



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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### CERTIFIED MAIL RETURN RECEIPT REQUESTED

March 4, 2016

Scott W. Jezek, Esq.  
31 Williams F. Palmer Road  
P.O. Box 376  
Moodus, CT 06469

RE: **PETITION NO. 1215** – Shagbark Lumber and Farm Supplies, Inc. 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 1.6 Megawatt Solar Photovoltaic Electric Generating facility located at 21 Mount Parnassus Road, a/k/a Route 434, East Haddam, Connecticut.

Dear Attorney Jezek:

At a public meeting held on March 3, 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 Town of East Haddam 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) Vernal pool analysis;
  - c) Erosion and sedimentation control plan consistent with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control*;
  - d) A stormwater management plan consistent with the *2004 Connecticut Stormwater Quality Manual*;
  - e) Landscaping plan that mitigates any visual impact; and
  - f) SHPO 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 East Haddam;
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 February 1, 2016 and additional information received on February 19, 2016 and February 22, 2016.

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 March 3, 2016

- c: The Honorable Mark B. Walter, First Selectman, Town of East Haddam  
Crary H. Brownell, Chm, Planning and Zoning Comm, Town of East Haddam  
Julia Leonardo, Shagbark Lumber and Farm Supplies, Inc.  
Thomas Wemyss, PurePoint Energy



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### Petition No. 1215

**Shagbark Lumber and Farm Supplies, Inc.**

**21 Mount Parnassus Road (Route 434), East Haddam**

**Staff Report**

**March 3, 2016**

### Introduction

On February 2, 2016, Shagbark Lumber and Farm Supplies, Inc. (SLFS 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, operation and maintenance of a 1.6 megawatt (MW) direct current (DC) or approximately 1.2 MW alternating current (AC) solar photovoltaic generating facility located 21 Mount Parnassus Road (Route 434) in East Haddam, Connecticut. Council member Robert Hannon, Acting Executive Director Melanie Bachman, and Michael Perrone of the Council staff visited the site on February 19, 2016 to review this proposal. Attorneys Scott W. Jezek and Deborah Barbi, Law Office of Scott W. Jezek (representing SLFS); Honorable Mark Walter, First Selectman, Town of East Haddam; Roger Nemergut, P.E. and Jason Nemergut, P.E., Nemergut Consulting; Dennis Quinn, on behalf of Davison Environmental; Thomas Wemyss, PurePoint Energy; and Michael Sassi, Bridge Energy; Joanna Hunt, SLFS; Frederic Hunt, SLFS; and Julia Leonardo, SLFS also attended the field review.

On or about January 27, 2016, the Petitioner notified the Town of East Haddam and other local officials and abutting property owners of the proposed project. Specifically, the Petitioner provided notice to the following Town officials: Mark Walter, First Selectman; Cray Brownell, Chairman, Planning and Zoning Commission; Randolph Dill, Chairman, Inland Wetlands and Watercourses Commission; and James Ventres, Land Use Administrator. Notice was provided to state officials and agencies on or about February 11, 2016. To date, the Council has not received any comments from abutters. By letter received February 29, 2016, State Representative Melissa Ziobron expressed her support for the proposed project. By letter dated March 3, 2016, the Connecticut Department of Transportation provided comments requesting that SLFS obtain an Highway Encroachment Permit for any work performed within the State Route 434 right-of-way.

### Municipal Consultation

The Petitioner has attended meetings with First Selectman Mark Walter and James Ventres, Town Land Use Administrator for the Town of East Haddam. On February 3, 2016, three sets of plans were provided to the Town of East Haddam Land Use Office. On February 9, 2016, Attorney Jezek and Roger Nemergut, P.E. gave a presentation at the East Haddam Planning and Zoning Commission's (EHPZC) meeting. On February 16, 2016, Attorney Jezek and Mr. Nemergut gave a presentation to the East Haddam Inland Wetlands and Watercourses Commission (EHIWWC). On February 23, 2016, the EHPZC held its regular meeting and discussed the Petition. The Petitioner will continue to engage the Town of East Haddam throughout the process.

By letter dated February 25, 2016, the East Haddam Planning and Zoning Commission (EHPZC) provided written comments to the Council. Specifically, the EHPZC has the following comments:

- a) The notice to abutters did not include maps or other information;
- b) The EHPZC has not held a hearing prior to submission of the project plans to the Council;

- c) The EHPZC would have asked for a view shed analysis from Mount Parnassus Road, Town Street, and the abutting properties;
- d) The site plan should have included Mount Parnassus Road to see the proximity of the project to the main thoroughfare and the abutters;
- e) Visual buffers were mentioned in the Petition, but not included in the plans; and
- f) No petition or application should be accepted by the Council until after it has been presented to the Board of Selectman, EHPZC, EHIWWC, and the Historical Commission.

By letter dated February 26, 2016, the Council responded to the EHPZC indicating that EHPZC was invited to provide comments to the Council by letter dated February 3, 2016; the EHPZC was invited to the field review by notice dated February 11, 2016; and that the EHPZC's concerns would be considered by the Council.

### **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 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. 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 the south-central 10.5 acres of the approximately 124-acre parcel owned by Bud and Bobby, LLC and currently hosts SLFS. Approximately 100-acres of the subject parcel is currently maintained in agriculture for haying and an additional five acres for beef cattle and horse pastures. The remaining acreage consists of a lumberyard, feed and grain store, hardware store operation and conservation easement.

The site is located in an industrial zone, IG District (IG-7). The site is bounded to the west by other undeveloped land of the Petitioner, to the east by an agricultural field owned by the Petitioner and an Eversource electrical transmission line easement, to the south by the retail component of SLFS, to the north by other undeveloped land of the Petitioner and the Eversource easement, and to the southwest by homes including that of the Petitioner.

The site is located approximately one mile east of the Connecticut River. The site's primary frontage lies along Mount Parnassus Road. The site also fronts on Route 151 (Town Street). The primary natural resource present on the site is Succor Brook. The site lies in the central portion of the Succor Brook Watershed which drains directly to the Connecticut River at the Goodspeed Opera House in downtown East Haddam.

### **Proposed Project**

The solar field would include a total of 5,080 solar photovoltaic modules (with 50 inverters) on fixed rack systems oriented to the south. There would be two rack-mounted arrays located to the east and west (respectively) of an existing wetland (#3A). These panels would be tilted on an angle of 20 degrees with the horizontal. SLFS would also construct four lumber ports to support solar panels. These lumber ports would have dimensions of 97.5 feet by 20 feet, 117 feet by 20 feet, 136.5 feet by 20 feet, and 136.5 feet by 40 feet, respectively. The solar panels on top of the lumber ports would

reach a maximum height of approximately 16 feet above grade. The rack-mounted panels would reach a maximum height of approximately 15 feet above grade.

The project will interconnect with Eversource's existing overhead 23-kilovolt three-phase distribution line that runs parallel to Mount Parnassus Road (on the south side of the road). At least three utility poles would be installed on the subject property. Electrical interconnection equipment would be located on the eastern side of the northern-most lumber port, subject to Eversource's final design requirements. Staff suggests that the electrical utility interconnection be included in the D&M Plan.

The project would include a six-foot tall security fence with two-inch mesh and without barbed wire. The Petitioner would utilize an approximately 600-foot long existing access to the lumber yard from Mount Parnassus Road to access the beginning of a proposed 12-foot wide by 760 feet of gravel access roads and turn-around for the solar facility. The existing access is processed aggregate and would not require any upgrades.

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

The solar panels total about 6 acres in area and are all located in uplands. Given that much of the site is already clear, site development would require the clearing of 1.9 acres of trees (or less than a third of the total solar panel area) to support the project footprint and also to minimize shading losses. The Petitioner has performed a carbon debt analysis. While the loss of trees necessarily reduces carbon capturing ability, the carbon dioxide emissions reductions due to the solar power displacing more traditional generation (which includes fossil-fueled generation) results in a very rapid "carbon payback" of about 16 days of full energy production. Thus, the proposed project would very rapidly result in a net reduction in carbon dioxide emissions for the environment.

The solar rack posts would be driven into the ground. Approximately 2,400 cubic yards of cut and approximately 1,900 cubic yards of fill would be required to grade the project.

A stormwater management plan has been developed by Nemergut Consulting in accordance with the *2004 Connecticut Stormwater Quality Manual*. The stormwater management plan is designed to prevent degradation of downstream waters from stormwater runoff. An erosion and sedimentation control plan would be prepared prior to final site design. Staff recommends including a condition that the final stormwater management plan consistent with the *2004 Connecticut Stormwater Quality Manual* and the final erosion and sedimentation control plan consistent with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* be provided in the Development and Management Plan (D&M Plan).

A Decommissioning Plan was included in the Petition and has provisions for project removal after a service life of up to 30 years.

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. No surface drinking water supplies are located in the Town of East Haddam. In addition, the project is not located within an aquifer protection area. The majority of the project would remain outside of the 100-year flood zone, except for the extreme western corner of the western array.

There are four wetlands in proximity to the project. Wetland 1 is situated east and north of the site. This wetland is isolated and would be rehabilitated as a bio-retention basin consistent with the Stormwater Quality Management Plan. Wetland 2 is located to the north of the site in the vicinity of the Eversource easement and is predominately the drainage area to Succor Brook. Wetland 3A is

located in the center of the site and separates the two solar rack-mounted solar arrays. Wetland 4 is located southeast of the eastern panel array.

Amphibian and reptile surveys were conducted on September 17, 2015, October 10, 2015, and October 21, 2015. Two vernal pool species, the wood frog and the spotted salamander were observed in the study area. This indicates the presence of a nearby vernal pool. A likely cryptic vernal was identified in the study area. This potential vernal pool is located within Wetland 2 and is approximately 623 feet north of the project area, and it consists of an old excavated pond with stone dam located within the reaches of the Succor Brook. The other wetlands do not have a suitable hydrologic regime to support breeding by vernal pool species. While the project complies with Calhoun and Klemens 2002 Best Development Practices for vernal pool protection, as a precaution, staff suggests that a vernal pool survey be performed approximately spring 2016 and any updated recommended protective measures be provided in the D&M Plan.

While a total of 1.74 acres of tree clearing within Wetland 3 and Wetland 4 would be required for proper sun exposure, the trees would be removed by hand during the winter and with stumps left into place to prevent soil disturbance and degradation of wetlands. Due to the high density of shrubs and herbaceous plants present in these areas, the wetland would quickly revert to dense emergent and shrub-dominated wetlands once the tree canopy is removed.

DEEP's Natural Diversity Database identifies three plant species in the area: Indian Paintbrush, State endangered species; Pale Green Orchid, a State Special Concern species; and Rich Orchid area habitat. An assessment was performed by a botanist. There is no evidence of the Indian Paintbrush or Pale Green Orchid at the site. The Rich Orchid area occurs off-site.

By letter dated January 24, 2016, DEEP has determined that the proposed project would not have any adverse impacts on federal or state-listed species if best management practices and protection plans are followed for the eastern box turtle. DEEP also notes that, by having a stormwater management plan in place, it would prevent any degradation to Succor Brook. Council staff notes that the Petitioner's Natural Resource Assessment contains an Eastern Box Turtle Protection Plan and a final stormwater management plan is recommended for the D&M Plan.

Notwithstanding DEEP's recommendations, other State-listed species were considered in the Petitioner's Natural Resource Report. Specifically, the Bog Copper is a State-listed Species of Special Concern butterfly. However, no suitable habitat is present within the study area for this species. The Banded Sunfish is a small, stout-bodied sunfish that is a State-listed Species of Special Concern. Its potential habitat is the Succor Brook. However, no direct impact to stream habitat is proposed. The proposed stormwater management plan is expected to prevent degradation of water quality in Succor Brook. The Red-headed Woodpecker is a State-listed Endangered Species listed in the study area. However, its suitable habitat is located over 1,200 feet away. The New England Cottontail is not State-listed, but a candidate for federal listing. However, it is a highly mobile species and the minimal loss of sub-optimal habitat is not expected to be significant. Exclusion fencing would deter access to and the use of the construction zone. The Bald Eagle, a State-listed Threatened Species, has suitable habitat over ¼ mile away. Thus, there is no potential for secondary impacts.

The Petitioner submitted a Project Review Cover Form to the State Historic Preservation Office (SHPO). To date, a response from SHPO has not been received. A response is anticipated by approximately March 18, 2016. Staff recommends that the final SHPO determination be provided in the D&M Plan.

The proposed project is expected to meet the DEEP noise standards at the property boundaries.

There are approximately 10 homes located within a 1000-foot radius of the center of the project. The nearest off-site residence (i.e. Mather Property) is located approximately 750 feet southeast of the proposed project on the north side of Route 434.

Visibility of the project at residences located directly on the opposite (i.e. south) side of Route 434 is not expected to be significant due to the existing trees on the north side of Route 434 and existing SLFS buildings. Visibility at residences located west of the site (on Route 151) is also not expected to be significant due to existing buildings at the lumber yard and trees located west of the site. There is some potential for visibility from the Mather and Ventres properties located on the north side of Route 434 and possibly a few residential properties on the south side of Route 434, located southeast of the project. Accordingly, the Petitioner is proposing landscape plantings southeast of the project area to minimize the visual impacts from these areas. Staff recommends that the final details of the landscaping plan that mitigates any visual impact be submitted with the D&M Plan.

### **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.

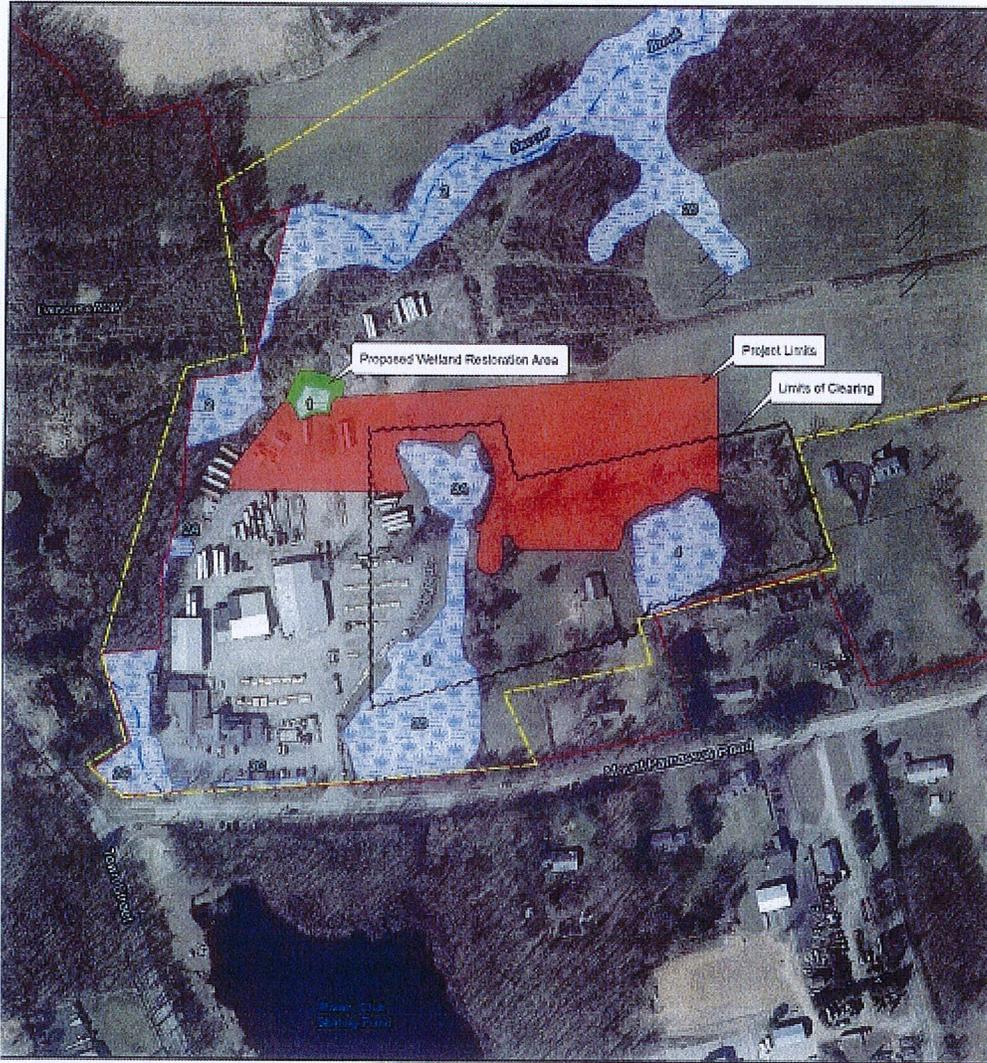
### **Recommendations**

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 Town of East Haddam 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) Vernal pool analysis;
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  - d) A stormwater management plan consistent with the *2004 Connecticut Stormwater Quality Manual*;
  - e) Landscaping plan that mitigates any visual impact; and
  - f) SHPO determination.



## Site Features Map



**FIGURE 3**  
**Site Features Map**  
**21 Mount Pamassus Road**  
**East Haddam, CT**

<b>Legend</b>	Property Boundary	Study Area Boundary
	Wetlands (wetland numbers indicated)	
<b>Project Area</b>	Limits of Clearing	
	Wetland Restoration Area	
	Limits of Construction	
<b>Map Description</b>	The location and extent of features illustrated are approximate only. This map is intended for illustrative purposes only. It contains no authoritative data.	

**SCALE**

0 125 250 Feet

N

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**DAVISON ENVIRONMENTAL**