



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

January 11, 2016

Philip M. Small, Esq.
Brown Rudnick LLP
185 Asylum Street, 38th Floor
Hartford, CT 06103

RE: **PETITION NO. 1195** - SolarCity Corporation petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction and operation of a 4.05 Megawatt Community Shared Solar Photovoltaic Electric Generating facility located on municipally-owned property at 1240 Poquonnock Road, Groton, Connecticut.

Dear Attorney Small:

At a public meeting held on January 7, 2016, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

- The Petitioner shall provide a copy of the final Change in Use Permit from the Department of Public Health and any associated site plan changes for Council review and approval prior to construction;
- The Petitioner shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the City and Town of Groton for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) A final plan of site development to include specifications for the solar panels, supporting infrastructure, fueling pad with containment measures, electrical equipment, equipment compound, access and maintenance roads, utility connections, and landscaping;
 - b) Construction details for site clearing, site phasing, grading, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended;
 - c) Report regarding Natural Diversity Database plants in the vicinity of the project and plans to protect such species in the vicinity of project, as applicable;
 - d) Plans to protect the bald eagle and other breeding birds including plans to relocate the osprey nesting platforms in consultation with the Department of Energy and Environmental Protection;
 - e) A final copy of the Stormwater Management Report stamped by a Professional Engineer;
 - f) Final wetland and vernal pool protection and reforestation plans;
 - g) Construction work hours and days of work; and
 - h) Identification of an environmental monitor for the project;
- Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between

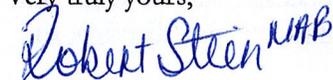
the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;

- Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Groton;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;
- This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and
- If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated October 9, 2015 and additional information dated October 29, 2015, November 12, 2015, November 25, 2015, and December 10, 2015.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,



Robert Stein
Chairman

RS/MP/lm

Enclosure: Staff Report dated January 7, 2016

c: The Honorable Bruce Flax, Mayor, Town of Groton
Mark Oefinger, Town Manager, Town of Groton
Jonathan J. Reiner, AICP, Director of Planning, Town of Groton
The Honorable Marian Galbraith, Mayor, City of Groton
Barbara Goodrich, City Planner, City of Groton
David Rose, Chairman of Planning and Zoning Commission, City of Groton
Ellie Schecter, SolarCity Corporation

Petition No. 1195
SolarCity Corporation
1240 Poquonnock Road, Groton
Staff Report
January 7, 2016

Introduction

On October 9, 2015, SolarCity Corporation (SolarCity or Petitioner) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the construction and operation of an approximately 3.25 megawatt (MW) alternating current (AC) solar electric generating facility on municipally-owned land located at 1250 Poquonnock Road, Groton.

Council member James J. Murphy, Jr., as well as Council staff members Fred Cunliffe and Michael Perrone, visited the site on November 9, 2015 to review the proposal. Others present at the field review included Philip Small, Esq., Brown Rudnick LLP (representing SolarCity); Robert Miller, Project Coordinator, SolarCity; Matthew Gustafson, Environmental Consultant, All-Points Technology Corporation, P.C.; David McKay, Civil Engineer, Boundaries LLC; Mike Singer, Principal, Brightfields Development, LLC; Caitlin McSherry, Assistant Project Manager, Brightfields Development, LLC; Frank Winkler, Manager of Economic Development, Groton Utilities; Ron Gaudet, Utilities Director, Groton Utilities; Len Mediavilla, General Manager, Groton Utilities; and Deb Gaudette, Executive Assistant, Groton Utilities.

The Town of Groton Planning Commission held a Special Meeting at the Council's November 9, 2015 site visit. Matt Allen, Planner I, Town of Groton Planning Commission; Deborah Jones, Assistant Director, Town of Groton Planning Commission; Jeff Pritchard, Vice-Chair/Secretary, Town of Groton Planning Commission; Jim Sherrard, Chair, Town of Groton Planning Commission; Diane Glemboski, Planner II, Town of Groton Planning Commission; Barbara Tarbox, Commission Member, Town of Groton Planning Commission; and Margil Steinfeld, Town of Groton Planning Commission also attended the site visit.

On or about October 7, 2015, the Petitioner notified the Town of Groton; the City of Groton; other state, local, and federal officials; and abutting property owners of the proposed project. The Council has not received any comments from abutters to date. Municipal comments are noted below in the next section.

Municipal Consultation

Prior to the submission of the Petition to the Council, SolarCity and Brightfields Development, LLC (Brightfields) presented the project to the City of Groton Utilities Commission on September 24, 2014 and to the Groton City Council on October 27, 2014. Additionally, representatives from Brightfields met with the Town Manager of the Town of Groton, Mark Oefinger, on November 5, 2014 to discuss the proposed facility. A representative from the project's development team was present at the Groton City Council meeting on December 1, 2014 to discuss the terms of the proposed Site Lease Agreement (SLA) between SolarCity and the City of Groton. On March 23, 2015, the Groton City Council voted to approve the SLA with SolarCity, and on March 26, 2015 the SLA was signed.

By letter dated November 13, 2015, the Town of Groton Planning Commission and Town of Groton Inland Wetlands Agency (TGPCIWA) noted several concerns. Specifically, the Town of Groton Planning Commission noted the following concerns:

- a) The hours of operation for driving the support posts should be reduced to 9 am to 5 pm, 5 days a week, to limit the impact on the adjacent residential area;
- b) Additional landscaping should be installed along the southeast border of the facility to buffer the adjacent residential area; and
- c) The Commission notes that the facility is located in the Water Resource Protection overlay district and appropriate measures should be taken to protect the drinking water resource, including measures to prohibit any hazardous materials from entering the watershed.

The Town of Groton Inland Wetlands Agency noted the following in its comments:

- a) The Agency feels that the distance of the panels from the reservoir and the wetlands is not sufficient to protect these resources; and
- b) The Agency is concerned that heated rainwater will be shed from the units, and it will adversely impact the wetlands.

Public Benefit

The project would be a “grid-side distributed resources” facility, as defined in Connecticut General Statutes (CGS) § 16-1(a)(43). CGS § 16a-35k establishes the State’s energy policies, including the goal to “develop and utilize renewable energy resources, such as solar and wind energy, to the maximum extent possible.” The 2013 Connecticut Comprehensive Energy Strategy emphasizes low- or no-emission sources of electric generation and development of more distributed generation, which the proposed facility is. The proposed facility would contribute to fulfilling the State’s Renewable Portfolio Standard as a zero emission Class I renewable energy source.

Proposed Site

The project would be located on a 290.5-acre parcel owned by the City of Groton. To the north and west of the parcel is Groton Reservoir. To the east of the parcel is the Rodgers property and Route 117. To the south of the parcel are residential properties located along North Road. To the northwest and northeast of the property are Groton Reservoir and Smith Lake, respectively. To the west of the property beyond Groton Reservoir are residential properties along Buddington Road. This parcel contains the Groton Utilities Water Treatment Plant infrastructure, the Poquonnock electrical substation (with associated transmission and distribution connections), and a mix of undeveloped woods and fields.

Proposed Project

The proposed solar project would consist of approximately 13,072 310-Watt Canadian solar panels, each measuring approximately 64.95 inches by 39.05 inches by 1.37 inches. Solar array (or mounting plane) number one would be located in the northern portion of the property and have approximately 6,574 solar panels. Solar array number two would be located to the south of array number one and have approximately 2,926 solar panels. Solar array number three would be located in the southeast portion of the property (just east of Poquonnock Substation) and have approximately 3,572 solar panels. The solar arrays would have fixed panels facing the south at a 20 degree angle above the horizontal.

The proposed facility would use a post-driven mounting system. The mounting assemblies holding the modules are built on I-beam foundations that would be driven into the ground, with the rack then constructed on the posts. After the rack is installed, the modules are bolted on to the rack. The bottom edge of the panels would be approximately two feet above grade. The top or highest edge of the solar panels would be approximately 6.5 feet above grade. Collectively, these panels would generate approximately 4.05 MW of direct current (DC) power.

The project would include five Solectria inverters, of which two would be 500-kilowatt (kW) and three would be 750 kW. The inverters convert the DC power supplied by the panels into AC power in order to be compatible with the AC electric grid. The inverters would be mounted on four concrete pads with transformers that are connected to the grid via switch gear. Approximately 3.25 MW of AC power would be available for the grid. The AC output would be fed into the existing overhead distribution system of Groton Utilities located on the subject property in the vicinity of Poquonnock Substation. Staff suggests that the final details of the electrical interconnection be included in a Development and Management Plan (D&M Plan).

No new fencing would be required because the subject property is already secured with an existing fence. SolarCity proposes to utilize an existing gravel access from State Route 117 (North Road) for construction purposes to avoid the residential areas along municipal North Road. After completion of the project, the primary access would be the existing access off of municipal North Road. Minimal upgrades to existing access drives may be performed with gravel as needed. No new access roads are proposed.

In response to municipal comments, SolarCity proposes to limit the driving of support posts into the ground to 8:00 a.m. to 5:00 p.m. seven days per week. Other general site construction activities are proposed between 7:00 a.m. and 7:00 p.m. The final construction hours schedule would be included in the D&M Plan.

Stormwater will be handled in accordance with the 2004 *Connecticut Stormwater Quality Manual*. Staff suggests that a final copy of the stormwater management report, stamped by a Professional Engineer, be provided in the D&M Plan.

Environment, Cultural and Scenic Values

The proposed project will consist of approximately 13.5 acres. The project area consists of open fields and four acres of woodland. Two existing overhead electrical utility corridors follow an existing gravel road which would border the east side of mounting planes one and two. This project area has moderate slopes, and any area where re-grading is necessary can be accomplished without significant cuts and/or fills. Approximately 75 percent of the project area is previously disturbed land. The remainder is woodlands.

SolarCity reviewed the most recent DEEP Natural Diversity Database (NDDB) Map for endangered, threatened, or special concern species and found that several shaded areas associated with the Groton Reservoir, Smith Lake, and the Poquonnock River overlap the proposed site. Accordingly, a request for NDDB review was submitted to DEEP on July 16, 2015. By letter dated November 1, 2015, DEEP indicated that the bald eagle, a threatened species, may occur in the vicinity of the proposed site. DEEP notes that nesting bald eagles may be negatively affected if work is performed too close to a nest or roosting site. Accordingly, DEEP recommends the following measures to protect the bald eagle:

- a) From February 1st through August 1st (the bald eagle breeding season), any machinery or equipment shall maintain, at a minimum, a 600-foot protection zone around any nest site. If a bald eagle is found to be nesting on or within 600 feet of the project area, work shall be halted immediately until after the breeding season; and
- b) From December 31st through March 1st (wintering bald eagles), any machinery or equipment shall maintain, at a minimum, a 600-foot protection zone around areas of high eagle use, particularly winter roosting sites;

DEEP also notes that several State-listed plant species have been documented on-site or in the immediate vicinity of Groton Reservoir. These plant species are noted below.

- a) State-designated Special Concern Species – few-seeded sedge, blue waxweed, clasping-leaved water-horehound, and eastern prickly pear;
- b) State-designated Threatened Species – showy aster, Nuttall's milkwort, and beaked rush; and
- c) State-designated Endangered Species – spike-rush, white thoroughwort, water pennywort, globe-fruited false-loosestrife.

Council staff suggests including a condition that measures to protect the bald eagle be included in the D&M Plan. In addition, the D&M Plan should include a report regarding possible NDDDB plants in the vicinity of the site and any recommended protective measures to minimize any adverse impacts to such NDDDB plant species.

A bird breeding assessment was conducted in June 2015 which focused on high conservation priority species. The inventory includes two State-listed Threatened Species: the American kestrel (potentially present) and the great egret (observed). The majority of the project area is located within open field areas which represent prime foraging habitat for the American kestrel, and similar habitat does occur outside of the project area for foraging. However, no prime nesting habitat would be impacted by the proposed facility. The forested areas that would be impacted by the proposed project consist of softwood species unsuitable for cavity nesters such as the American kestrel.

The great egret is a coastal species, breeding on offshore islands in Long Island Sound and foraging within shallow open water. The proposed site is not a breeding habitat for the great egret. The shallow waters of the Groton Reservoir are utilized as a feeding area where they feed on amphibians and small fish. The facility would not affect the great egret's feeding habitat.

There are two Osprey nesting platforms located at the site. SolarCity plans to relocate both platforms out of the project area to avoid any potential conflicts with the proposed facility. To minimize the impact to the Osprey, SolarCity would remove the platforms during the inactive nesting period (between October and the end of January) and replace them prior to the 2016 nesting season. The construction and installation of the new nesting platforms would occur in accordance with the provisions of DEEP Office of Long Island Sound's General Permit for Osprey Platforms and Perch Poles.

Finally, as a general precautionary measure to protect breeding birds in the vicinity of the project, SolarCity intends to complete vegetative clearing work prior to May 1st. If construction activities should occur during the peak nest period of May 1st through August 15th, or, if tree clearing has not been completed by May 1st, an avian survey may be conducted to determine if breeding birds would be disturbed. If the avian survey concludes that breeding birds would be disturbed, vegetation clearing activities may be restricted through the peak nesting period (or a modified time frame based on the findings of the survey can be considered.) Staff suggests that the final details of such protective measures be included in the D&M Plan.

The musk turtle (a/k/a stinkpot) is historically known to occur within the Groton Reservoir area based on surveys conducted by Dr. Klemens circa 1993. The presence of the stinkpot was re-confirmed at the site. While not an NDDDB species, the musk turtle is considered to be of conservation interest based on its limited bio-geographical distribution in Connecticut. Musk turtles are highly aquatic with overland movement restricted to females during the nesting season. Mortality from roads (other human activities) associated with overland movement, is not a significant source of mortality for the musk turtle due to their aquatic nature. No activity is proposed within wetlands or waterbodies and no alterations to wetland hydrology are proposed; therefore, there would be no impact to aquatic habitats by the musk turtle. In addition, musk turtles typically nest in uplands less than 45 feet from aquatic habitats. Therefore, it is possible that upland areas presently use for nesting could be affected. However, the majority of the potential nesting areas would be preserved due to the fact that the immediate lake edge (i.e. areas less than 25 feet away) would not be affected. Therefore, any loss of potential nesting habitat is expected to be minor and not result in an adverse effect to the musk turtle.

SolarCity performed a Carbon Debt Analysis. With the loss of the carbon-capturing ability of about 101 trees or roughly 4.04 acres, plus the carbon dioxide generated in the manufacturing and installation of the solar panels to be offset by the solar power displacing traditional electric generation (which includes fossil fuels in the portfolio), the “break-even point” is less than three years. That is, after three years of commercial operation, the project will result in a net reduction in carbon dioxide emissions for the environment.

By letter dated November 5, 2015, the Connecticut Department of Public Health (DPH) provided written comments indicating that the proposed project is to be located on land that is within the public water supply watersheds of Poquonnock Reservoir and Smith Pond and all contain three water supply wells all of which are sources of public drinking water for the customers of Groton Utilities (GU). The proposed project would be located on land designated as Class I and Class II water company land. Under Connecticut General Statutes Section 25-32, GU would be required to apply to DPH for a change of use permit prior to any construction on their water company land.

Furthermore, DPH notes that alternative locations for the project do not appear to have been considered. DPH believes that the Petition materials do not appear to fully evaluate the potential impacts to the public drinking water supply and public health during the construction, operation, and decommissioning of the proposed facility. DPH also notes that the Petition does not adequately acknowledge the three public water supply wells on the subject property. Potential impacts to these sources of public drinking water should also be considered by the Council in rendering its decision. Finally, DPH requests that GU obtain a water company land change in use permit from the Commissioner of DPH prior to the Council’s decision on this Petition.

By letter dated November 12, 2015, SolarCity acknowledged that a DPH permit is necessary. As a result, SolarCity has been working with GU to prepare an application to DPH and will file it soon. SolarCity will provide a copy to the Council as well as the TGPCIWA when it is complete. Furthermore, SolarCity respectfully requests that the Council make the submission of DPH change in use permit (and revised site plan to meet DPH requirements if necessary) a condition of approval, rather than delay such an approval given the Council’s 180-day timeline (to April 6, 2016) to render a decision.

Additionally, as part of the DPH permit submittal, to address DPH concerns as well as the concerns of the TGPCIWA, SolarCity proposes to install a series of perimeter water quality swales between the limits of the proposed arrays and the reservoir to further mitigate any potential runoff impacts to the adjacent resource areas. The water quality swales would be populated with local plant species consistent with those already present in wetlands in the immediate vicinity. Also, there is one production well located within the project’s footprint; however, it is an inactive well. SolarCity would maintain a buffer to the well as specified by GU.

The project would also have a 20-foot by 25-foot concrete fueling pad to provide a contained fueling area for construction vehicles as a water resource protection measure.

The site lies outside the 100 year and 500 year floodplain according to the United States Federal Emergency Management Agency's mapping. While the municipality of Groton is located within the Coastal Zone Management Area, the project area itself is located outside of the Coastal Boundary.

By letter dated August 19, 2015, the State Historic Preservation Office (SHPO) noted that the proposed project area was previously used for sand and gravel mining. Groton Reservoir to the west and Smith Lake to the east currently fill the depressions created by the mining activities. Historically, the area consisted of well-drained soils in close proximity to perennial sources of water, and some of these remnant areas remain. This type of environmental setting is associated with pre-contact Native American settlement. As such, SHPO noted that there is elevated potential for the site to contain significant archaeological resources. Thus, SHPO

requested that a professional cultural resources assessment and reconnaissance survey be completed prior to construction.

Accordingly, SolarCity's archaeological consultant, Heritage Consultants, LLC (HC), performed a Phase I Cultural Resources Reconnaissance Survey. The survey was a three-step process. First, HC performed a literature search and records review. Then, HC identified all previously recorded archaeological sites within the vicinity of the Area of Potential Effect. Finally, HC performed the in-field reconnaissance survey including shovel tests. By letter dated November 19, 2015, HC determined that the proposed project would have no impact on cultural resources. A copy of HC's report has been submitted to SHPO.

SolarCity had a noise analysis performed. The highest projected noise levels associated with the project would be 35 dBA at the northern property line. This is lower than even the most stringent DEEP standard of 45 dBA (for nighttime residential emitter to residential receptor). Thus, the project would comply with applicable DEEP noise standards.

Four wetlands areas were identified at the site with a fifth wetland identified but not delineated because it is over 400 feet from the proposed project area. Wetland 1 runs along the banks of the Groton Reservoir down the western side of the project area. The majority of the area is mowed regularly in mostly emergent and stunted scrub/shrub growth although areas to the north do maintain some forested buffer. This wetland generally drains south and is controlled by a concrete weir structure. The closest construction activity would occur approximately 25 feet east of Wetland 1. Wetland 2 is on the east side of the project area and runs along the banks of Smith Lake. The southern banks of this wetland consist of sloping, exposed sand and gravel shores with sparse scrub/shrub vegetation. The western banks of this wetland are very steeply sloping with upland edges dominated by mature red pine. The edges and bottom of this wetland are generally devoid of vegetation with sparse submergents and emergent plants. Wetland 3 is a small, isolated, depression located on the interior of the site to the east of a utility transmission corridor and to the north of the transmission substation. The northern half of this wetland is forested while the southern half is scrub-shrub/emergent dominant. The core of this wetland is entirely open water, consisting of year-round inundation. Wetland 4 is associated with a large, open water body in the interior of the site to the east, outside of the fence surrounding the project area. This wetland has steeply sloping banks and open water areas that are colonized intermittently by buttonbush "rafts." The banks of this wetland are dominated by scrub/shrub vegetation. A 100-foot setback from Wetland 4 has been included in the design. Wetland 5 is located to the north of Wetland 4 and is a large, open waterbody. The banks around this wetland are generally steep with forested edges. Edges of the flooded extents are colonized by buttonbush "rafts" with areas of emergent and submergent vegetation similar to other inundated wetlands identified on the site. No project activities are proposed in proximity of Wetland 5.

A vernal pool survey was conducted on May 5, 2015 and June 10, 2015. While vernal pool indicator species were observed within Wetlands 3, 4 and 5, Wetland 3 (containing Vernal Pool 1) was identified as the most significant vernal pool habitat. This is because Vernal Pool 1 had the highest observed number of spotted salamander egg masses (about 45 in total). Also, Wetland 3 generally has physical characteristics more typical of vernal pool habitat when compared to other wetlands. Since Vernal Pool 1 is also the closest vernal pool to the project area and its moderate productivity for the spotted salamander, an analysis of the project impacts on vernal pool wildlife was performed using Calhoun and Klemens 2002.

According to the analysis, the existing pre-construction conditions show 11 percent development within the Vernal Pool Envelope (VPE), which is the zero to one hundred foot area around the vernal pool. This would increase to 17 percent post-construction. The Critical Terrestrial Habitat (CTH) area is the area ranging from 100 feet to 750 feet from the vernal pool. Pre-construction, approximately 14 percent of the CTH is developed. Post-construction, a total of approximately 34 percent of the CTH would be developed. With development within the VPE and more than 25 percent development within the CTH, the project would not meet the standards of Calhoun and Klemens 2002.

However, the proposed site activities are located largely within non-forested habitats which do not provide suitable terrestrial forest habitat for vernal pool amphibians. The loss of habitat within the VPE is entirely within non-forested meadow habitat that is mowed both seasonally and more frequently. Within the CTH, the 20 percent increase in development would only result in 2.13 acres of forest loss to the southeast, and is restricted to a remnant European Larch plantation. The larch plantation is considered to be of low value for amphibians due to limited duff, limited cover objects and a relatively open canopy. However, given the limited forest habitat presently available on the site, additional forest removal will reduce the total available forest cover which has the potential to reduce the population of vernal pool indicator species present, despite the low value of this larch forest. In an effort to mitigate this impact to the maximum extent practicable, SolarCity proposes re-forestation areas adjacent to Wetland 3 which are currently regularly-mowed meadows. The remainder of the activity within the CTH of Vernal Pool 1 (7.3 acres) would occur entirely within the open meadow located immediately west of the existing utility corridor. Staff recommends that a reforestation plan be included in the D&M Plan.

In response to municipal concerns about solar panels potentially heating rainwater and thermally polluting adjacent wetlands, SolarCity notes that the time that the rainwater would come in contact with the solar panels is very short due to the 20 degree fixed pitch, the smooth surface of the glass, as well as openings between each panel which reduce the potential flow path. Once off the panel, rain water will infiltrate into the soil and/or mix with other surface water flowing from the grassed areas. Additionally, when it is raining the sky will be cloudy, thus significantly reducing the surface temperature of the panel glass. Thus, the proposed solar panels are not expected to cause an increase in the temperature of the rainwater runoff.

The large arrays that would occupy the western portion of the site (i.e. Solar Array Nos. 1 and 2) are set back sufficiently from abutting properties and public roads such that they would not be visible from off-site locations. However, the southeast array (i.e. Solar Array No. 3) would be located near the existing fence line along the southern property boundary, adjacent to five neighboring residences along municipal North Road, where views of existing infrastructure on the site exist today. Portions of Solar Array No. 3 would be visible from some locations in this area. To reduce the visual impact from such residences, SolarCity proposes to install a vegetative buffer as requested by the Town of Groton Planning Commission. Such vegetative buffer would consist of Green Giant Arborvitae off-site just outside the existing southern fence line.

A decommissioning plan was included in the petition and has provisions for project removal and site restoration.

Conclusion

The Petitioner contends that pursuant to CGS § 16-50k(a), the Siting Council shall approve by declaratory ruling the construction or location of "any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection." The proposed project meets these criteria. The proposed project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize wetland impacts, will employ a stormwater management plan that will result in minimal impact on the runoff flow and flow patterns, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. In addition, as demonstrated above, the proposed project will not have a substantial adverse environmental effect.

Staff recommends approval with the following conditions:

1. The Petitioner shall provide a copy of the final Change in Use Permit from the Department of Public Health and any associated site plan changes for Council review and approval prior to construction;

2. The Petitioner shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the City and Town of Groton for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) A final plan of site development to include specifications for the solar panels, supporting infrastructure, fueling pad with containment measures, electrical equipment, equipment compound, access and maintenance roads, utility connections, and landscaping;
 - b) Construction details for site clearing, site phasing, grading, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended;
 - c) Report regarding Natural Diversity Database plants in the vicinity of the project and plans to protect such species in the vicinity of project, as applicable;
 - d) Plans to protect the bald eagle and other breeding birds including plans to relocate the osprey nesting platforms in consultation with the Department of Energy and Environmental Protection;
 - e) A final copy of the Stormwater Management Report stamped by a Professional Engineer;
 - f) Final wetland and vernal pool protection and reforestation plans;
 - g) Construction work hours and days of work; and
 - h) Identification of an environmental monitor for the project.

Site Layout



- Legend**
- Site Boundary
 - Project Area (14-13.48 acres)
 - Approximate Assessor Parcel Boundary (CTDEEP)
 - Existing Gravel Access Drive
 - Existing Fence Line
 - ▲ Start/End Wetland Flag
 - Wetland Boundary
 - 25' Wetland Buffer
 - Limit of 500-Year Flood Zone
 - Wetland Area
 - Vernal Pool
 - 100' Vernal Pool Envelope

Figure 2
Existing Conditions Map
 Proposed Solar Facility
 1240 Pogonnock Road
 Groton, Connecticut

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Map Source: 2013 Aerial Photograph (CTDEEP)
 Map Scale: 1 inch = 325 feet
 Map Date: October 2015



Project Layout



Photo-simulations from residential areas along North Road



DOCUMENTATION

PHOTO	LOCATION	ORIENTATION
18	NORTH ROAD	NORTH



DOCUMENTATION

PHOTO	LOCATION	ORIENTATION
20	NORTH ROAD	NORTHWEST