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April 16, 2013

VIA HAND DELIVERY

Ms. Linda Roberts
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Petition 1056: Petition of GRE 314 East Lyme, LLC for a Declaratory Ruling for the Location, Construction, and Operation of a 5 MW Solar Photovoltaic Renewable Energy Generating Project on Grassy Hill Road and Walnut Hill Road in East Lyme, Connecticut

Dear Ms. Roberts:

On behalf of the petitioner, GRE 314 East Lyme, LLC, enclosed is an original and fifteen (15) copies of the petitioner's Draft Findings of Fact

Should you have any questions concerning this submittal, please contact me at your convenience. Thank you in advance for your assistance.

Respectfully submitted,

Lee D. Hoffman

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PETITION NO. 1056 – GRE 314 East Lyme, LLC Petition for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the Proposed Construction and Operation of a 5.0 MW Solar Photovoltaic Renewable Energy Generating Project Located On Grassy Hill Road and Walnut Hill Road, East Lyme, Connecticut

Connecticut Siting Council

April 16, 2013

DRAFT

Findings of Fact

Administrative Procedures

1. GRE 314 East Lyme, LLC (GRE), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50k and § 4-176(a), and Regulations of Connecticut State Agencies (RCSA) § 16-50j-38 *et seq*, submitted a petition (Petition) to the Connecticut Siting Council (Council) on December 17, 2012, for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the construction and operation of a 5.0 megawatt (MW) solar photovoltaic (PV) generating facility located at 40 and 44 Grassy Hill Road, 89 Walnut Hill Road, and Walnut Hill Road Rear in East Lyme, Connecticut. (Petition, p. 1)

2. GRE is a limited liability company with an office at 10 Main Street, Suite E, Middletown, CT 06457. (Petition, p. 6)

3. GRE's project was submitted in response to a Request for Proposal (RFP) for zero-emission Class I renewable energy source generation facilities issued by Connecticut's Department of Energy and Environmental Protection (DEEP) in December, 2011. DEEP's RFP was issued in accordance with the requirements of Section 127 of Public Act 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future*. GRE's proposal was one of two projects selected out of twenty-one proposals through DEEP's RFP process. (Petition, pp. 2-3; Petition, Appendix A, Letter from DEEP dated March 13, 2013)

4. GRE provided notice of its intent to file a petition with the Council via certified mail to abutting property owners. (Petition, p. 20; Petition, Appendix G)

5. GRE received return receipts from all abutting property owners to whom it sent notice of its petition filing. (GRE Response to Council Interrogatories, p. 1 and Exhibit Q-1)

6. GRE sent a copy of the Petition to the Town of East Lyme. (Petition, p. 5)

7. GRE provided notice of its Petition to all federal, state, and local officials and agencies as required by RCSA § 16-50j-40. (GRE Response to Council Interrogatories, p. 1 and

Exhibit Q-1)

8. GRE posted a sign at the site access driveway along Walnut Hill Road. The sign measured four feet by six feet and contained the information as required by RCSA § 16-50j-21(a)(3). (GRE's Pre-Hearing Submission, Exhibit 2, Sign Posting Affidavit with Photograph dated March 5, 2013)

9. The Council and its staff conducted an inspection of the proposed site on March 14, 2013. (CSC Petition 1056 Field Review Notice; Transcript, March 14, 2013, 3:00 p.m. [Tr. 1], p. 10)

10. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on March 14, 2013, beginning at 3:00 p.m. and continuing at 7:00 p.m. in the East Lyme Town Hall at 108 Pennsylvania Avenue, Niantic, Connecticut. (Tr. 1, p. 2)

State Agency Comments

11. Pursuant to CGS § 16-50j(h) and RCSA § 16-50j-12, the Council solicited written comments and consultations from the state agencies identified therein. (Record)

12. In response to the Council's solicitation, the Department of Transportation (DOT) submitted a letter stating that it had reviewed the Petition and had no comments. (DOT comments, March 1, 2013)

13. In response to the Council's solicitation, DEEP submitted comments on March 13, 2013. In its comments, DEEP stated that the proposed drainage measures are reasonable and that because the project would not be an industrial activity it would not require registration for its stormwater discharge. DEEP also noted that the project may impact two species listed on the Natural Diversity Data Base—the Harry's elfin butterfly and the American chaffseed. (DEEP comments, March 13, 2013)

14. The Council did not receive comments from any other state agencies. (Record)

Municipal Consultation

15. Prior to filing the Petition with the Council, GRE kept local officials apprised of its plans for the project. GRE's contact with local officials included: regular discussion with local officials, including the Town of East Lyme's First Selectman; providing the Town of Eastl Lyme with a copy of the Petition; and holding a legally noticed, public informational hearing in East Lyme on December 5, 2012, which was part of a regularly scheduled Board of Selectmen meeting. (Petition, p. 5)

16. Due to the project being within 2,500 feet of the Town of Montville, GRE sent notice of the project to the Town of Montville on February 14, 2013, and sent information on the

project to the Town of Montville's Planning Department on February 15, 2013. (GRE Response to Council Interrogatories, p. 1)

Site Search

17. GRE reviewed its portfolio of available real estate for properties that would be capable of supporting this type of project. (GRE Response to Council Interrogatories, p. 2)

18. GRE selected the project site based on, among other things: the site has sufficient size to accommodate the number of solar PV panels and related infrastructure required for the project; the ability to avoid construction in wetlands, upland review areas, or other environmentally sensitive areas; appropriate grading and topography; and proximity to electrical infrastructure and roadways. (Petition, p. 7)

Solar Assessment

19. According to the National Renewable Energy Laboratory's Solar Advisor Model, the project would be capable of generating 6,458,000 kilowatt hours per year. (Transcript, March 14, 2013, 7:00 p.m. [Tr. 2], p. 44; Petition, p. 10)
20. The efficiency of the solar panels in the project will degrade by no more than the industry standard of 0.5% per year. Based on GRE's real-world field-operating data, the actual degradation may be closer to 0.25%. (GRE Response to Council Interrogatories, p. 4)

Site Description

21. GRE's proposed project is located on four parcels of property that comprise a total of 75.669 acres. GRE owns the parcels. The parcels are a mix of developed and undeveloped and have been vacant for many years. (Petition, pp. 3-4, 7)

22. The project itself will utilize approximately thirty-five acres, with the panels themselves taking up twenty-seven of those thirty-five acres. (Petition, pp. 3-4)

23. The land is in a rural district zone, RU-40. (Petition, p. 4)

24. Land use in the surrounding vicinity is residential to the west, a vacant field to the north, and forest to the south and west. (Petition, p. 7)

Project Description

25. GRE's project would be a "grid-side distributed resources" facility, as defined in CGS § 16-1(a)(43), because it involves "the generation of electricity from a unit with a rating of not more than sixty-five megawatts that is connected to the transmission or distribution

system…". (Petition, p. 20)

26. The project would consist primarily of the construction and installation of over 17,500 solar PV panels and associated ground equipment. There will be eight inverters connected to the panel cluster. (Petition, p. 7)

27. During construction and operation of the project, GRE will utilize an existing gravel driveway. An eight-foot wide maintenance path will be constructed around the border of the panel clusters, with access aisles among the clusters at various points. (Petition, p. 8)

28. The project would include an electrical collector yard. At the point of common coupling with The Connecticut Light and Power Company (CL&P) distribution network, there would be a utility-class circuit breaker equipped with a multifunctional relay or a recloser to serve as an Interconnection Interruption Device. Revenue metering would be provided on the utility side of the breaker and a disconnect switch would be provided on the utility side of the meter. (Petition, p. 8; Tr. 1, pp. 38-39)

29. The project would include additional equipment, as needed, to monitor circuit voltage and to disconnect from the grid to protect the project's system during outages. (Petition, p. 8)

30. An ancillary building will be constructed on the property to provide storage and office space for operations and maintenance equipment. The ancillary building will contain restroom facilities and will require an on-site well to meet sanitary and drinking needs. GRE will dispose of wastewater to an on-site septic system designed in accordance with applicable standards to accommodate wastewater loading rates and soil conditions. (Petition, p. 8; Tr. 1, pp. 78-79)

31. Interconnection will be made to CL&P's distribution system at Grassy Hill Road in accordance with all applicable CL&P technical standards and State of Connecticut, ISO-NE and FERC requirements. The interconnection will be made pursuant to CL&P's and United Illuminating's Guidelines for Generator Interconnection. GRE has successfully completed a Scoping Meeting, an Application Request, and an Application Review. (Petition, p. 9)

32. The project has an anticipated useful life of twenty-five years. (Petition, p. 7)

33. GRE will use wood chips and no-mow grass seed under and around the panel clusters. GRE will not use fertilizers, and there could be targeted application of herbicides. (Tr. 1, pp. 8, 32-34, 73-74)

34. GRE anticipates minimal, if any, annual cleaning of the panels using water only. (Tr. 1, p. 31)

35. Fencing and landscaping will be used around the perimeter of the property to minimize the visual impact of the project. (Petition, pp. 7, 15-16; Tr. 1, pp. 25, 34)

36. The estimated cost of the project is:

Solar PV panels and electrical	$10,550,000
Site work	$4,313,000
Balance of Plant	$641,100
Total estimated cost	$15,504,100

(GRE Response to Council Interrogatories, p. 2 and Exhibit Q-7)

Environmental Considerations

37. The project would generate 100% clean, renewable energy without any air emissions, including greenhouse gas emissions. (Petition, p. 10)

38. Over its twenty-five year anticipated useful life, the project would result in a reduction of 88,300 pounds of nitrogen oxides, 179,750 pounds of sulfur oxides, and 158,300 tons of carbon dioxide when compared to traditional fossil fuel generation. (Petition, pp. 10-11)

39. Because the project will not burn fuel such as natural gas, coal, or oil, there will not be any need to consider release and ignition of combustible fuels at pipelines, compressors, or storage facilities. The absence of combustible fuels for facility operation completely eliminates the risk of environmental damage due to fuel spillage or explosion due to inadvertent ignition of natural gas or other fossil fuels. (Petition, p. 12)

40. The project will not consume water in its generation of electricity, so the project in not anticipated to have an adverse impact to the water resources of the state. (Petition, pp. 3, 8, 19)

41. The noise impacts from the project will be minimal. There is a very slight hum from the inverters, but it is faint, the inverters are enclosed in cases to muffle the noise, and the inverters can be moved away from property lines to further minimize the effect. (Petition, p. 12; Tr. 1, pp. 35-36, 92)

42. The project will be consistent with the goals of the State's Conservation and Development Policies Plan generally, and specifically for conservation areas, preservation areas, and rural areas. (Petition, pp. 13-14)

43. The visual resources evaluation indicates that the project would not have a substantial adverse visual effect on nearby residences due to the planned fencing and vegetative screening. (Petition, pp. 15-16)

44. The project will not affect any historic properties. (GRE Pre-Hearing Submission, Exhibit 5, Letter from State Historic Preservation Office (SHPO) dated March 6, 2013)

45. Much of the property no longer retains archaeological potential and does not need to be examined using subsurface techniques prior to construction. The parts of the property that appear to retain intact archaeological deposits were subjected to a Phase IB Cultural Resources Survey in 2007. At that time, no evidence of significant cultural material was identified within the proposed solar field project bounds, and no additional testing is recommended at this time. As result, the project will not impact any potentially significant or significant cultural resources. (Phase IA Cultural Resources Assessment Survey, dated April 2013, pp. 11-12)

46. The Tinker family cemetery was noted outside of, but in close proximity to the proposed construction. It is situated in the southwest corner of where the western project perimeter changes from an easterly to southerly direction. Although the cemetery is located beyond the stonewalls that form the parcel boundaries, it is recommended that a 6 m (20 ft) buffer from the stone wall be established to ensure that no unmarked graves are disturbed during construction. This cemetery falls under the protection of CGS § 53a-218 (Interference with a cemetery or burial ground). (Phase IA Cultural Resources Assessment Survey, dated April 2013, p. 11)

47. The Natural Diversity Data Base report indicated the possible presence of two species in the database—the Harry's elfin butterfly and the American chaffseed. Targeted surveys were undertaken for both the host plant for the Harry's elfin butterfly and the American chaffseed. Neither plant occurs on the property. (Petition, p. 17; Petition, Appendix D, Natural Resource Inventory and Impact Assessment, p. 23)

48. The project is located in a Flood Zone X, an area outside any 500-year floodplain with a minimal risk for flooding. (Petition, Appendix E, Stormwater Management Report, Figure 4, FEMA Flood Map)

49. The project would not use any water during its electricity-generating operations and would not have an adverse impact on water quality or supply in the state. (Petition, pp. 10, 17)

50. There are seven wetland systems located on the project site. Most of the wetlands are wooded swamps that include areas of wet meadow/emergent marsh, open water, or shrub-scrub embedded within them. (Petition, p. 17; Petition, Appendix D, Natural Resource Inventory and Impact Assessment, pp. 4-6)

51. The project has been designed so that there will be no direct impacts on these wetlands. The entirety of the project will be constructed outside the boundaries of these wetlands and outside of the boundaries of the applicable upland review areas for these wetlands. A Wildlife/Conservation seed mix containing native grasses and forbs will be used to stabilize exposed areas post-construction. (Petition, pp. 17-18; Petition, Appendix D, Natural Resource Inventory and Impact Assessment, p. 24)

52. GRE will utilize Best Management Practices in accordance with the 2002 Connecticut Guidelines for Erosion and Sediment Control throughout the course of construction

activities on the property and will be maintained until disturbed areas have been permanently stabilized. (Petition, pp. 18-19)

53. Peak stormwater discharge rates will be lessened from the pre-developed to post-developed site conditions. (Petition, Appendix E, Stormwater Management Report, p. 7)

Visibility

54. The project will be surrounded by fencing and landscaping so as to minimize visual impacts of the project from the road and nearby residences. (Petition, p. 7; Tr. 1, p. 25)

55. The plantings in the landscaping between the fence and the neighboring properties would be allowed to grow freely without trimming in order to make the fence less visible over time. (Tr. 1, p. 34)

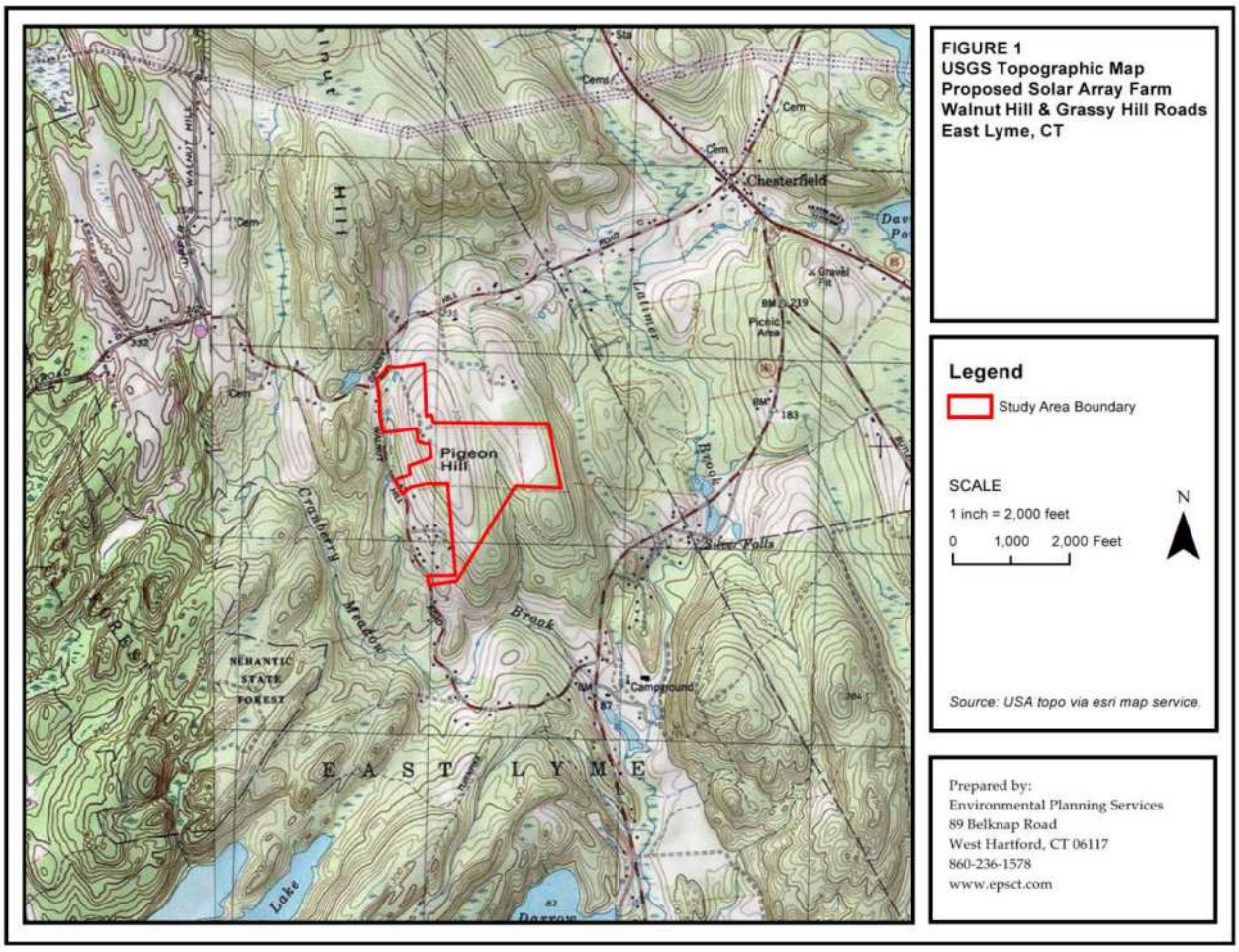
Attachment 1: Site Location Map

Attachment 2: Overall Site Plan

Attachment 3: Overall Aerial Plan, showing array location, wetlands and wetlands buffer area

ATTACHMENT 1

Figure 1. Site Location Map



ATTACHMENT 2

Overall Site Plan

LEGEND

- GRAVEL MAINTENANCE PATH / PARKING
- LOD — LIMIT OF CONSTRUCTION EQUALS CONTRACT LIMIT LINE
- — x — 6' HIGH CHAIN LINK FENCE
- WOOD STOCKADE FENCE (HEIGHT PER PLAN)
- LIMIT OF CLEARING/GRUBBING
- 280kW SOLAR PANEL CLUSTER
- FARMER STONE WALL (SEE SHEET DN-2 FOR DETAIL)

100 0 50 100

100' INLAND WETLAND BUFFER

PROPOSED GRAVEL DRIVEWAY (TYP)

MAINTENANCE BUILDING AND PARKING

EXISTING GRAVEL DRIVEWAY

PANEL ARRAY (TYP)

ELECTRICAL EQUIPMENT (TYP)

ACCESS ROADS (TYP)

PANEL ARRAY (TYP)

PROPERTY LINE (TYP)

WALNUT HILL ROAD

WALNUT HILL ROAD

Antares Solar Field • Grassy Hill Road & Walnut Hill Road, East Lyme, Connecticut • March 14, 2013

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ATTACHMENT 3

Overall Aerial Plan

150 0 75 150

100' INLAND WETLAND BUFFER

MAINTENANCE BUILDING AND PARKING

100'

PROPERTY LINE (TYP)

PANEL ARRAY (TYP)

ACCESS ROADS (TYP)

PANEL ARRAY (TYP)

GRASSY HILL ROAD

WALNUT HILL ROAD

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