



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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### CERTIFIED MAIL RETURN RECEIPT REQUESTED

May 13, 2016

Daniel Boyd  
RES America Developments, Inc.  
455 Boston Post Road, Suite 206  
Old Saybrook, CT 06475

RE: **PETITION NO. 1224** – Woods Hill Solar, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 17.61 Megawatt AC Solar Photovoltaic Electric Generating facility located at 90 and 101 Woods Hill Road, Pomfret, Connecticut.

Dear Mr. Boyd:

At a public meeting held on May 12, 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:

1. The Petitioner shall prepare a Development and Management Plan (D&M) 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 Towns of Pomfret, Brooklyn, and Killingly for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) A final site plan including, but not limited to, the electrical interconnection design;
  - b) The vernal pool report; and
  - c) The State Historical Preservation Office determination;
2. 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;
3. 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 Pomfret;
4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
5. 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;

6. 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
7. 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 March 31, 2016, and additional information dated May 5, 2016 and May 10, 2016.

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

Very truly yours,



Robert Stein  
Chairman

RS/CMW/lm

Enclosure: Staff Report dated May 12, 2016

- c: The Honorable Craig Baldwin, First Selectman, Town of Pomfret
- Walter P. Hinchman, Planning and Zoning Chairman, Town of Pomfret
- The Honorable Richard Ives, First Selectman, Town of Brooklyn
- Jana Butts Roberson, AICP, Land Use Administrator, Town of Brooklyn
- The Honorable David Griffiths, Town Council Chairman, Town of Killingly
- Sean Hendricks, Town Manager, Town of Killingly
- Ann-Marie L. Aubrey, Director of Planning and Development, Town of Killingly
- Lee D. Hoffman, Esq.
- Juanita Cristina and Sheila Nabozny, property owners
- Charles Tyler, property owner



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### Petition No. 1224

#### Woods Hill Solar, LLC

90 and 101 Woods Hill Road, Pomfret

#### Staff Report

May 12, 2016

### Introduction

On March 31, 2016, Woods Hill Solar, LLC (WHS or the 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, operation and maintenance of a 17.6 MW alternating current (AC) or 22 megawatt (MW) direct current (DC) solar photovoltaic (PV) generating facility to be located at 90 and 101 Woods Hill Road in Pomfret, Connecticut. Council member Michael Harder, Acting Executive Director Melanie Bachman, and Christina Walsh of the Council staff visited the site on May 2, 2016 to review this proposal. Attorney Lee Hoffman of Pullman & Comley, LLC, Daniel Boyd of RES America Developments, Inc., Briony Angus of Tighe & Bond, and Eric Davison of Davison Environmental, LLC attended the field review representing the Petitioner.

On or about March 30, 2016, the Petitioner notified the Town of Pomfret, and the Towns of Killingly and Brooklyn (both within 2,500 feet of the project), the required state officials and abutting property owners of the proposed project. On May 3, 2016, the Council received a letter from the Town of Pomfret First Selectman Craig W. Baldwin in support of the proposed project.

On May 10, 2016, the Council received comments from the Department of Agriculture (DOAg) in opposition to the project on the basis that the project seeks to convert approximately 102 acres of "Prime and Important Soils" to an approximately 20 MW solar development. Furthermore, DOAg is under the erroneous impression that the project entails an expenditure of state funds, which requires agricultural evaluation.

### Municipal Consultation

The Petitioner has met with the Town of Pomfret since 2014 regarding the proposed project. A public information meeting was held at Pomfret's Senior Center on March 8, 2016. Additionally, the Petitioner communicated with the Town of Brooklyn on June 8, 2015 and the Town of Killingly on March 30, 2016.

### Public Benefit

The project would be a "grid-side distributed resources" facility, as defined in Connecticut General Statutes (CGS) § 16-1(a)(37). CGS § 16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." The 2013 Connecticut Comprehensive Energy Strategy emphasizes low- or no-emission sources of electric generation and development of more distributed generation. The proposed facility is distributed generation. Specifically, the proposed facility will 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 two parcels at 101 Woods Hill Road (Parcel A) and 90 Woods Hill Road (Parcel B). Parcel A is an approximately 113 acre property currently owned by Juanita Cristina and Sheila



Nabozny located southeast of the terminus of Woods Hill Road. Parcel B is an approximately 115 acre property currently owned by Charles Tyler located northwest of the terminus of Woods Hill Road. The Parcel A property is zoned Commercial Business (CB) and Rural Residential (RR). The Parcel B property is zoned CB. WHS has an Option to Purchase Parcel A and an Option to Lease Parcel B.

The two parcels together, referred to as the site, would total approximately 228 acres. The site consists of cleared agricultural land that is used for agricultural purposes. There are no structures on the site. Most of the surrounding land use is agricultural and wooded open space.

Although the eastern portion of Parcel B and the northern portion of Parcel A contain tracts of prime farmland and statewide important farmland, neither parcel is subject to any agricultural restriction. There are no encumbrances on development uses as a result of acquisition of development rights by the state of Connecticut. According to the Town of Pomfret Tax Assessor records, the Public Act 490 land use code indicates both parcels are classified as “Tillable D – good to fair.” The Phase I Environmental Site Assessments conducted for each parcel by Tighe & Bond concluded that both parcels contain potential contaminants of concern, including pesticides and herbicides based on past agricultural use, and the presence of minor amounts of solid waste (wood, plastic and metal).

There are two residences near the proposed facility. One is located approximately 250 feet east of the Parcel B array and approximately 125 feet northwest of the Parcel A array. The second is approximately 125 feet west of Parcel A and approximately 600 feet southeast of Parcel B.

Parcel A is traversed by an Eversource Energy transmission line right-of-way. Both parcels contain stone walls.

The Quinebaug River is approximately 1,200 feet east of the cleared portion of Parcel A. White Brook is just west of Parcel B. Parcel B generally slopes northeast toward White Brook. The grade of Parcel B varies from flat along the eastern property boundary to an approximately 30 percent grade in the gully towards White Brook. Parcel A generally slopes to the south and east. The grade of Parcel A varies from flat along the western property boundary to a 35 percent grade within the eastern utility easement.

### **Proposed Project**

The proposed solar facility would include 69,882 solar PV modules on fixed rack systems within a 102 acre footprint. The racks would run east-west and be mounted facing south at a fixed 25 degree angle to the ground surface. A driven metal post foundation system would be used to support the racks. The racks would be installed approximately 16 feet apart. The top of the racks would reach a height of approximately seven feet.

The proposed electrical equipment would be installed on ten 32-foot by 48-foot reinforced and fenced concrete electrical equipment pads, each of which would support the inverters, switchgear, and a transformer needed to step up the power before interconnecting with Eversource’s distribution circuit. The fencing around the equipment pads would be a seven foot tall chain link fence with two inch mesh. No other fencing is proposed at the solar facility.

Access to the facility would be via new 12-foot wide access roads that would extend from Woods Hill Road into Parcel A and Parcel B.

The facility is expected to produce approximately 33,190,000 kilowatt-hours of energy in the first year of operation with a design life of 25 years and efficiency loss of approximately 0.5 percent per year. Approximately 70 percent of the output would be peak power.

The proposed racking system is designed to meet applicable local building codes for wind and snow loads. The solar panels and steel support structures would be designed to the 50 year snow load design criteria, which assumes snow accumulation of 40 pounds per square foot.

Construction is expected to begin in the summer of 2016 and be completed with the facility operational by the end of 2016. The Petitioner expects that typical construction hours would be Monday through Friday from 7:30 a.m. through 5:00 p.m.

In February 2015, WHS submitted an interconnection request with Eversource. The point of interconnection would be approximately five miles northeast of the proposed facility at the Tracy Road Substation. Underground conduits would convey power from the equipment pads at the facility to the interconnection location north of the proposed site. The interconnection studies are ongoing and are expected to be completed in the coming months. Staff suggests that the electrical utility interconnection be included in the Development and Management (D&M) Plan for the project.

### **Environment, Cultural and Scenic Values**

The proposed project would require the select removal and clearing of 16 acres of existing vegetation to minimize shade impacts. Clearing is expected to occur within approximately 75 feet to 100 feet of delineated inland wetlands. The Petitioner proposes to clear the entire 16 acres at once as one phase of construction; however, the 16 acres are not grouped together but are dispersed throughout the properties. There is one area greater than five acres that is proposed for clearing.

There are four wetlands and one intermittent watercourse within the vicinity of the proposed project. A fifth wetland was identified nearby but is not near the project's limit of work. Wetland 1, located in the northwestern portion of Parcel B, is a large forested, hillside seepage wetland. Wetland 2, in the northern portion of Parcel B, is a small isolated forested wetland. Wetland 3, located in the southern portion of Parcel A, is a narrow hillside seepage wetland and intermittent watercourse. Wetland 4, in the northern part of Parcel A, is a small area in an abandoned access road on the parcel boundary. Wetland 5 is in the eastern portion of Parcel A and is a large forested wetland well outside of the proposed construction area for the facility. Wetland 5 contains two vernal pools. Proposed project activity would be 1,000 feet or greater from these vernal pool areas. Vernal pool field work was completed in early Spring 2016 and a summary report is being prepared for the project. Staff recommends this report be provided to the Council as part of the D&M Plan for the project.

The Petitioner has performed a carbon debt analysis. Due to the proposed 16 acres of clearing to construct the facility which reduces the carbon capturing ability, it would take approximately ten months to be offset by the project.

Fescue species would be planted beneath the solar arrays and aisles would be planted with a low-growing solar array mix. Mowing in the aisles is expected to occur twice a year.

Views of the proposed facility are not expected to be significant due to heavily forested areas to the east, southeast, southwest, north, and northwest. Also, the relatively low height of the facility with equipment components generally not taller than seven feet reduces the potential for visual impact. Vegetative screening is proposed at two locations along Woods Hill Road on Parcel A and a third location on Parcel B to minimize visual impact to adjacent residences. There is substantial existing vegetation in the area to the east and southeast, southwest, north and northwest, that serves as natural screening for the proposed project.

The proposed facility layout would use existing grades to minimize the earth work required. Soil disturbance would be necessary to install foundations for the PV panels and associated equipment. Grading may also be required for the development of the proposed access roads. Stormwater flowpaths are not expected to be

impacted by the proposed project. Hay fields would remain vegetated and corn fields would be seeded with a grass/hay mix for stabilization. The drip edge of the panels would not be erosive for established vegetation. Channelization of stormwater flows along the panel drip edge is a potential concern prior to vegetation establishment in areas where topography runs perpendicular to the drip edge and slopes exceed five percent. These conditions do not occur over most of the project; however, where these conditions do occur, the areas would be monitored throughout construction until vegetation is established.

The host properties are not within an Aquifer Protection Area. Groundwater at the proposed property is classified as GA. GA-classified area uses include existing private and potential public or private supplies of water suitable for drinking without treatment and base flow for hydraulically-connected surface water bodies. The east side of the site is located within the drainage basin associated with the Quinebaug River. The west side of the site is within the drainage basin associated with White Brook.

A Stormwater Management Report is included in the petition. Since the topography of the site would not significantly change, the existing drainage areas of the properties would remain. A decrease in runoff would be expected following completion of the proposed project due to the conversion of agricultural fields to grassy meadow. Erosion and sedimentation controls would be installed around the project area prior to vegetation removal.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the proposed site is in an area designated as Zone C, an area of minimal flooding.

The proposed project is approximately 1.2 miles from the Quinebaug River. The Quinebaug River is part of the Last Green Valley National Heritage corridor; however, the construction and clearing associated with the proposed project is not expected to impact the corridor.

State Route 169, located approximately 1.75 miles west of the proposed project is a National Scenic Byway. A portion of Route 169 in Pomfret Town Center is part of the Pomfret Street Historic District. A portion of Route 244, approximately 4.2 miles north of the proposed site is a state-designated scenic road.

Based on the proposed project information, on January 21, 2016, the Connecticut State Historic Preservation Office (SHPO) requested that a professional cultural resources assessment and reconnaissance survey be completed prior to construction due to an elevated potential to contain significant archaeological resources. A Phase 1A Cultural Resources Assessment was completed on April 28, 2016. The assessment revealed known archaeological sites in the vicinity of the project and recommends a Phase 1B cultural resources reconnaissance survey be completed and that the scope of work for the Phase 1B survey be formulated in consultation with SHPO. Staff recommends SHPO's determination be provided in the D&M Plan.

A breeding bird inventory was done for the proposed site. The inventory is a list of 63 birds that could potentially breed on the site, identifying 26 species of "Greatest Conservation Need," including 9 important species, 11 very important species, and 6 most important species as categorized by the Connecticut Department of Energy and Environmental Protection's *2015 Connecticut Wildlife Action Plan*. A breeding bird survey was not done due to project timing. Breeding bird protection measures include all vegetation removal work to occur prior to May 1, if not completed by May 1, an avian survey may be conducted to determine if breeding birds would be disturbed. If a survey determines that breeding birds would be disturbed, vegetation removal activities may be restricted through the peak nesting period or some portion of that time frame.

Additionally, five state-listed bird species were identified during the breeding bird inventory including the American kestrel (Special Concern species), brown thrasher (Special Concern species), eastern meadowlark (Threatened species), savannah sparrow (Special Concern species), and bobolink (Special Concern species). The eastern meadowlark, savannah sparrow, and bobolink are all grassland species that nest on the ground; therefore, hay harvesting at the proposed property would make the likelihood of successful breeding of these

species low. To protect grassland bird species, the hayfields should be mowed during the non-breeding season, which is September to April. If this is not possible, hay mowing should be delayed until mid-July to early August to allow grassland birds to complete most nesting activities. Furthermore, if delayed mowing is not feasible, there are additional steps that may be taken to minimize impacts on nesting grassland birds.

The nearest Important Bird Area is the Bafflin Sanctuary Complex, which is located approximately one mile northwest of the proposed site.

The hoary bat, red bat, silver-haired bat and frosted elfin butterfly have been identified by the Department of Energy and Environmental Protection (DEEP) as species that may occur within or in the vicinity of the proposed site. The three bat species are state-designated species of special concern. The frosted elfin butterfly is a state-designated threatened species. To protect the bat species, DEEP recommended that tree cutting be conducted during the winter months and that work should not be conducted between May 1 and August 15. Additionally, long-term impacts could be minimized by retaining large diameter coniferous and deciduous trees whenever possible. The Petitioner is unaware of any known maternity roost trees or hibernacula in the vicinity of the proposed project; however, WHS proposes avoiding tree removal activities between June 1 and July 31.

The Petitioner had intended to survey the project area for two plant species, wild blue lupine and wild indigo. Subsequent discussions with DEEP Wildlife Division staff have indicated that such a survey may not be necessary because the proposed limit of tree clearing is located outside of the Natural Diversity Data Base mapped polygon. The Petitioner will get written confirmation and provide it to the Council.

The project would have no adverse environmental effect to air or water quality. The solar project would not produce air emissions of regulated air pollutants or greenhouse gasses during operation. The project is not expected to impact any drinking water sources.

DEEP noise regulations limit Class B emitters to Class A receptors to a nighttime limit of 45 dBA at the property line. The proposed project is generally expected to meet the DEEP noise standards at the property boundaries. The one exception is that noise levels may reach 46 dBA at the boundary with the two existing residences that are on the project parcels but would meet noise criteria at the off-property nearby residences. The Petitioner has situated the inverters and transformers in the central portion of the solar array in an effort to keep noise levels below DEEP standards at nearby residences.

A Decommissioning Plan was included in the Petition and has provisions for project removal after a service life of up to 50 years.

### **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, 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.

### **Recommendations**

Staff recommends inclusion of the following conditions:

- The Petitioner shall prepare a Development and Management Plan (D&M) 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 Towns of Pomfret, Brooklyn, and Killingly for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) A final site plan including, but not limited to, the electrical interconnection design;
  - b) the vernal pool report; and
  - c) the SHPO determination.



Site Features Map

