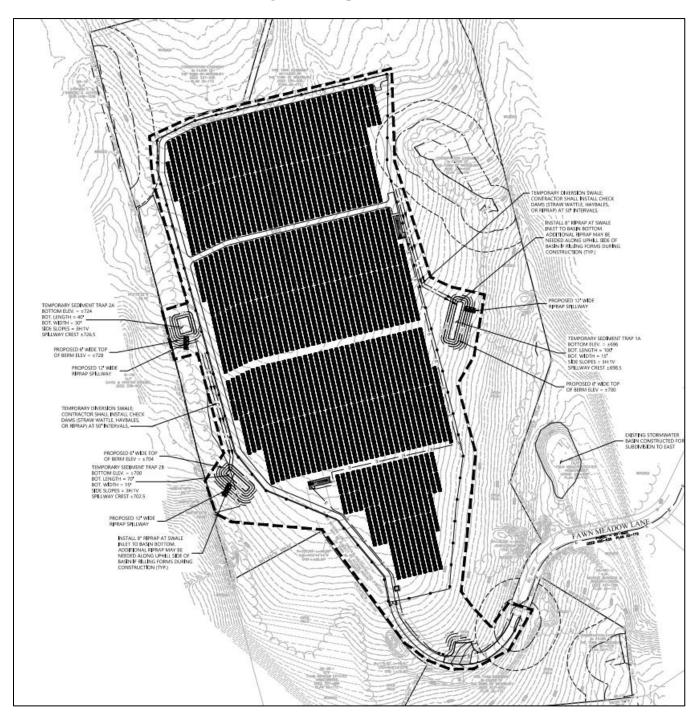
PROPERTY LINE PROPOSED FENCE LINE

Figure 2- Existing Site Conditions

(GCE 1, Figure 9)

Figure 3 – Proposed Facility Layout

Figure 4 – Proposed Site Plan



(GCE 1, Appendix A)

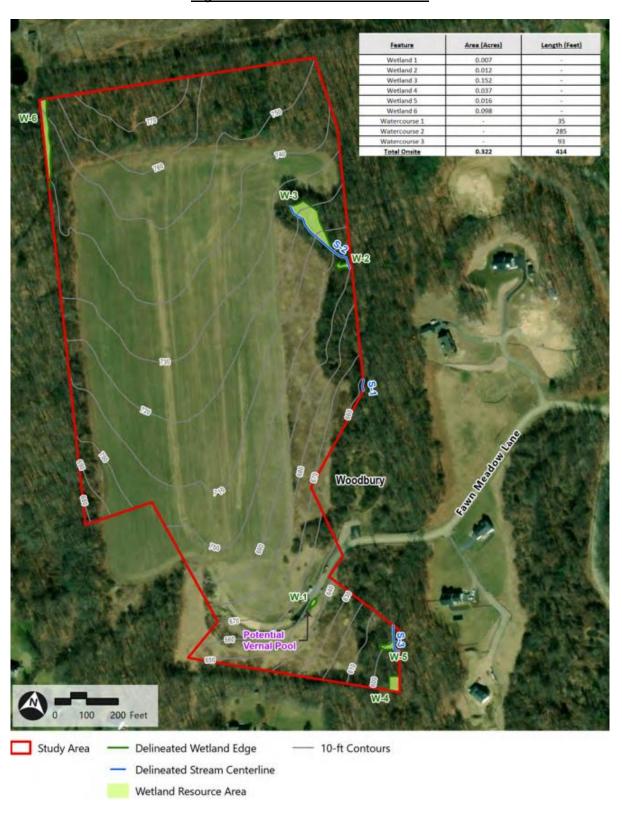


Figure 5- Wetlands and Watercourses

PROPERTY LINE FENCE LINE PARCEL AREA 36.53 ACRES PRIME FARMLAND ON PROPERTY 2.71 ACRES STATEWIDE IMPORTANCE ON PROPERTY 13.59 ACRES PROJECT AREA 15.46 ACRES 1.08 ACRES PRIME FARMLAND WITHIN FENCE STATEWIDE IMPORTANCE WITHIN FENCE 4.44 ACRES LEGEND GENERAL NOTES BASEMAP IMAGERY OBTAINED FROM MAXAR ON 4/25/2024. LOCATION OF FARMLAND SOILS OBTAINED FROM CT ECO ON PRIME FARMLAND SOILS 04/25/2024. EXISTING SITE BOUNDARY INFORMATION PROVIDED VIA STATEWIDE IMPORTANCE SURVEY BY NORTHEAST SURVEY CONSULTANTS ON 9/22/2023. SOILS

Figure 6 - Farmland Soils Map