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August 22, 2017

VIA ELECTRONIC MAIL AND OVERNIGHT MAIL

Ms. Melanie Bachman
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: PETITION NO. 1310 – Quinebaug Solar, LLC Petition for Declaratory Ruling

Dear Ms. Bachman:

Enclosed please find an original and 15 copies of Quinebaug Solar, LLC's responses to the Connecticut Siting Council's ("Council's") interrogatories CSC-1 through CSC-77 in connection with the above-referenced matter.

Please feel free to contact me should you have any questions regarding this submission.

Very truly yours,

David W. Bogan

DWB/dls

Enclosures

STATE OF CONNECTICUT
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Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

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CSC-1 Under Tab G of the Petition, Quinebaug Solar, LLC (QS) included 13 letters from abutting property owners indicating that they do not object to the proposed project. Provide a list of the names and addresses of the signatories of such letters.

Petitioner's Response: The following reflects the names and addresses of the signatories of the referenced letters included under Tab G:

Name	Address	Date Signed
1. Michael J. Zurowski	275 Rukstela Road, Brooklyn, CT 06234	10/18/2016
2. Jennifer A. Dombkowski	40 Kerr Road, Canterbury, CT 06331	10/13/2016
3. Scott C. Carito	251 Christian Hill Road, Brooklyn, CT 06234	10/13/2016
4. Spencer Strolsky	90 Maynard Road, Brooklyn, CT 06234	10/13/2016
5. Brian G. Rizor, Jr.	772 Allen Hill Road, Brooklyn, CT 06234	10/12/2016
6. Sarah L. Stewart	279 Christian Hill Road, Brooklyn, CT 06234	10/12/2016
7. Leanne Grudzien	80 Maynard Road, Brooklyn, CT 06234	10/12/2016
8. Tammy I. Eckard	281 Wauregan Road, Canterbury, CT 06331	9/22/2016
9. Wendy M. Gagnon	234 Wauregan Road, Canterbury, CT 06331	9/22/2016
10. Melissa B. Arters	250 Rukstela Road, Brooklyn, CT 06234	9/15/2016
11. Richard Stuyniski/ Stuyniski Family Trust	Beecher Road, Brooklyn, CT 06234	9/15/2016
12. Leonard G. and Aida Bissonnette	755 Allen Hill Road, Brooklyn, CT 06234	9/1/2016
13. Christopher V. Laraia	766 Allen Hill Road, Brooklyn, CT 06234	9/1/2016

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CSC-2 When was the proposed project submitted as a proposal for the Tri-State Clean Energy RFP? When was the proposed project selected?

Petitioner's Response: The proposed project was submitted to the Tri-State Clean Energy RFP evaluation team on January 27, 2016. The Connecticut Department of Energy and Environmental Protection (DEEP) sent the project a letter on October 24, 2016 in which it stated that the project was selected by the Tri-State Clean Energy RFP evaluation team for "Notice of Selection for Contract Negotiation under the New England Clean Energy RFP."

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CSC-3 Does the Petitioner have a contract to sell the electricity it expects to generate with the proposed project? If so, to which public utility? Was a Power Purchase Agreement (PPA) approved by PURA? When? Are there provisions for any extension of time in the PPA?

Petitioner's Response: Quinebaug has a contract to sell the electricity that will be generated from the project. The electricity from the Quinebaug project will be sold to Connecticut utilities including Eversource (Connecticut Light and Power) (40.18% of the project's electricity) and United Illuminating (9.82% of the project's electricity), the remainder of the project's electricity will be sold to Massachusetts and Rhode Island utilities including; Eversource (NSTAR-18.84%), Eversource (WMECO – 3.28%), National Grid (19.98%), Unitil (0.4%) and National Grid (Narragansett Electric 7.5%).

The power purchase agreement ("PPA") is currently expected to be filed for PURA review on August 25, 2017 which will trigger a 30 day review period for approval. There are no provisions for extending the PPA beyond the 20 year term.

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CSC-4 What is the length of the PPA, if applicable? Is there an option to renew?

Petitioner's Response: The length of the PPA is 20 years. There is no option in the PPA to renew.

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CSC-5 What are the existing land uses in each direction from the proposed site, e.g. north, south, east, and west?

Petitioner's Response: Land uses to the south of the Project site include gravel mining, residential development, forested undeveloped land, and agriculture. The Quinebaug River and the DEEP Quinebaug Valley Trout Hatchery are located to the southeast. Immediately to the east of the Project site, there is undeveloped forested land. Further east along Christian Hill and Maynard Road the current land use is residential. Land uses to the north of the Project site include agricultural land, forested undeveloped land, and single-family residential. Land uses to the west of the Project site include gravel mining (northwest), forested undeveloped land, and agriculture.

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CSC-6 Has the State of Connecticut Department of Agriculture purchased any development rights for the proposed site as part of the State Program for the Preservation of Agricultural Land?

Petitioner's Response: Our research reveals that on November 15, 1993, the Connecticut Department of Agriculture filed a Notice in the Brooklyn and Canterbury Land Records indicating that Kathryn Rukstela had filed an Application for Consideration in the State of Connecticut Program for the Preservation of Agricultural Lands, attached as Exhibit CSC-6 – November 1993 Application for Consideration. Pursuant to Connecticut General Statutes § 22-26cc(b), if the Connecticut Department of Agriculture subsequently acquired any rights to the land, they would have had to file notice of such a restriction. The land records contain no such notice.

In 2005, Ms. Rukstela sold the property via a warranty deed to River Junction Estates, LLC, included as Exhibit CSC-6 – January 2005 Transfer to River Junction Estates. Immediately after the transfer, River Junction Estates, LLC filed a Notice to revoke any prior offer to purchase the land in the Brooklyn and Canterbury Land Records, pursuant to Connecticut General Statutes § 22-26cc(a), attached as Exhibit CSC-6 – January 2005 Revocation.

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CSC-7 Is any portion of the site currently in productive agricultural use? If so, how many acres and is it used by the property owner or is it leased to a third party? Could the project qualify under the Agricultural Virtual Net Metering Program or other agriculturally-friendly renewable energy program?

Petitioner's Response: Currently, approximately 80 acres of the property under lease by Quinebaug is being used for agricultural purposes. The agricultural practices are conducted by third parties, and the current landowner does not farm the property.

The project as proposed would likely not qualify under Connecticut's Agricultural Virtual Net Metering Program. Connecticut General Statutes § 16-244u(a)(7)(B) defines an "agricultural virtual net metering facility" as having "(iii) a nameplate capacity rating of three megawatts or less." As the Quinebaug Project is proposed with a capacity of approximately 65 megawatts direct current (DC) or 50 megawatts alternating current (AC), it would not be eligible for consideration under current program requirements.

Other agriculturally-friendly renewable energy programs either apply to different technology (anaerobic digestion or combined heat and power), modifications of existing buildings (C-PACE) or upgrades of existing equipment (Small Business Energy Advantage or other Energize Connecticut programs).

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CSC-8 Does the proposed site contain any Connecticut Prime Farmland and/or Important Agricultural Soils? If so, what acreage of prime and important soils would the facility and associated equipment be located on?

Petitioner's Response: As described in Section 6.16 of the Petition, soil investigations within the Study Area determined that portions of the site are mapped by the Natural Resource Conservation Service (NRCS) as soil series classified as Prime Farmland, Farmland of Statewide Importance, and Locally Important Farmland soil types.

As shown on Figure R-1 in Exhibit R of the Petition, the area of estimated disturbance to mapped Statewide Important Farmland Soils is approximately 3.1 acres. The estimated disturbance to mapped Prime Farmland Soils is approximately 1.6 acres, and the estimated disturbance to mapped Locally Important Farmland Soils is approximately 1.5 acres; for a total potential projection of ±6.2 acres of mapped Agricultural Soils Disturbed.

However, during a Project site visit it was determined that the forested central and eastern portions of the Project site would not be considered Prime Farmland. Thus, these estimated agricultural soils disturbances based on NRCS mapping are likely to be greater than actual impacts.

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CSC-9 Is there any environmental contamination on the proposed site from any previous agricultural use or other land use disturbance (ex. Soil and/or water contamination)? If so, how would the petitioner remediate the pre-existing soil and/or water contamination?

Petitioner's Response: A Phase I Environmental Site Assessment was conducted at the Quinebaug solar Project site. No Recognized Environmental Conditions (RECs), Historical RECs, or Controlled RECs were identified on the site.

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CSC-10 Is the site parcel, or any portion thereof, part of the Public Act 490 Program? If so, how does the town land use code classify the parcel(s)? For example, is/are the parcel(s) classified as "Tillable D – good to fair"?

Petitioner's Response: Connecticut Public Act 63-490, codified in Connecticut General Statutes §§ 12-107a –f, allows certain farm, forest or open space land to be assessed at its use value as opposed to its fair market value. Pursuant to Connecticut General Statutes § 12-107c(a), "an owner of land may apply for its classification as farm land." The current owners of the site have not applied to the Tax Assessors of Brooklyn or Canterbury for special assessment for agricultural purposes.

Each Connecticut municipality controls the designation of open space. Our research determined that the parcels located in Canterbury are not classified as open space. In Brooklyn, one parcel currently owned by Founders Bee and Investments, LLC is partially classified as open space. However, the portion to be leased by the project is not classified as open space, according to the Town of Brooklyn Tax Assessors Office.

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CSC-11 Have any residential subdivisions or other land use plans been approved by the town for the site in the past? If so, please submit the approved plans. If not, could a residential subdivision or other land use plan be constructed at the site? If so, please provide an overlay map depicting the details of a potential residential subdivision or other land use plan for the site using maximum development potential allowed by the town's zoning regulations.

Petitioner's Response: As discussed on Page 3-3 and Exhibit K of the Petition, at the time they acquired the subject parcels, River Junction Estates approached the Town of Brooklyn to establish a recreation development district, which was approved. This district was created in order to permit the construction of a golf course and 182 housing units on that property. Additionally, lands near Wauregan Road in Canterbury and Brooklyn were acquired, and a portion of that property was intended to be used as a point of ingress to the aforementioned golf course. River Junction Estates, LLC created a 15-lot subdivision north of Wauregan Road, approved by the Town, and used the remainder of the property for gravel extraction. These developments were deemed economically inviable at the time because of the decline in the housing market during the late 2000's. Consequently, the owner courted solar developers to lease that property. Under current market conditions however, there has been substantial interest in developing the property for residential housing. As no golf course exists today, it is assumed that those development plans were abandoned by River Junction Estates.

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CSC-12 Where is the nearest recreational area from the proposed site? Describe the visibility of the proposed project from nearby recreational areas.

Petitioner's Response: The J. Arthur Atwood Memorial Field is located approximately 0.75 miles to the east of the Project site. The Project is not expected to be visible from this recreational area as a result of vegetation remain between the Project site and the fields, and existing development (residential properties) that would obstruct any views of the Project. The athletic fields inside the Project site are privately owned.

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CSC-13 Where is the nearest area of historical significance or archaeological sensitivity from the proposed site? Describe the visibility of the proposed project from nearby historic or archaeological areas.

Petitioner's Response: The nearest historic resource listed on the National Register of Historic Places is the Wauregan Historic District. This historic district, which consists of a mill village, was established around a cotton mill that was powered by the Quinebaug River. It was listed on the National Register of Historic Places in 1979. The Wauregan Historic District is located approximately 0.5 miles from the eastern edge of the limit of work associated with the proposed solar facility. The region between the solar facility and Wauregan Historic District consists of undulating topography, residential neighborhoods, and large stands of mature forest. Due to its distance from the limit of work, the Wauregan Historic District will not be impacted directly by the proposed solar facility. Further, the viewshed from the historic district also will not be impacted by the proposed project because of the hilly and forested nature or the terrain between the proposed solar facility and the historic district.

The nearest area of archaeological sensitivity is within the proposed limit of work itself. A Phase 1A cultural resources assessment survey was performed at the Project site, including pedestrian survey and mapping, and it was found to contain some areas of moderate/high archaeologically sensitive areas. A Phase 1B cultural resources reconnaissance survey will be performed on these identified areas, including subsurface testing, prior to construction of the proposed solar facility.

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CSC-14 What is the status of the Phase 1B Survey and its submission to the State Historic Preservation Office (SHPO) for review?

Petitioner's Response: Fieldwork for the proposed Phase 1B cultural resources reconnaissance survey is pending. However, Quinebaug, through its archaeological contractor, Heritage Consultants, LLC, has prepared and submitted a Scope of Work for the Phase 1B cultural resources reconnaissance survey to the Connecticut State Historic Preservation Office. That Scope of Work is currently under review.

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CSC-15 Where is the nearest off-site residence in Brooklyn located? Provide the distance, direction, and address of such off-site residence.

Petitioner's Response: Due north of the Project, there are four residential parcels located on a gravel road accessed via Allen Hill Road (Town of Brooklyn Map 30, Lots 31A to 31A-3). Each parcel is located approximately 100 feet away from perimeter fencing.

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CSC-16 Where is the nearest off-site residence in Canterbury located? Provide the distance, direction, and address of such off-site residence.

Petitioner's Response: To the southeast of the Project, the residences located at 265 and 267 Wauregan Road parcels are each approximately 88 feet from the edge of the structures to the perimeter fencing.

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CSC-17 What are the percent losses associated with the inverters?

Petitioner's Response: Inverter losses are expected to be approximately 1-1.5%

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CSC-18 On page 19 of ISO-New England, Inc.'s (ISO-NE) Final 2017 Solar PV Forecast, ISO-NE utilizes an AC MW to DC MW (AC/DC Ratio) of 0.83. Is it correct to say that the actual AC/DC Ratio can vary from one solar PV project to the next? Is it correct to say that the AC/DC Ratio of the proposed project is approximately 0.77? Generally, which design considerations were used to determine the AC/DC Ratio of the proposed project?

Petitioner's Response: The AC/DC ratio is approximately 0.77. The AC/DC ratio was largely determined by the module efficiency and available buildable land. Some further optimization is possible before construction.

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CSC-19 Explain why a solar panel orientation to the south with an angle at 25 degrees above the horizontal was selected for this facility. Is the project designed to maximize annual energy production or peak load shaving?

Petitioner's Response: The project parameters were selected to economically maximize energy production.

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CSC-20 For solar PV, capacity factor is the ratio of net AC megawatt-hours (MWh) output in one year divided by the product of DC megawatts and 8,760 hours per year. What is the projected capacity factor (expressed as a percentage) for the proposed project?

Petitioner's Response: The estimated hourly average net capacity factor (NCF) is 19.6 percent.

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CSC-21 What is the efficiency of the photovoltaic module technology of the proposed project?

Petitioner's Response: Current design is based on 340 watt modules.

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CSC-22 Is a battery or other type of energy storage system proposed? If yes, describe the function of lithium-ion battery or other type of storage system. What prediction methods and reports has QS used to assess total capacity and annual energy production in kilowatt-hours for this project, and how are the proposed batteries or other type of energy storage incorporated into those predictions? Are the batteries or other type of energy storage used to "even out" the energy production, charging during the day and discharging at night, or are they charged during off-peak hours to grant more output during peak hours? Are they simply used to function as a power supply backup?

Petitioner's Response: No energy storage system is proposed as part of the project.

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CSC-23 Would the impact of bird droppings, bird feeding habits (ex. Dropping food items such as clams or other prey on the solar panels) or weather events (ex. Snow or ice accumulation, hail, dust, pollen, etc.) reduce the energy production of the proposed project? If so, approximately how much and for how long? Would any of these expose the solar panels to ballistic or other damage? If applicable, what type of methods would be employed to clear the panels of the bird droppings, prey shells, snow and ice accumulation, hail, dust or pollen?

Petitioner's Response: Silting of the panels over time is normal and expected. Some loss of production will occur. Cleaning of the panels will occur naturally with normal rainfall and snow. Quinebaug also will perform regular visual operations and maintenance inspections as discussed in Exhibit I of the Petition.

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CSC-24 Would voltage and current be impacted by soft shading of the solar panels, such as air pollution, or hard shading of the solar panels, such as an accumulated solid? If so, would energy production be reduced?

Petitioner's Response: Silting of the panels over time is normal and expected. Some loss of production will occur. Cleaning of the panels will occur naturally with normal rainfall and snow. Quinebaug also will perform regular visual operations and maintenance inspections as discussed in Exhibit I of the Petition.

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CSC-25 Provide the specifications sheets for a) proposed inverters and b) solar photovoltaic panels.

Petitioner's Response: Specifications are provided as Exhibits CSC-25. Please note that final equipment selection is subject to change.

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CSC-26 Provide the approximate dimensions for the transformers and inverters, including the heights.

Petitioner's Response: The transformers and inverters are pre-manufactured and skid-mounted and will measure approximately 7-8 feet high x 16-18 feet wide x 4-6 feet deep.

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CSC-27 What is the design wind speed of the solar panels with the fixed vertical post foundations? What prevents the solar panels from separating from either the racking or the foundation during high winds?

Petitioner's Response: The design wind speed is 119 mph per ASCE 7-10. The racking system is designed by the supplier to meet the local design wind speed.

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CSC-28 Reference Tab G of the Petition. The proposed access roads are identified in red. What is the total length of all of the access roads combined in miles?

Petitioner's Response: The proposed access roads will be approximately 15 feet wide, and 3.37 miles in length.

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CSC-29 What is the color of the solar panels? Are other colors available? Is the glass casing reflective? Are there solar panels available with non-reflective glass? If so, what are the costs and benefits of each type?

Petitioner's Response: The solar panels will be black with an anti-reflection coating on the glass; no other colors are available.

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CSC-30 Is the project listed on the most recent ISO-NE Regional System Plan Project List? If so, what is the project identification number?

Petitioner's Response: The Project is Queue Position 588 in the ISO New England Generator Interconnection Queue and has been continuously listed since the February 2016 issue of the Queue. (The Regional System Plan includes summations of projects that are listed in the Queue as of the cut-off date for each particular update of the RSP, but does not list individual generator projects.)

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CSC-31 Would all of the power produced go to the grid or would any be for internal use? Would the power produced by the project be used regionally, locally or both?

Petitioner's Response: All of the power will be delivered to the grid. The electricity is being sold primarily to Connecticut utilities, and entirely to utilities in Connecticut, Massachusetts, and Rhode Island.

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CSC-32 Page 3-8 of the Petition references "the point of interconnection will be located at a new Eversource substation located east of the project site." Please explain.

Petitioner's Response: An existing Eversource 115 kV transmission line abuts the Project site on its eastern boundary. For technical reasons related to line protection, New England Transmission Owners no longer allow generators to tap their lines directly. Instead, new substations consisting of three breaker positions in the simplest case - as here - are required: one each for the generator and each of the two line segments created by intercepting the original line.

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CSC-33 Would the 115-kV transmission connection from the Project Transformer to Eversource's existing 115-kV transmission line be overhead or underground?

Petitioner's Response: This connection would be an overhead 115 kV line.

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CSC-34 On page 3-7 of the Petition, QS notes that, "A draft System Impact Study (SIS) has been completed and a SIS Review Meeting is scheduled for early June with ISO-NE." What is the status of the SIS? Does the Petitioner have an Interconnection Agreement and with whom?

Petitioner's Response: The System Impact Study has been completed, and the Interconnection Agreement among the Project, ISO New England, and Connecticut Light and Power Company (Eversource) is in draft form.

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CSC-35 If applicable, since the proposed project would connect to the electric transmission system, has QS received a determination of no significant adverse impact to the transmission system from the ISO-NE Reliability Committee? If yes, please submit a copy of such determination letter. If no, approximately when is a determination anticipated?

Petitioner's Response: The Project was approved by the Transmission and Stability Task Forces on June 29, 2017, and these task forces have recommended that the Reliability Committee ("RC") and ISO-NE issue a finding of no significant adverse impact. Such approval is now expected at the September meeting of the RC.

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CSC-36 Would the solar plant have a protection system to shut the plant down in the event of a fault within the facility or isolate the facility during abnormal grid disturbances or during other power outage events?

Petitioner's Response: Yes. The project will be relayed to provide protection from internal and external disturbances and will comply with Article 9.7.5 of the pro forma Large Generator Interconnection Agreement.

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CSC-37 Would the project comply with the National Electrical Code, the National Electrical Safety Code and any applicable National Fire Protection Association codes and standards?

Petitioner's Response: Yes, the project will comply with these codes and standards as applicable.

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CSC-38 Would the Development Area fence utilize an anti-climb design?

Petitioner's Response: The perimeter fence will be 7 feet tall and will not feature an anti-climb design. The fencing for the substation is 8 feet tall with an additional 1 feet of barbed wire in accordance with NEC requirements.

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CSC-39 Would the inverters be "staged" such that only the minimum required number would be on at a given time depending on solar power production, or, generally, would all 33 inverters be operating at the same time? Notwithstanding, does the Acoustic Analysis under Tab O conservatively assume the worst-case scenario of all inverters operating at the same time?

Petitioner's Response: The inverters would not be staged, all inverters will be operating at the same time. The Acoustic Study assumes that all inverters are operating concurrently.

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CSC-40 Under Tab O of the Petition, the Acoustic Analysis notes a DEEP Daytime Noise Control Sound Limit of 55 dBA. What class of emitter does QS consider the proposed project, e.g. Class A, B, or C?

Petitioner's Response: The Project site contains parcels that are located within the Residential Agricultural and Rural Districts in the Towns of Brooklyn and Canterbury, respectively. This would fall under Class A under the DEEP Noise Regulations.

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CSC-41 Would the proposed project meet the applicable DEEP Noise Control Standards at the property boundaries?

Petitioner's Response: Yes, the project meets the 55 dBA noise limit at the property boundaries as indicated in Section 6.3 and Exhibit O of the Petition.

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CSC-42 Would glare from the panels present a problem for any nearby properties? Can plantings be used to buffer the visibility of and/or glare from the solar arrays?

Petitioner's Response: No direct or sky-reflected glare is anticipated as part of this project. Solar technology has advanced to develop PV panels that have been designed to minimize glare. According to the Federal Aviation Administration (FAA) guidance on solar technologies, with regard to reflectivity (or "glare"), glass PV panels are designed to maximize absorption and minimize reflection to increase the efficiency of electricity production. To limit reflection, solar PV panels are constructed of dark, light-absorbing materials. The guide estimates that current panel technology and design results in as little as 2% of the incoming sunlight being reflected, depending on the angle of the sun. In comparison, the FAA Solar Guide indicates that snow has a reflectivity of 80%, white concrete has a reflectivity of about 76%, and wood shingles have a reflectivity of 14%.

Further, Quinebaug is proposing to install vegetative screening to mitigate potential visual impacts in the following locations: along Wauregan Road (in the vicinity of Liepis Road) and along Liepis Road in the southeastern portion of the Project site (Canterbury), and along portions of Allen Hill Road and Rukstella Road in the northern portion of the Project site (Brooklyn). Screening will be installed as indicated on the Project Site Plans in Exhibit C of the Petition, and as shown on Figure 4 in Exhibit B of the Petition.

Quinebaug has proposed to increase the vegetative screening associated with the project, in direct response to ongoing abutter outreach. Please refer to the updated proposed conditions figure in Exhibit CSC-42 – Updated Proposed Conditions Figure.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-43 Would glare from the solar panels attract birds (ex. appear as water) and create a collision hazard?

Petitioner's Response: As stated above in the response to CSC-42, no direct or sky-reflected glare is anticipated as part of this project as the solar PV panels will be constructed of dark, light-absorbing materials. Photovoltaic projects in general, and particularly in the eastern U.S. are not known to attract birds.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-44 Did the Petitioner conduct a Shade Study Analysis? Would shading present any challenges for the proposed project? Is most of the tree clearing to accommodate the project itself, or is some percentage of the tree clearing (e.g. to the south) associated with minimizing shading of the panels? Explain.

Petitioner's Response: Some tree clearing is needed to reduce shading and minimize any impact on energy production.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-45 Where is the nearest airport and/or airfield? Would glare from the solar arrays have any impact on air navigation? Has a glare analysis been conducted?

Petitioner's Response: The Wauregan Heliport is located approximately 2 miles east of the Project site, in the Town of Plainfield.

Quinebaug submitted a "Notice of Proposed Construction or Alteration" for the Project to the FAA and received a "Determination of No Hazard to Air Navigation." No direct or sky-reflected glare is anticipated as part of this project, and per subsequent correspondence with the FAA Obstruction Evaluation Specialist, it was confirmed that if not explicitly stated, as is the case here, a glint/ glare analysis is not required.

Please refer to Exhibit P of the Petition for FAA correspondence.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-46 Is it correct to say that the Federal Aviation Administration (FAA) correspondence under Tab P of the Petition is related to the height and location of the facility and is unrelated to a glare analysis?

Petitioner's Response: Yes. The FAA correspondence provided in Tab P of the Petition relates to the height and location of the facility rather than to any glare analyses. However, please refer again to the response to CSC-45, which confirms that any requirements for further glare studies would have been outlined in the FAA Determination.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-47 Would a crane be required for any portion of construction, e.g. to set the Project Transformer in place? If yes, would that necessitate construction notice to FAA for the height(s) of such temporary crane equipment?

Petitioner's Response: A crane is needed to set the main power transformer in place; because of the minimal height of the crane to be used FAA notification is not required.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-48 Would the proximity of any existing or proposed outbuildings, structures, etc. present a fire safety or other hazard (ex. lightning strike)? Would the proximity of any existing or proposed outbuildings, structures, etc. present a hazard in relation to the electric generating equipment?

Petitioner's Response: No.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-49 Is outreach and/or training necessary to local emergency responders in the event of a fire or other emergency at the site? How would site access be ensured for emergency responders? In the event of a brush or electrical fire, how would the Petitioner mitigate potential electric hazards that could be encountered by emergency response personnel?

Petitioner's Response: As stated in Section 6.2 of the Petition, prior to operation, Quinebaug Solar will meet with Brooklyn and Canterbury first responders to provide information regarding response to emergencies at PV facilities and to provide a tour of the project. All disconnect switches will be clearly marked for use in an emergency. Further, the system will be remotely monitored through a data acquisition system (DAS), and will feature remote shutdown capabilities. Adequate access for fire and emergency service equipment will be provided to the project via the proposed access roads as shown on the Site Plans in the Petition.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-50 Under Tab Q of the Petition, QS notes that, "The Project has a nameplate capacity of 65 MW DC and is expected to produce approximately 142,350,000 kilowatt-hours (kWh) per year. According to the EPA Greenhouse Gas Equivalencies calculator, the energy produced will be sufficient to offset approximately 100,000 metric tons of carbon…" Are those kWh based on DC or AC? Does QS agree that it is appropriate to utilize kWh AC for this analysis because only AC power can flow into the grid, displace traditional grid generation and result in carbon emissions reductions? If necessary, recalculate the Tab Q Carbon Debt Analysis using kWh AC.

Petitioner's Response: Quinebaug agrees that it is appropriate to utilize kWh $_{AC}$ for the Carbon Debt Analysis and accordingly, has recalculated the Carbon Debt Analysis (included as Exhibit CSC-50 – Updated Carbon Debt Analysis). Using the MW_{AC} nameplate capacity, the project is projected to produce approximately 109,500,000 kWh annually and to result in approximately 76,954 metric tons of CO_2 emissions reductions.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-51 Provide the carbon debt payback period. Specifically, the U.S. Environmental Protection Agency (EPA) estimates that 1.06 metric tons of carbon dioxide are sequestered by one acre of average U.S. forest in one year. That number can be multiplied by the number of acres of trees to be cleared to estimate the annual loss of carbon dioxide sequestration in metric tons per year for the project. Then the total projected annual electrical production in kWh AC for the solar facility can be multiplied by the EPA estimate of 7.03×10^{-4} metric tons of carbon dioxide displaced per kilowatt-hour in order to provide the annual carbon dioxide emissions avoided by the operation of solar plant. Based on this or a different analysis, compute the number of months or years it would take to "break even" with carbon dioxide or when the carbon dioxide emissions reductions would equal the sequestration loss. (Data source: http://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references.)

Petitioner's Response: Quinebaug is working with EarthShift Global, LLC to determine the carbon debt payback period for the project. Based on several of EarthShift Global's previous New England studies of solar installations, they see carbon payback periods in the range of 8-11 years. Essentially, by using this solar energy all the carbon which would have been sequestered by the site over the full project lifetime plus all the carbon dioxide emitted to manufacture the solar equipment together would have been emitted by an equivalent natural gas plant in only 8-11 years.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-52 Under Tab M of the Petition, QS has included a letter from DEEP dated October 7, 2016 regarding its preliminary review of the Natural Diversity Database (NDDB). To date, has QS received any follow-up correspondence from DEEP regarding the NDDB?

Petitioner's Response: To date, no follow-up correspondence has been received from DEEP regarding the NDDB. The preliminary review letters included in the petition represent the most recent letters available.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-53 Provide the total tree clearing area in upland areas and the total tree clearing area in wetland areas, if applicable.

Petitioner's Response: No tree clearing is proposed within wetland areas or within the fifty (50) foot boundary of wetland area.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-54 Based on the February 1, 2016 DEEP Map entitled "Northern long-eared bat (NLEB) areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance," is it correct to say that there would be no tree clearing within 0.25 miles of a known NLEB hibernaculum?

Petitioner's Response: Yes. There are no known NLEB hibernaculum within 0.25 miles of the Project site. The nearest known NLEB hibernaculum identified by DEEP is in East Granby, approximately 40 miles west of the Project site.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-55 Page 3-4 of the Petition notes that, "The vast majority of activities associated with the Project will occur a minimum of 50 feet from all mapped wetlands or watercourses." What is the closest distance from the proposed fence line to a wetland, and where is it located? What is the closest distance from the proposed fence line to a watercourse, and where is it located?

Petitioner's Response: There are two locations (both in the Town of Canterbury) where the fence line is located approximately 12 feet from a wetland boundary. The first location is the southern side of the proposed access road crosswise from the Mowrey Farmstead (approximately 41°44'42.8"N 71°56'19.4"W). The second location is within the Lot 17 Wauregan Road parcel on the southeast side of the proposed access road (approximately 41°44'42.8"N 71°56'19.4"W). It should be noted that in these locations, the existing road is approximately 15 feet from the delineated wetland.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-56 Is it correct to say that the proposed project would not be located within a DEEP-designated aquifer protection area? Are there any wells on the site or in the vicinity of the site? If so, how would the petitioner protect the wells and/or water quality from construction impacts.

Petitioner's Response: As shown on the Existing Conditions figure provided in Exhibit B of the Petition, the proposed project will not be located within a DEEP-designated aquifer protection area, and there are no aquifer protection areas mapped in the vicinity of the Project site. The Figure in Exhibit CSC-56 – Ground Water Figure shows that the Project site is not located in proximity to the Area of Contribution to a Public Water Supply Well.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-57 Is any portion of the proposed project located within a 500-year flood zone? Provide Federal Emergency Management Agency flood zone map(s) that includes the proposed project.

Petitioner's Response: Small portions of the site are located within a 500-year flood zone (FEMA Zone B). Please refer to the attached Flood Rate Insurance Maps (Town of Brooklyn Panels 0901640003A, 0901640008A, 0901640009A, and Town of Canterbury Panel 0901830010A) in Exhibit CSC-57 – FEMA Maps.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-58 Would the solar panels "heat" rainwater and potentially thermally pollute wetlands?

Petitioner's Response: No, any rain water that runs off the panels will infiltrate into the ground and adjust to the prevailing ambient temperature.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-59 Would the proposed project adversely impact The Last Green Valley National Heritage Corridor as identified by the National Park Service? Explain.

Petitioner's Response: The Last Green Valley National Heritage Area (NHA) corridor is a 1,085 square-mile area defined by the Quinebaug and Shetucket Rivers systems in northeastern Connecticut and south-central Massachusetts. The area encompasses architecturally and culturally significant structures, attractions, villages and open spaces. There are 49 NHAs in 32 states that encompass a variety of land uses. Unlike national parks, National Heritage Areas are large lived-in landscapes. Consequently, National Heritage Areas entities collaborate with communities to determine how to make heritage relevant to local interests and needs. The Last Green Valley, Inc. (TLGV), a non-profit organization, has produced a Vision 2020 plan for this NHA. One of the goals addressed in the Vision 2020 plan encourages promoting green and renewable energy sources and energy conservation. We do not expect the project to have an impact to the Last Green Valley National Heritage Corridor.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-60 What is the length of the posts and to what depth would the posts be driven into the ground to provide structural stability? Are any impacts to groundwater anticipated? If so, how would the petitioner manage and/or mitigate these impacts?

Petitioner's Response: The total length of the posts will average approximately 14-16 feet with embedment of approximately 10-12 feet

STATE OF CONNECTICUT
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Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-61 If applicable, could tree clearing, grubbing, grading, excavation, filling and dewatering, be performed in stages (e.g. five acres at a time)? Why or why not? (Note: Connecticut Department of Energy and Environmental Protection "DEEP" General Permit for the Discharge of Stormwater and Dewatering Wastewasters Associated with Construction Activities states that, "Whenever possible, the site shall be phased to avoid the disturbance of over five acres at a time…")

Petitioner's Response: Cleared and grubbed areas will be stabilized and construction period erosion controls will be installed after clearing and grubbing. The goal is to avoid having more than 5 acres of soil exposed at any given time during clearing and grubbing, by installing stormwater controls and stabilization materials (mulch) during the clearing and grubbing period.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-62 Will grading be required? If so, is it possible to install the facility with minimal alteration to existing slopes? If not, could existing vegetation be maintained/managed?

Petitioner's Response: Minimal site alteration is proposed, and generally materials removed will be used as fill so that no materials will be removed or added to the site. Existing vegetation will be maintained and managed to the greatest extent possible.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-63 Estimate the amounts of cut and fill in cubic yards for a) access roads and b) general site grading, if applicable.

Petitioner's Response: Cut and fill activities will result in a net balance of earth material (i.e. material removed will be used as fill and no materials will be removed or added to the site).

STATE OF CONNECTICUT
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Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-64 How would the vertical posts (that would support the solar arrays) be drive into the ground? In the event that ledge is encountered, what methods would be utilized (ex. Mechanical chipping or blasting) or would relocation of the posts be utilized instead of chipping or blasting?

Petitioner's Response: Posts will be installed using a pile driver. When post refusal occurs, each instance must be evaluated for the best course of action.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-65 What is the anticipated sequence of construction? During what time of year would each sequence ideally occur? Does this account for possible seasonal construction restrictions due to the presence of protected species?

Petitioner's Response: The typical sequence of construction is clearing and site prep, trenching and placement of collection wires, installation of site roads, installation of posts, racking system, panels, and inverters, and final testing and commissioning.

STATE OF CONNECTICUT
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Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-66 Is it possible that some Sunday construction hours might be necessary due to unforeseen conditions such as inclement weather, transmission outage constraints and/or critical path activities? If the project is approved, could the final construction hours be included in the D&M Plan?

Petitioner's Response: Construction hours are planned for weekdays during daylight hours. Some weekend work may be needed due to unforeseen circumstances. Final construction hours will be included in the D&M Plan.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-67 Would a Construction General Permit from DEEP, or other type of permit, be required?

Petitioner's Response: A Construction General Permit will be required from DEEP, and will be obtained prior to construction activities commencing.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-68 Would the stormwater design be installed in phases to control stormwater flows onto adjacent properties during construction?

Petitioner's Response: In accordance with DEEP General Permit guidelines, stormwater design will be installed in five-acre stages to control stormwater flows onto adjacent properties during construction.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-69 Has the petitioner considered provisions to handle stormwater during/following a rain event during construction? Are temporary swales and/or basins proposed?

Petitioner's Response: Prior to construction activities commencing, Quinebaug will develop a Stormwater Pollution Control Plan (SWPCP) which will include temporary stormwater management provisions.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-70 How did QS determine the designation of the main construction access road over other possible entrances from public roads? Could the main construction access road be relocated? If so, where? If not, could the main construction access road be paved?

Petitioner's Response: Quinebaug identified the main construction access road as the location that would result in the most minimal traffic impact, and in the smallest amount of soil disturbance. The proposed access road is an existing dirt road that is currently used for gravel extraction activities. As such, it is anticipated that this location will not have significant adverse impacts to Project neighbors (i.e. construction vehicle traffic or dust) as its proposed use is consistent with existing uses. The construction access road is not proposed to be paved.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-71 How would the Petitioner handle potential snow accumulation on the panels and any effects of blocking the sunlight?

Petitioner's Response: Snow will be allowed to accumulate on the panels and naturally slide or melt off the panels. As discussed in the response to CSC-24, Quinebaug also will perform regular visual operations and maintenance inspections as outlined in Exhibit I of the Petition.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-72 Has any analysis been conducted to determine structural limits of snow accumulation on the solar panels and steel support structures, assuming heavy, wet snow and or ice? What accumulation of snow could the structures handle? Would the Petitioner clear snow from the panels when it approached the limit?

Petitioner's Response: The racking system will be designed to accommodate the maximum snow load expected for this location. Snow clearing is not planned.

STATE OF CONNECTICUT
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Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-73 Would the petitioner adhere to any seasonal restrictions on mowing due to the presence of protected species?

Petitioner's Response: Quinebaug is open to consider recommendations regarding seasonal restrictions to mowing. The Project site is already quite disturbed and large portions are actively managed for agriculture and regularly mowed. Protected species were not observed on-site and the project is not anticipated to have an adverse impact on any protected species as proposed in the application.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-74 Would the installed solar panels require regular cleaning or other, similar, maintenance? How would this be accomplished? Would this maintenance activity have any impacts to water quality?

Petitioner's Response: Regular solar panel cleanings are not anticipated due to rain/snow precipitation in the area. If a cleaning would be necessary, minimal water would be used to remove deposits that accumulated from the local environment. There is no anticipated impact to water quality.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-75 What are the impacts of the grass on erosion? Would the site be hydro-seeded?

Petitioner's Response: Quinebaug plans to minimize impacts to existing vegetation and to revegetate as soon as practicable following construction to stabilize the site. Hydro-seeding is an option, as is broadcast seeding.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-76 Could the petitioner establish post-construction site restoration/revegetation that includes the incorporation of model pollinator habitat?

Petitioner's Response: As stated in the Petition (Page 3-6, Paragraph 5; Page 6-12, Paragraph 6), Quinebaug Solar is committed to identifying conservation seed mixes for restoration of disturbed areas, including establishment of a vegetative cover to be maintained underneath the solar panels. Quinebaug Solar will develop a pollinator plan for implementation prior to construction.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition No. 1310

Petitioner:

Quinebaug Solar, LLC

Submission Date:

August 22, 2017

CSC-77 How would the proposed project impact traffic? Specifically, about how many construction vehicles per day would be expected to visit the site during construction? Once the facility is operational, estimate the number and frequency of vehicles visiting the site for operation and maintenance.

Petitioner's Response: The Project is expected to have a limited impact on traffic flow and nearby residents should not be significantly affected. It is anticipated that construction vehicles would utilize Interstate 395, Route 6, Route 14, and/or Route 12, dependent on their point of origin. From there, vehicles will likely access the gated entry point from Wauregan Road via Route 205. During construction, 5 to 10 delivery vehicles are expected to visit the site daily. Once constructed, the Project will generally not result in vehicle trips other than those associated with system maintenance.

CERTIFICATION

I hereby certify that a copy of the foregoing document was sent by first class mail to the following service list on this 22nd day of August, 2017.

David W. Bogan

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-6
November 1993 Application for Consideration

BOOK 145 PAGE 0001

TO ALL WHOM IT MAY CONCERN:

NOTICE IS HEREBY GIVEN PURSUANT TO CONNECTICUT GENERAL STATUTES THAT KATHRYN RUKSTELA, 749 ALLEN HILL ROAD, BROOKLYN, CONNECTICUT, HAS FILED AN APPLICATION FOR CONSIDERATION UNDER THE STATE OF CONNECTICUT PROGRAM FOR THE PRESERVATION OF AGRICULTURAL LANDS.

SAID APPLICATION REFERS TO LAND SITUATED IN BROOKLYN AND AND CANTERBURY, CONNECTICUT AND RECORDED IN THE BROOKLYN LAND RECORDS

VOLUME AND PAGE

79	659-660
61	166

AND IN THE CANTERBURY LAND RECORDS

VOLUME AND PAGE

75	152
44	6

DATED AT HARTFORD, CONNECTICUT, THIS 15TH DAY OF NOVEMBER, 1993.

JOHN J. FILCHAK III
DEPUTY COMMISSIONER OF AGRICULTURE

Received for record this 17th day of November A.D. 1993 at 10:00 A M.

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-6
January 2005 Transfer to River Junction Estates

BOOK 349 PAGE 0369

Warranty Deed - Statutory Form

THAT I, KATHRYN RUKSTELA, of the Town of Brooklyn, County of Windham, and State of Connecticut for consideration paid, grant to RIVER JUNCTION ESTATES, LLC, a Connecticut Limited Liability Company with its place of business at 204 Munyan Road in the Town of Putnam, County of Windham and State of Connecticut, with WARRANTY COVENANTS,

A certain parcel of land located in the Towns of Canterbury and Brooklyn in the County of Windham and State of Connecticut, bounded and described as follows:

One certain farm or tract of land, with all buildings thereon standing, bounded and described as follows:

Bounded Northerly by land formerly or now of Andrew T. J. Clarke and wife, and land now or formerly of Alex Rukstela; Easterly by land of said Rukstela land of Frank Liepis; Southerly by land now or formerly of Andrew T. J. Clarke and wife and land now or formerly of W. F. Herr and land now or formerly of Charles Phillips; Westerly by Blackwells Brook, so-called. Containing about 110(one hundred ten) acres, more or less, together with the right to and from the cemetery on said farm.

Reference is made to a Certificate of Devise, Descent or Distribution from the Estate of Alban F. Rukstela to Kathryn Rukstela dated May 21, 1985 and recorded on May 22, 1985 in Volume 75 at Page 152 of the Canterbury Land Records.

Further reference is made to a Certificate of Devise, Descent or Distribution from the Estate of Alban F. Rukstela to Kathryn Rukstela dated May 21, 1985 and recorded on May 21, 1985 in Volume 79 at Page 659 of the Brooklyn Land Records.

The grantee herein assumes and agrees to pay the taxes due the Town of Canterbury and Town of Brooklyn on the October 1, 2004 Grand List and all taxes due thereafter.

THIS DEED IS EXECUTED IN DUPLICATE FOR PURPOSES OF RECORDING.

Signed this 14th day of JANUARY, 2005. STATE $ 130.00 TOWN $ 65.00

Witnessed by:

George H. Jackson, III

Kathryn Rukstela

Kathryn Rukstela

State of Connecticut)
) SS.: PLAINFIELD, JANUARY 14, 2005
County of Windham)

Personally appeared, KATHRYN RUKSTELA, signer and sealer of the foregoing instrument, and acknowledged the same to be her free act and deed, before me.

George H. Jackson, III
Commissioner of the Superior Court

Latest mailing address of Grantee:
204 Munyan Road
Putnam, CT 06260

Received for record this 18th day of Jan. 2005, A.D. at 11:51A M.

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-6
January 2005 Revocation

NOTICE OF REVOCATION OF OFFER PURSUANT TO CONNECTICUT GENERAL STATUE 22-26 cc

Notice is hereby given pursuant to Connecticut General Statue 22-26 cc that River Junction Estates, LLC hereby revokes any offer to purchase the land described in Schedule "A" attached hereto from the Department of Agriculture.

References made to a certain "Application for Consideration" to purchase said premises by the Commissioner of Agriculture dated November 15, 1993 and recorded in Volume 145 Page 1 of the Brooklyn Land Records and in Volume 98 Page 379 of the Canterbury Land Records.

This notice is prepared for simultaneous recording in the towns of Brooklyn and Canterbury.

River Junction Estates, LLC

By: Alan R. Rawson
Alan Rawson
Its Business Manager
Duly Authorized

C:\WPFiles\Real Estate\NoticeRevocation-Agriculture(Rawson)-13274.wpd

Schedule "A"

A certain parcel of land located in the Towns of Canterbury and Brooklyn in the County of Windham and State of Connecticut, bounded and described as follows:

One certain farm or tract of land, with all buildings thereon standing, bounded and described as follows:

Bounded Northerly by land formerly or now of Andrew T. J. Clarke and wife, and land now or formerly of Alex Rukstela; Easterly by land of said Rukstela land of Frank Liepis; Southerly by land now or formerly of Andrew T. J. Clarke and wife and land now or formerly of W. F. Herr and land now or formerly of Charles Phillips; Westerly by Blackwells Brook, so-called. Containing about 110(one hundred ten) acres, more or less, together with the right to and from the cemetery on said farm.

Received for record this 18th day of Jan. 2005, A.D. at 11:54A M.

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-25

Solar Ware Samurai brochure

A partner you can trust.

Bankability. Reliability. Serviceability.

TMEIC, a multi-billion $ joint venture between Toshiba & Mitsubishi-Electric, is a global leader for PV inverter technology innovation.

Bankability

The financial strength you need in an inverter partner. TMEIC is a diversified industrial systems company, serving steel, oil & gas, mining, container crane and a wide variety of power electronics applications.

- #1 market share leader in the Japanese market and #1 worldwide for inverters >99kW
- More than 10 GW of PV Inverters installed world-wide
- Over 30 years of PV inverter manufacturing and R&D experience

Reliability

A level above the competition. TMEIC was the first company to implement advanced 3-level NPS topology and an advanced hybrid cooling system for PV central inverters.

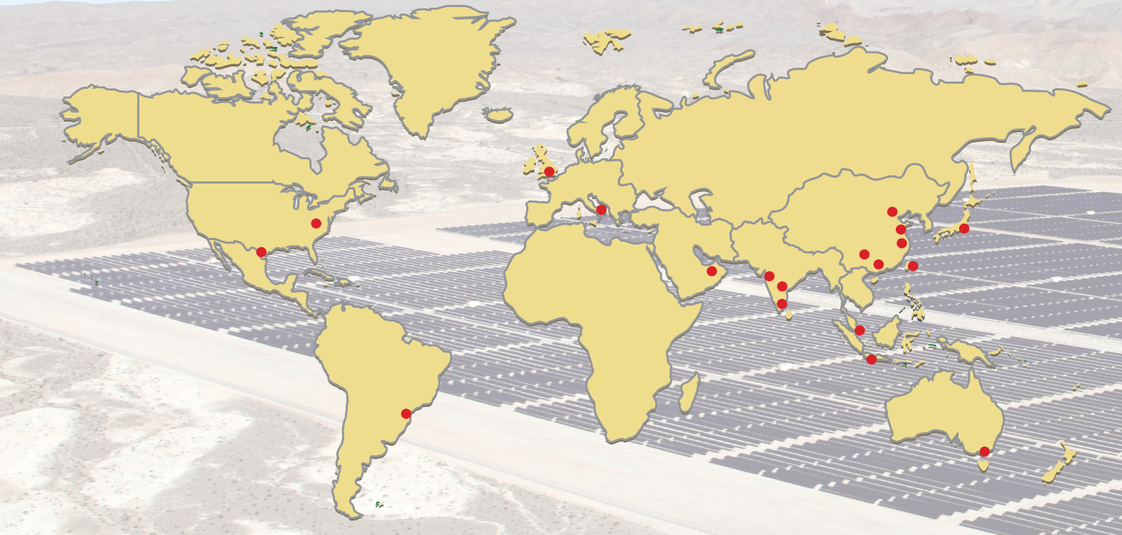
- First central inverter to achieve 99% maximum efficiency
- Heatpipe-based cooling minimizes particle entrance, increasing uptime & reducing O&M cost
- With over 10 GW installed, TMEIC has only had two IGBT field failures.

Serviceability

We're there when you need us! TMEIC's well proven technology is further enhanced with the industry's leading service structure.

- 24/7 US based phone support
- Comprehensive customer training system
- Extended warranty of up to 20 years
- Optional performance guarantee

Global Locations



2060 Cook Dr., Salem, VA 24153 • +1 (540) 283-2000
Email: SolarPV@tmeic.com • www.tmeic.com

Contents subject to change without notice
The Samurai Series name is used by TMEIC exclusively in North America.
Photo courtesy of Signal Energy

P-1307-Y
Revised August 2017

TMEIC

We drive industry

SOLAR WARE® Samurai Series

Up to 3200 kW, 1500V

The world's first 1500VDC PV inverter certified to UL1741

SOLAR WARE® SAMURAI

Multiple Power Classes

- 833 kW to 1833 kW (1000 V)
- 2500 kW to 3200 kW (1500 V)

1500Vdc Series

- UL 1741 Certified
- Reduces cable mass to minimize cost & enhance flexible plant design
- Reduces combiner box and number of inverters

Award Winning Central Inverters for the Solar Industry

- Advanced multilevel inverter - 56% of switching loss reduction
- Maximized and optimized efficiency at high load
- Wide MPPT range allowing for best in class DC/AC Ratios
- Flexible DC-input configuration to meet complex array configuration

Maximize Revenue & Improve ROI

- High-yield power generation – Maximum efficiency of 99%
- High-efficiency in any weather
- Realize large capacity with fewer inverters
- Reduce site work and BOS investment

Grid Connection Features

TMEIC developed the grid connection features working with Japanese power companies. All of TMEIC's utility scale inverters include the latest interconnection technology. These features include:

- Power factor control
- Reactive/Active power control
- TMEIC's proprietary anti-islanding technique utilizes a slip mode frequency shift method
- Advanced Fault Ride Through Features

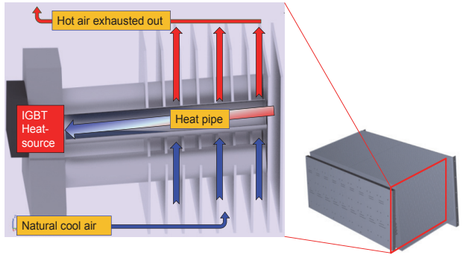
Advanced Hybrid Cooling System

The first heat pipe air-cooled PV inverter

Utilizing TMEIC heat pipe technology, the inverter runs without fan operation up to 50% load. Heat-pipe cooling significantly simplifies thermal management, because it uses fewer parts and only a slow-speed fan with a heat pipe heat sink. TMEIC's advanced hybrid cooling solution:

- Simple & Robust
- High Reliability
- Significantly reduces O&M costs
- Small Footprint

The Fan-less mode runs when the inverter is below 50% load @ 50°C. Natural convection provides necessary cooling. Cool air enters from the bottom, flows through the heat pipe, and hot air is exhausted from the top.



SPECIFICATIONS

Type		PVL-L0833GR	PVL-L1833GRQ	PVL-L1833GRM	PVH-L2500GR	PVH-L2700GR	PVH-L3200GR
Output side (AC)	Rated Power	833 kW / 916 kVA	1667 kW / 1883 kVA	1833 kW / 2000 kVA	2500 kW / 2500 kVA	2700 kW / 2700 kVA	3200 kW / 3200 kVA
	Rated Voltage (3-phase)	418V +10%, -12%	418V +10%, -12%	418V +10%*1	550V +10%*1	600V +10%*1	600V (+10%, -12%)
	Rated Frequency	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz (+0.5 Hz, -0.7 Hz)	60/50 Hz	60/50 Hz (+0.5Hz, -0.7Hz)	60/50 Hz (+0.5Hz, -0.7Hz)
	Rated Power Factor	Over 0.99	Over 0.99	Over 0.99	Over 0.99	Over 0.99	Over .99
	Reactive Capability	+/-762kVAR	+/-762kVAR	+/-800kVAR	+/-980kVAR *4	+/-1020kVAR*4	1394kVAR*5
	Rated Current	1265 Arms	2533 Arms	2762 Arms	2624 Arms	2598 Arms	3079Arms
	Maximum Current	1438 Arms	2877 Arms	2762 Arms	2624 Arms	2598 Arms	3079Arms
	Maximum Eff.	99%	99%	99%	98.8%	98.8%	98.9%*5
	CEC Efficiency	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%*5
Input side (DC)	Maximum Voltage	1000 Vdc	1000 Vdc	1000 Vdc	1500 Vdc	1500 Vdc	1500 Vdc
	MPPT Operation Range	605 Vdc ~ 950 Vdc*2	605 Vdc ~ 950 Vdc*2	605 Vdc ~ 950 Vdc	800 Vdc ~ 1300 Vdc	875 Vdc ~ 1300 Vdc	875Vdc ~ 1300Vdc
Environ. Conditions	Ingress Protection Ratings	NEMA3R	NEMA3R	NEMA3R	NEMA3R	NEMA3R	NEMA3R
	Installation	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
	Amb. Temp. Range	-20°~55°C (-4°~131°F) Derate from 50°-55° C*3			-20°~55°C (-4°~131°F) Derate from 40°-55°C*3		-20°~50°(-4°~122°F)
	Max. Altitude	2000 m (contact TMEIC for ratings above 2000 m)					
Protective Functions	Input (DC) Side	Ground Fault, DC Reverse Current, Over Voltage, Over Current					
	Grid (AC) Side	Anti-islanding, Over/Under Voltage, Over/Under Frequency, Over Current					
	Grid Assistance	Reactive/Active Power Control, Power Factor Control, Fault Ride Through (optional)					
User Interface	User Interface	LCD (3.8 inch, QVGA) with Touch-Screen					
	Communication	Modbus/TCP					
Fault Analysis		Fault Event Log, Waveform Acquisition via memory card					
Compliance		UL1741/CSA; 107.1/IEEE1547; NEC standard					
Cooling Method		Advanced Hybrid Cooling					
Standard Number of Inputs		1					
Standard Control Power Supply		Control Power Supply from Inverter output and Capacitor backup circuit (3 sec. compensation)					
Weight		7,940 lbs (3600kg)	11,500 lbs (5200 kg)		13,228 lbs (6000 kg)		12,125 lbs. (5500 kg)*5
Dimensions (H x W x D)		92 x 118 x 46 inch (2286 x 3000 x 1150 mm)	92 x 197 x 46 inch (2286x5000x1150 mm)				
Floor Space		5,348 sq. in. (3.45m²)	8,914 sq. in. (5.75 m²)				
Color		Cabinet: Sand White #Dic583, Roof: Gray #Munsel N4.5					

Notes:

*1 Full power available at and above nominal voltage. Derate will apply below nominal voltage.
*2 Transition from constant DC voltage mode to MPPT mode occurs between 595V and 605V.
*3 Contact a TMEIC Sales Manager for detailed temperature-related derates.
*4 Available reactive capability with reduction in active power.
*5 Preliminary testing.

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

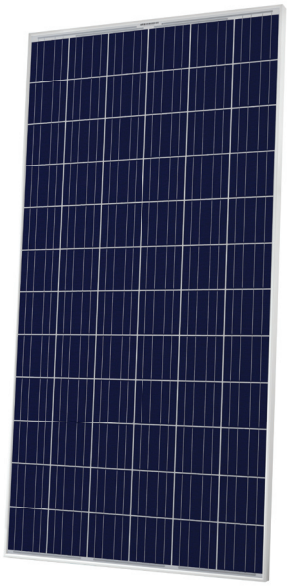
Exhibit CSC-25
Hanwha Q CELLS Datasheet
Q.Plus L NE 2017 340-350

PRELIMINARY

Q.PLUS L NE 2017 340-350

Q.ANTUM SOLAR MODULE

The Q.ANTUM solar module Q.PLUS L NE 2017 with power classes up to 350 Wp is the strongest module of its type on the market globally. Powered by 72 Q CELLS solar cells Q.PLUS L NE 2017 was specially designed for large solar power plants to reduce BOS costs. Only Q CELLS offers German engineering quality with our unique triple Yield Security.



LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area and lower BOS costs thanks to higher power classes and an efficiency rate of up to 17.8 %.

INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

ENDURING HIGH PERFORMANCE

Long-term yield security with Anti-PID Technology[1], Hot-Spot-Protect and Traceable Quality Tra.Q™.

LIGHT-WEIGHT QUALITY FRAME

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee[2].

EUPD RESEARCH TOP BRAND PV MODULES EUROPE 2015

Q CELLS YIELD SECURITY
- ANTI PID TECHNOLOGY (APT)
- HOT-SPOT PROTECT (HSP)
- TRACEABLE QUALITY (TRA.Q™)

Photon
Q CELLS
Best polycrystalline solar module 2013
Q.PRO-G2 235
151 modules tested

[1] APT test conditions: Cells at -1000 V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h

[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

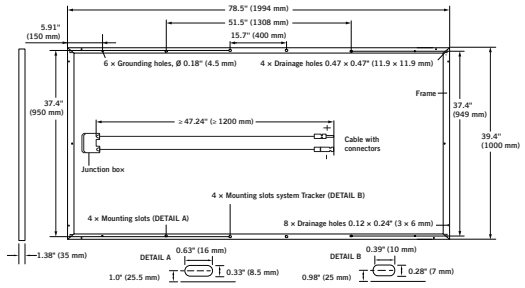
Ground-mounted solar power plants

Engineered in **Germany**

Q CELLS

MECHANICAL SPECIFICATION

Format	78.5 in × 39.4 in × 1.38 in (including frame) (1994 mm × 1000 mm × 35 mm)
Weight	52.9 lb (24 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodised aluminum
Cell	6 × 12 Q.ANTUM solar cells
Junction box	3.35-4.13 in × 2.36-3.15 in × 0.59-0.67 in (85-105 mm × 60-80 mm × 15-17 mm), Protection class ≥ IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 47.24 in (1200 mm), (-) ≥ 47.24 in (1200 mm)
Connector	Amphenol H4 UTX, IP68

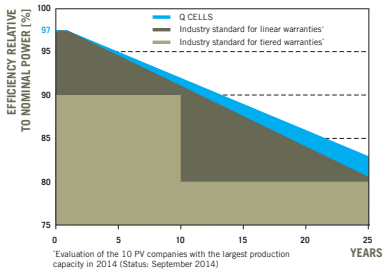


ELECTRICAL CHARACTERISTICS

POWER CLASS				340	345	350
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)						
Minimum	**Power at MPP[2]**	P_{MPP}	[W]	340	345	350
	Short Circuit Current*	I_{SC}	[A]	9.61	9.66	9.71
	Open Circuit Voltage*	V_{OC}	[V]	47.12	47.37	47.61
	Current at MPP*	I_{MPP}	[A]	9.08	9.13	9.19
	Voltage at MPP*	V_{MPP}	[V]	37.46	37.77	38.08
	Efficiency[2]	η	[%]	≥17.1	≥17.3	≥17.6
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC[3]						
Minimum	**Power at MPP[2]**	P_{MPP}	[W]	252.0	255.7	259.4
	Short Circuit Current*	I_{SC}	[A]	7.75	7.79	7.83
	Open Circuit Voltage*	V_{OC}	[V]	44.03	44.26	44.49
	Current at MPP*	I_{MPP}	[A]	7.13	7.17	7.22
	Voltage at MPP*	V_{MPP}	[V]	35.37	35.65	35.92

[1] 1000 W/m², 25°C, spectrum AM 1.5G [2] Measurement tolerances STC ±3%; NOC ±5% [3] 800 W/m², NOCT, spectrum AM 1.5G * typical values, actual values may differ

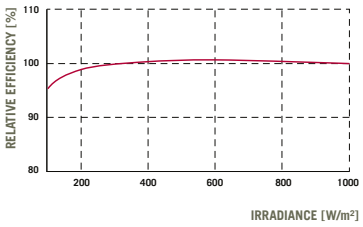
Q CELLS PERFORMANCE WARRANTY



At least 97 % of nominal power during first year. Thereafter max. 0.6 % degradation per year.
At least 92 % of nominal power after 10 years.
At least 83 % of nominal power after 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	**Temperature Coefficient of V_{OC}**	β	[%/K]	−0.285
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.395	**Normal Operating Cell Temperature**	**NOCT**	[°F]	113 ± 5.4 (45 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	**Safety Class**	II
Maximum Series Fuse Rating	[A DC]	15	**Fire Rating**	C / TYPE 1
Max Load (UL)[2]	[lbs/ft²]	75 (3600 Pa)	**Permitted module temperature on continuous duty**	-40 °F up to +185 °F (-40 °C up to +85 °C)
Load Rating (UL)[2]	[lbs/ft²]	33 (1600 Pa)	[2] see installation manual	

QUALIFICATIONS AND CERTIFICATES

IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A
This data sheet complies with DIN EN 50380.

PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 40' Container	22
Pallet Dimensions (L × W × H)	81.3 × 45.3 × 46.9 in (2065 × 1150 × 1190 mm)
Pallet Weight	1671 lbs (758 kg)

NOTE: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS USA Corp.
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | **TEL** +1 949 748 59 96 | **WEB** www.q-cells.com

Engineered in **Germany**

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

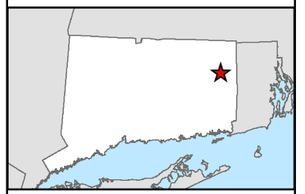
Exhibit CSC-42
Proposed Conditions

PROPOSED CONDITIONS

LEGEND

- Vegetative Screening
- Roads
- Panels
- Project Area
- Contour (10')
- Streams
- Watercourse (CT DEP)
- Limit of Work
- Wetland Boundary
- Wetland Area
- Cultural Areas
- Natural Diversity Database Area
- Waterbody
- Town Boundary

LOCUS MAP



N

0 325 650

Feet

1 in = 650 ft

NOTES

1. Based on 2016 Statewide Orthophotography, Courtesty of CTECO.

Quinebaug Solar
Brooklyn & Canterbury, Connecticut

August 2017

Tighe&Bond
Engineers | Environmental Specialists

V:\Projects\R\R0317\QuinebaugCT_Solar\Maps\ProposedConditions_QuinebaugCT_2.mxd

R-0317

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-50

Updated Carbon Debt Analysis

On behalf of Quinebaug Solar, LLC., Tighe & Bond performed an analysis to determine whether the proposed Quinebaug solar array ("Project"), to be located on approximately 270 acres of the 561-acre Project Area/ Site located in Brooklyn and Canterbury, CT ("Project Site"), has the ability to produce a net improvement in carbon reduction compared to the loss of approximately 120 acres of forested land.

The Project has a nameplate rated capacity of 50 MW $_{AC}$, and is expected to produce approximately 109,500,000 kWh per year. According to the EPA Greenhouse Gas Equivalencies calculator, the energy produced will be sufficient to offset approximately 76,954 metric tons of carbon and will have an effect comparable to taking 16,255 passenger vehicles off the road for one year. Conversely, the U.S. Environmental Protection Agency (EPA) estimates that 1.06 metric tons of carbon dioxide are sequestered by one acre of average U.S. forest in one year. By these metrics, the 120 acres of clearing associated with the project would result in 127.2 metric tons of CO_2 emissions that would not be sequestered. However, the energy produced by the project will reduce CO_2 emissions by an amount comparable to the carbon that would be sequestered by approximately 72,845 acres of forest – the equivalent of the sequestration of CO_2 emissions from nearly 184,500,000 miles driven in one year.

The results of this analysis demonstrate that the Project would have a measurable net improvement in carbon debt.

Please refer to Figure 1 for an overview of the EPA Green House Gas Equivalencies calculations for the Project.

Figure 1. Greenhouse Gas Equivalencies Calculation - Quinebaug Solar Project

If You Have Energy Data | If You Have Emissions Data

109,500,000 kilowatt-hours of electricity

Calculate

Equivalency Results How are they calculated?

The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to: 76,954 Metric Tons

Greenhouse gas emissions from

16,255 Passenger vehicles driven for one year	184,432,169 Miles driven by an average passenger vehicle	24,422 Tons of waste recycled instead of landfilled	3,489 Garbage trucks of waste recycled instead of landfilled

CO_2 emissions from

8,659,162 gallons of gasoline consumed	82,117,206 Pounds of coal burned	1,019 tanker trucks' worth of gasoline	8,126 homes' energy use for one year
19.4 Wind turbines running for a year	11,364 homes' electricity use for one year	410 railcars' worth of coal burned	2,727,897 Incandescent lamps switched to LEDs
178,165 barrels of oil consumed	3,145,856 propane cylinders used for home barbeques	0.022 coal-fired power plants in one year	

Carbon sequestered by

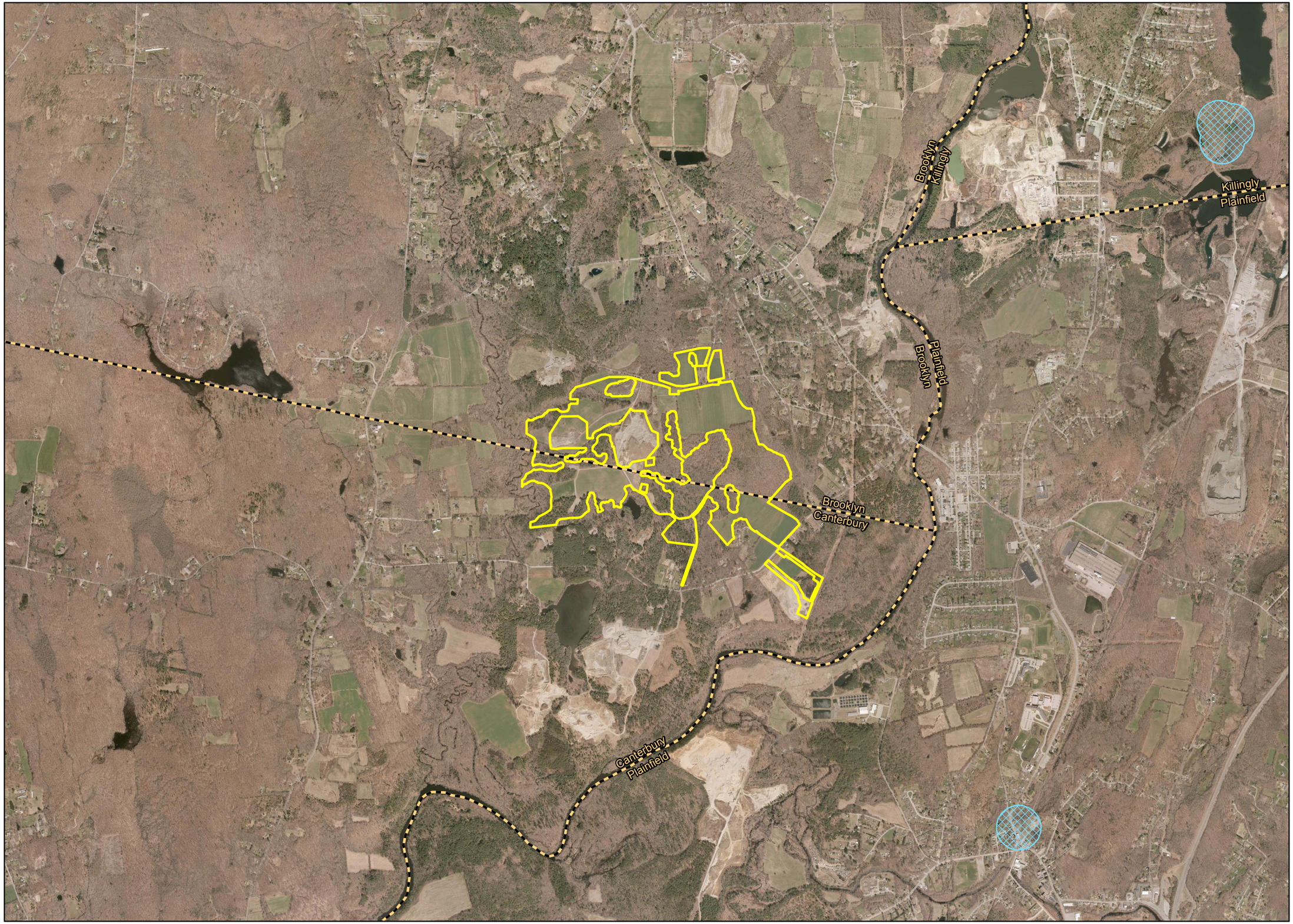
1,994,350 tree seedlings grown for 10 years	72,845 acres of U.S. forests in one year	613 acres of U.S. forests preserved from conversion to cropland in one year

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-56
Ground Water Figure



SITE OVERVIEW

LEGEND

- Area of Contribution to Public Supply Well
- Limit of Work
- Town Boundary

LOCUS MAP

0 1,000 2,000
Feet
1 in = 2,000 ft

NOTES

1. Based on 2016 Statewide Orthophotography, Courtesy of CTECO.
2. Data downloaded from CT DEP.

Quinebaug Solar
Brooklyn & Canterbury, Connecticut

August 2017

Tighe&Bond
Engineers | Environmental Specialists

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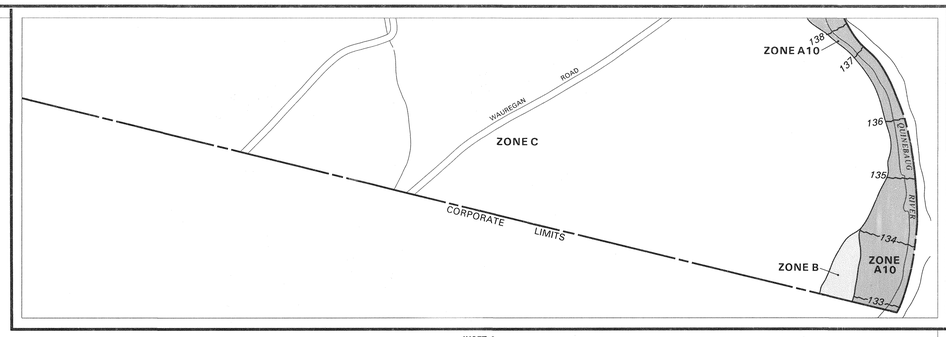
R-0317

Petition No. 1310

Company: Quinebaug Solar, LLC

Submission Date: August 22, 2017

Exhibit CSC-57
FEMA Maps



INSET A

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 1	201.95	Chiseled square cut on southeast corner curb on the west end of the south side of Day Street bridge over Long Brook.

[1]National Geodetic Vertical Datum of 1929

KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations*
100-Year Flood Boundary
500-Year Flood Boundary
Base Flood Elevation Line With Elevation In Feet**
Base Flood Elevation in Feet Where Uniform Within Zone**
Elevation Reference Mark
Zone D Boundary
River Mile

ZONE B
ZONE A1
ZONE A5
ZONE B
513
(EL 987)
RM7×
•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
FEBRUARY 28, 1975
FLOOD HAZARD BOUNDARY MAP REVISIONS:
NONE

FLOOD INSURANCE RATE MAP EFFECTIVE:
JANUARY 3, 1985
FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
BROOKLYN,
CONNECTICUT
WINDHAM COUNTY

PANEL 3 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
090164 0003 A

EFFECTIVE DATE:
JANUARY 3, 1985

Federal Emergency Management Agency

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 3	151.23	Chiseled square cut on southwest corner curb below east parapet wall of State Route 169 bridge over Blackwell Brook.

[1] National Geodetic Vertical Datum of 1929

KEY TO MAP

- 500-Year Flood Boundary
- 100-Year Flood Boundary
- Zone Designations*
- 100-Year Flood Boundary
- 500-Year Flood Boundary
- Base Flood Elevation Line With Elevation In Feet**
- Base Flood Elevation in Feet Where Uniform Within Zone** (EL 987)
- Elevation Reference Mark RM7×
- Zone D Boundary
- River Mile •M1.5

ZONE B / ZONE A1 / ZONE A5 / ZONE B

513

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
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B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
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FEBRUARY 28, 1975
FLOOD HAZARD BOUNDARY MAP REVISIONS:
NONE

FLOOD INSURANCE RATE MAP EFFECTIVE:
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FLOOD INSURANCE RATE MAP REVISIONS:

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To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

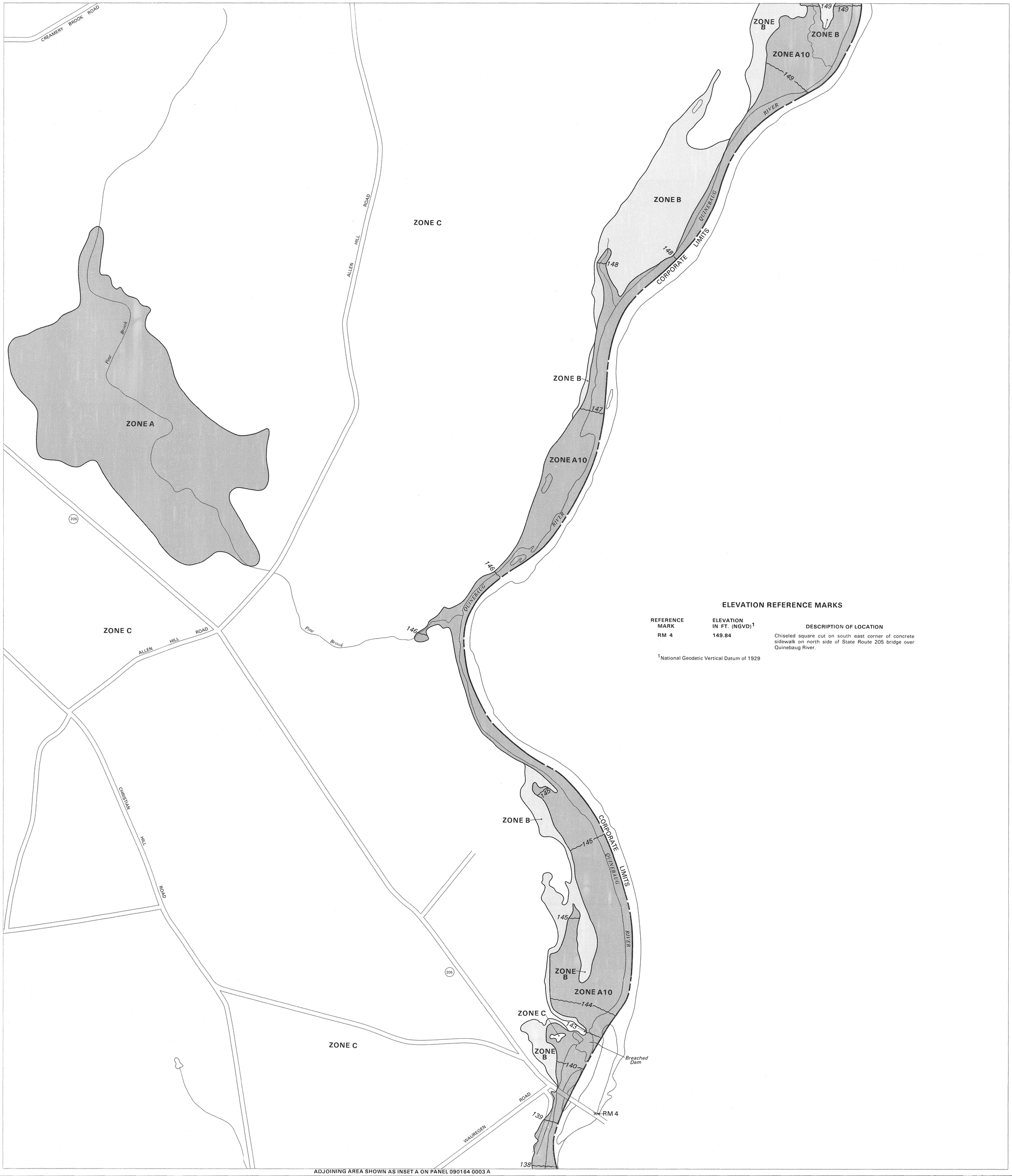
TOWN OF
BROOKLYN, CONNECTICUT
WINDHAM COUNTY

PANEL 8 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
090164 0008 A

EFFECTIVE DATE:
JANUARY 3, 1985

Federal Emergency Management Agency



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 4	149.84	Chiseled square cut on south east corner of concrete sidewalk on north side of State Route 205 bridge over Quinebaug River.

[1] National Geodetic Vertical Datum of 1929

ADJOINING AREA SHOWN AS INSET A ON PANEL 090164 0003 A

KEY TO MAP

- 500-Year Flood Boundary
- 100-Year Flood Boundary
- Zone Designations*
- 100-Year Flood Boundary
- 500-Year Flood Boundary

ZONE B / ZONE A1 / ZONE A5 / ZONE B

- Base Flood Elevation Line With Elevation In Feet** — 513
- Base Flood Elevation in Feet Where Uniform Within Zone** — (EL 987)
- Elevation Reference Mark — RM7×
- Zone D Boundary
- River Mile — •M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
FEBRUARY 28, 1975

FLOOD HAZARD BOUNDARY MAP REVISIONS:
NONE

FLOOD INSURANCE RATE MAP EFFECTIVE:
JANUARY 3, 1985

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

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APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
BROOKLYN, CONNECTICUT
WINDHAM COUNTY

PANEL 9 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
090164 0009 A

EFFECTIVE DATE:
JANUARY 3, 1985

Federal Emergency Management Agency

KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	ZONE B
Zone Designations*	ZONE A1 / ZONE A5
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7×
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
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C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

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For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JANUARY 10, 1975

FLOOD HAZARD BOUNDARY MAP REVISIONS:
NONE

FLOOD INSURANCE RATE MAP EFFECTIVE:
OCTOBER 16, 1984

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

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APPROXIMATE SCALE
800 0 800 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
CANTERBURY,
CONNECTICUT
WINDHAM COUNTY

PANEL 10 OF 30
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
090183 0010 A

EFFECTIVE DATE:
OCTOBER 16, 1984

Federal Emergency Management Agency