

**PETITION OF WINDHAM SOLAR LLC
FOR A DECLARATORY RULING FOR THE CONSTRUCTION
AND OPERATION OF **ONE 1.0 MEGAWATT and ONE 0.99 MEGAWATT**
SOLAR PHOTOVOLTAIC RENEWABLE ENERGY GENERATING
FACILITIES LOCATED OFF BENZ STREET IN
ANSONIA, CONNECTICUT**

**FEBRUARY 21, 2020
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I. INTRODUCTION

Pursuant to Section 16-50k(a) and Section 4-176(a) of the Connecticut General Statutes (“CGS”) and Section 16-50j-38 *et seq.* of the Regulations of Connecticut State Agencies (“RCSA”), Windham Solar LLC (the “Petitioner”) requests that the Connecticut Siting Council (the “Council”) issue a declaratory ruling approving the construction and operation of the Petitioner’s three (3) – 1.0 megawatt (“MW”) solar electric generating facilities (the “Facilities”), located on residentially-zoned land on Benz Street, Ansonia, Connecticut (the “Site”) within the electric utility service territory of The United Illuminating Company (“UI”).

CGS § 16-50k(a) provides:

“Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling ... (B) the construction or location of ... any customer-side distributed resources project or facility ... with a capacity of not more than sixty-five megawatts, as long as such project meets the air and water quality standards of the Department of Energy and Environmental Protection ...”

Pursuant to CGS § 16-50k(a), the Council should approve the Facilities by declaratory ruling since they are customer-side distributed resources facilities under 65 MW in capacity that comply with the air and water quality standards of the Connecticut Department of Energy and Environmental Protection (“DEEP”). Further, 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.” As demonstrated from the information included in this petition, the Facilities will result in no air emissions, have minimal impacts that comply with DEEP’s air and water quality standards, and will have no substantial adverse environmental effects. The Facilities will further the State of Connecticut’s energy policy by developing renewable energy resources and distributed energy resources. The Facilities also further the State

of Connecticut’s goals announced in the 2018 Comprehensive Energy Strategy (the “CES”).¹ The Facilities will be an essential part of a clean energy future within UI territory.

II. PETITIONER

Windham Solar LLC (“Windham”) is a Connecticut limited liability company active in providing comprehensive solutions for the development, construction, and operation of solar facilities in the State of Connecticut. Windham is working with Ecos Energy, LLC (“Ecos”), based in Minneapolis, MN, on developing the Facilities. Both the Petitioner and Ecos have industry knowledge and experience to develop and implement the Facilities in a way that maximizes benefits to the citizens of Connecticut and ensures all relevant regulatory bodies are satisfied during the project life-cycle development.

Correspondence and communications regarding this petition should be addressed to:

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III. DESCRIPTION OF PROPOSED FACILITIES

The State of Connecticut has recognized the benefits of local renewable energy development and implemented renewable portfolio standard (“RPS”) to encourage the development of renewable energy resources. The Facilities will play an essential role in the State’s renewable energy goals. The Facilities will provide a source of clean, renewable energy that is locally produced. The Facilities will produce 100 percent clean, renewable electricity with zero

¹ https://www.ct.gov/deep/lib/deep/energy/ces/2018_comprehensive_energy_strategy.pdf

carbon dioxide (“CO2”) emissions. Most importantly, the Facilities will displace electricity produced by fossil fuels.

Site Selection

The Site was selected based upon several factors, including:

- Site Suitability
 - a. Solar resource
 - b. Soil characteristics
 - c. Topographic characteristics that allow for efficient facility design and construction,
- Proximity to electrical infrastructure and roadways—the Site has direct public road access and is adjacent to a UI, 3-phase electric utility distribution line,
- Local electrical demand.

A. Site Description

The Site’s main address is 31 Benz Street, Ansonia, CT. The Site is a 12.72-acre parcel that is zoned ‘A - Residential.’ The Site contains two structures, including a two-story house, an old shed, and a stone structure. No other structures exist on the Property. Those structures will be properly removed from the Site before construction begins. Approximately 9.39 acres of the Site appears to have evidence of prior land development activity and covered with dense forestry or large surface boulders. The remaining 3.33 acres of the Site consists of developed land, including the residential structure, an asphalt driveway about 250 linear feet from Benz Street, and a large open area of grass and landscaping. Approximately 0.40 acres of the Site on the North-West portion of the Site is a wetlands area. Topography on the site is fairly undulating with most of the site draining to the north to the delineated wetland. The remainder of the site drains to the south to

the Benz Street right of way. Most of the adjacent parcels of land to the North, East, and West of the Site are residential lots with occupants. An ALTA Survey shows a 15-foot wide section of land, with an approximate area of 0.36 acres, that runs along the Western side of the Site with a designation of the “Old Highway.”, this undeveloped area shall provide additional buffering of the project for the residents to the west of the facility. The ALTA Survey showing the Site’s general location, characteristics, and boundaries are on Sheet 2 of Exhibit A (Facilities Site Plan). Exhibit B (GIS Maps) shows an aerial view of the Site. Exhibit C (Key Observation Point Plan) contains photographs of the Site taken from ground level as well as cross-sections from key observation points.

B. Description of the Facilities

The Facilities are renewable energy generation facilities that will use polycrystalline solar PV modules to convert solar radiation to electricity. They are on the customer side of the UI meter. The project will have two separate facilities: a 1.0 MW (AC) Facility and a 0.99 MW (AC) Facility. Each Facility will consist of approximately 3,068 solar modules, based on a module rating of 430 Watts DC at Standard Test Conditions (“STC”). The direct current (“DC”) to alternating current (“AC”) ratio of the facilities will be approximately 1.24. The solar modules will be supported above the ground by a steel and aluminum fixed-tilt racking system. The modules will be oriented directly due south at a tilt angle of approximately 25-degrees. The solar modules will be installed on the racking system in a portrait orientation, with two rows of modules per rack. The racking system will support the modules to maintain a ground clearance of at least 36-inches. The racking system foundations will be a series of ground screws that are designed for installation on sites with rocky subsurface conditions, this installation method requires no concrete foundations. The length and size of the ground screw undergoes engineering assessment following a geotechnical and

structural analysis; an embedment depth of 4 to 5 feet is typical. A cross section of the racking is shown on Sheet 3 of Exhibit A. The solar modules will be installed in a series of strings consisting of 26± modules per string. Approximately 12-20 Strings will be connected to each inverter mounted in key locations through-out the Site or at a central location depending on the final electrical design. The array along with the stormwater facility associated with this work will be located a minimum of 50-feet from the property line

The inverters alter the 1500V DC power output of the solar modules to somewhere between 600V and 800V three-phase AC power output depending on the final inverter selection. The array along with the stormwater facility associated with this work will be located a minimum of 50-feet from the property line

The power output from the inverters will feed into a main switchgear unit, combining each Facility into a single 3-phase electrical output. The collected three-phase AC power output is then input to a step-up transformer to increase the output voltage to 23kV (or other voltage, as determined by UI) for interconnection to the UI electric distribution system. The power output from the transformer will route via underground cabling to a pad or pole mounted fused AC disconnect switch for each facility. From the disconnect switch the three-phase utility voltage will be routed to a pole mounted utility meter for each of the facilities revenue generation. From the meter the facilities three-phase voltage will be routed to a pole mounted recloser, which will provide automated overcurrent protection for the facilities and to the UI electric distribution/transmission system.

Each facility will contain a centralized equipment pad area that shall include inverters (if centrally located), transformer, additional revenue metering, disconnect switches, a suite of monitoring, communications and video security equipment. Conceptual details of the electrical

equipment throughout the site and equipment pads have been provided as Exhibit J (Electrical Equipment Information).

The centralized equipment pads for each project will be accessible by a 14-foot wide gravel driveway and hammerhead turn-around for operations, maintenance, and emergency vehicle access. The entirety of the project footprint will have a 7-foot tall chain-link security fence surrounding it, with an interior perimeter clear space for site accessibility and maintenance around the facility. Access to the Site will be via a padlocked gate in the perimeter fence at the location of the main access driveway from Benz Street, which follows the original asphalt driveway entrance. Access to the facility will be provided to local emergency services. A series of motion-sensitive video security cameras will be installed around and within the perimeter fence for site monitoring and security. No night-time lighting of any kind is proposed for the Facilities. After construction, the ground area within the Facilities' footprint will be hydro-seeded with a botanist-reviewed seed mix that offers low/slow-growing groundcover vegetation that is drought-tolerant and native to the area. A series of arborvitae type trees and natural vegetation will be planted around the Site perimeter to create a visual barrier from neighboring properties and vehicles traveling along Benz Street. The Facilities' footprint area will encompass approximately 11.5 acres of the Site, all within the Facilities' perimeter fence line. All elements of Facilities' design, construction, operation, and maintenance will be performed in accordance with all applicable local, state, and national rules, guidelines, and regulations. The particulars of each Facility's footprint design and equipment locations are detailed in Exhibit A.

C. Interconnection

Each Facility is proposed for interconnection to the UI electric distribution grid at an existing 23 kV overhead electric line located along Benz Street. The interconnection would be in

accordance with UI technical standards and State of Connecticut, ISO-New England (“ISO-NE”), and the Federal Energy Regulatory Commission (“FERC”) requirements. The point of interconnection (“POI”) will consist of installing UI-specified metering and circuit protection (breakers/switches/relays) equipment for each Facility. The POI is designed and constructed according to UI’s Guidelines for Generator Interconnection. UI has performed a system impact study for the Facilities and found that the Facilities cannot be connected safely and reliably with no significant upgrades. The Petitioner is awaiting the issuance of the Facilities Study which was due on October 31, 2019 and plans to execute an Interconnection Agreement (“IA”) with UI for each Facility shortly thereafter.

D. Service Life and Capacity Factor

Each Facility’s equipment has an expected useful life of approximately 45 years, and the Petitioner will plan to operate each Facility until the equipment has exhausted its useful life. According to the 2012 Integrated Resources Plan for Connecticut, fixed-tilt PV solar has an expected capacity factor of approximately 13 percent.

IV. FACILITIES’ BENEFITS

Projects that are “necessary for the reliability of the electric power supply of the state or for a competitive [electric market]” present a clear public benefit. Conn. Gen. Stat. § 16-50p(c)(1). Each Facility provides the benefits contemplated in the statute and more, as it will generate much of its power during the typical high demand hours for electricity. By providing electricity when there is high demand, each Facility will help stabilize the electrical grid by effectively operating as if it were a Commercial & Industrial business enrolled in a demand response program; enabling a benefit for both the electric utility and their customers by providing enhanced electric load management to the transmission/distribution grid that is at risk of brown-outs and black-outs.

Additionally, there exists a clear public need for renewable projects and undertaking them supports the State's energy policies as codified in Conn. Gen. Stat. § 16a-35k, expressing the legislature's goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent."

In the April 10, 2019 edition of the Boston Globe, Bill McKibben, the Schumann Distinguished Scholar at Middlebury College, wrote:

The basic stability of our planet has been upended in our lifetimes. Unless we act quickly, the changes we've seen so far will be mild by comparison with what comes next. Science makes clear that without an emergency transition away from coal and gas and oil, we can expect such rapid shifts that our ability to maintain civilizations will be in doubt... Unless we goose the pace with government action, the world that we someday power with clean energy would be a dirty world, a broken planet.²

Last fall, the U.S. Administration released the complete *Fourth National Climate Assessment* (the "Climate Report").³ The Climate Report assesses the current and increasing adverse impacts from the continued use of fossil fuels on the public health, safety and welfare of the United States, its citizens and residents, and individual areas of the United States:

Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities. The impacts of global climate change are already being felt in the United States and are projected to intensify in the future—but the severity of future impacts will depend largely on actions taken to reduce greenhouse gas emissions.

Climate Report, Vol. II, Overview at 2.

The *Climate Report* provides overwhelming evidence proving that the continued use of fossil fuels endangers the public health, safety and welfare of Connecticut and the Northeastern

²<https://www.bostonglobe.com/opinion/2019/04/10/the-clock-keeps-ticking-fight-save-planet/R8ZrHbh2yFqA8bNXe6wdjJ/story.html>.

³ See, <https://nca2018.globalchange.gov/>, USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA. doi:10.7930/NCA4.2018.

United States:

Changing climate threatens the health and well-being of people in the Northeast through more extreme weather, warmer temperatures, degradation of air and water quality, and sea level rise. These environmental changes are expected to lead to health-related impacts and costs, including additional deaths, emergency room visits and hospitalizations, and a lower quality of life. Health impacts are expected to vary by location, age, current health, and other characteristics of individuals and communities.

Climate Report, Vol. II, Ch. 18, at 117.

As the preeminent climatologist, Dr. James Hansen, has warned, “Failure to act with all deliberate speed in the face of the clear scientific evidence of the long term dangers posed is the functional equivalent of a decision to eliminate the option of later generations and their legislatures to preserve a habitable climate system.”⁴ Allowing excessive carbon dioxide emissions to imperil the climate system jeopardizes the fundamental rights of all and of future generations. If fossil fuel emissions are not rapidly abated, then our children, grand-children and future generations will confront an inhospitable future.

Solar facilities are considered Class I renewable energy sources under General Statutes § 16-1(a)(26). Over the life of each Facility, they will contribute to a significant reduction in emissions, such as NO_x, SO_x, PM, CO₂, and VOC emissions as compared to other electric generating facilities that produce greenhouse gases as a by-product. These figures are further outlined *infra*. Additionally, each Facility will deliver its generated power ‘locally’ by injecting that power into a distribution-level electric circuit for use by nearby homes and businesses. A local electric generating facility decreases the amount of power that will need to be brought into the area from further away, providing relief to the utility transmission infrastructure and increasing local grid reliability and transmission efficiency due to an increase in power quality.

⁴James E. Hansen et al., *Scientific Case for Avoiding Dangerous Climate Change to Protect Young People and Nature*, NASA (Jul. 9, 2012), available at <http://pubs.giss.nasa.gov/abs/ha08510t.html>.

Each Facility will also help the State move closer to meeting its renewable portfolio standards. Concerning labor, the Company fully intends to employ local labor in completing each facility wherever practical. As part of a broader state, federal, and global strategies, reductions in greenhouse gas emissions and project life-cycle carbon footprint reduction from each facility will have long-term positive secondary biological, social, and economic benefits.

V. LOCAL INPUT & NOTICE

Exhibit A (Facilities Site Plan) submitted with this application will also be submitted to the Town of Ansonia Engineer, Fred D'Amico, for review and comments. The plans will be circulated internally among town departments for comments, as well. Any comments received from the Town of Ansonia's review will be forwarded to the CT Siting Council.

In addition to contacting the Town directly, the Petitioner will provide notice of this petition to all persons and appropriate municipal officials and government agencies to whom notice is required pursuant to CGS § 16-50j-40(a). For details, reference Exhibit D (Notice Service List).

VI. POTENTIAL ENVIRONMENTAL EFFECTS

The Petitioner has evaluated the Site and taken inventory of the existing resources onsite. Phases I & II of an Environmental Site Assessment ("ESA") have been performed, and no existing environmental issues were found at the site. For details on both ESA Phases, see Exhibit E (Phases I & II Environmental Site Assessment).

The proposed solar Facilities have been designed to minimize significant changes to the site and maintain ecological and other protected resources.

A. Natural Environment and Ecological Balance.

The Site selected for the Facilities' footprint is not within an area containing any sensitive, rare, or protected natural resources. Approximately 12 acres of the site will be cleared of tree/timber vegetation for the facilities' construction. The clearing limits can be found on Sheet 7 of Exhibit A. No clearing is proposed within the wetland area. During the clearing operation the existing residential structures on site and the fill material identified in the Phase 2 ESA will be removed and disposed of at the appropriate waste and recycling facilities.

Minimal grading will be required for each Facility, as the solar racking equipment is designed to follow the existing elevations of the Site's topography, therefore no major earthwork will occur in the array field. Approximately 2 acres of grading will be performed on the site to create stormwater conveyance swales the stormwater sediment and water quality basins. Additional grading will occur for the re-construction of the access driveway and transformer equipment pads.

B. Public Health and Safety

Overall, each Facility will meet or exceed all health and safety requirements applicable to electric power generating facilities. During construction, each employee working onsite will:

- 1) Receive required general and site-specific health and safety training.
- 2) Comply with all health and safety controls as directed by local and state requirements.
 - i. Understand and employ the site health and safety plan while on the job site.
- 3) Know the location of local emergency care facilities, travel times, ingress, and egress routes.
- 4) Report all unsafe conditions to the construction managers.

During construction, heavy equipment, delivery trucks, and water trucks for dust suppression will be required to access the Site during typical weekday working hours. It is anticipated that during the peak periods of construction activity, approximately 10 to 15 construction vehicles will make daily trips to and from the Site during the approximate five-month construction period. During construction of the Facilities, noise may be audible offsite so that all work will be conducted during regular weekday working hours, and measures will be set in place to mitigate construction noise levels below state and local noise limit standards. During construction operations, the Facilities will not present a health or safety hazard to anyone located onsite or offsite. The Facilities will generate no offsite noises, harmful glare, vibrations, or dangerous emissions of any kind. Solar PV is a long-proven solid-state, safe and benign technology for generating electricity. Authorized personnel visiting the Facilities during operation will be fully licensed and adequately trained on how to navigate a solar facility safely and how to quickly respond in the event of an emergency. Once operational, the Petitioner will work with local fire and law enforcement officials to ensure they have the appropriate knowledge and access to provide their services to the Facilities if necessary.

C. Air Quality

Overall, the Facilities will have minor air emissions of regulated air pollutants and greenhouse gases during construction, and no air permit will be required. During construction, any air emission effects will be temporary and will be controlled by enacting appropriate mitigation measures (e.g. water for dust control, avoiding mass early morning vehicle startups, etc.). Accordingly, any potential air effects as a result of the Facilities' construction activities will be negligible. During operation, the Facilities will not produce air emissions of regulated air

pollutants or greenhouse gases (i.e. PM10, PM2.5, VOCs, GHG, or Ozone). Thus, no air permit will be required.

Additionally, over the expected 45-year lifespan, the Facilities will result in the offset/elimination of approximately 156,229 tons^[1] of CO₂ equivalent, which is equal to 33,029 passenger vehicles off the road^[2] or 45,597 tons of avoided landfill waste^[3]. The Facilities will have a net beneficial effect on air quality. It's estimated that 11.69 acres of trees will be removed from the site during construction. The carbon debt payback period for the removal of these trees, based on the EPA estimate of 1.22 metric tons of carbon dioxide sequestered by one acre of average U.S. forest in one year, would be approximately 1.5 days. In other words, the solar generating facilities would off-set the same amount of CO₂ sequestered by the 11.69 acres of trees being removed, within the first two days of operation.

¹ CO₂ off-set calculations were made using the US Environmental Protection Agency ("EPA") GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

² Passenger Vehicle off-set calculations were made using the EPA GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

³ Avoided landfill calculations were made using the EPA GHG Equivalencies Calculator: <https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references>

D. Scenic Values and Visual Renderings

The Facilities will be minimally visible from neighboring property owners as well as viewsheds from Benz Street. There is a minimum of 50-feet between the array and all of its appurtenances, to the property line. Residential homes west of the Facilities are separated from the property by an existing 15' right of way parcel as illustrated in the ALTA survey on Sheet 2 of Exhibit A. The residences west of the Facilities are approximately 150 feet or greater from the nearest solar module. Residential homes east of the Facilities are separated from the nearest solar module by approximately 100 feet or greater, as dimensioned on Sheet 3 of Exhibit A.

To soften visual impacts from abutters and Benz Street a proposed arborvitae tree hedge is to be installed along the Facilities' fence line as detailed on Sheet 7 of Exhibit A. The proposed plantings along the Facilities' boundary will remain throughout the life of the project and will aid in screening the Facilities from the abutting residences. The solar modules on the racking has a low profile rising less than 9 feet above the grade of the site. The solar equipment at each Facilities equipment pad location is less than 7 feet in height. The tallest element of the Facilities will be poles for video cameras and meteorological equipment, which are installed at 12-14' feet in height at each equipment pad. The proposed screening hedge is expected to grow to 30 feet or greater in maturity, significantly higher than the Facilities infrastructure. The Facilities will have a minimum setback distance of 50-feet from Benz Street and the arborvitae screening hedge will also shield views from passing motorists.

There are no protected or designated scenic areas, roadways, or trails at any vantage point within the Site boundaries. Given these details, and the proposed screening infrastructure the Facilities will not have a significant adverse effect on the scenic values of the area. Current photographs of the Site, along with visual cross-sections of the Facilities, can be found in Exhibit C.

E. Historic Values

The Petitioner has requested a review of the Facilities and site by the Connecticut State Historic Preservation Office ("SHPO"). On February 7th, 2019 the petitioner received a response attached as Exhibit H. Based on the Site and Facilities information provided to SHPO, a decision has been made, stating "...no historic properties will be affected by the construction of the Facility."

F. Wildlife & Habitat

The Facilities have been designed to avoid any impacts to sensitive plant or wildlife species or the associated habitats. The site was investigated for wetlands features and a seasonally flooded, forested wetland was located along the west property boundary and extends off-site. The wetland hydrology appears to be driven primarily by groundwater discharge/seeps originating from extremely stony uplands adjacent to the wetland. Full details of the delineation can be found in Exhibit F (Wetlands Report). The wetland delineation and a 50' upland buffer setback is represented on all pertinent plan sheets in Exhibit A. The Facilities solar footprint was designed to avoid the delineated wetlands features entirely, and the 50-foot buffer around them. A stormwater management basin will be installed partially within the 50-buffer and will ultimately create additional habitat adjacent to the wetland for wildlife. Appropriate erosion control measures will also be installed to protect the wetland habitat during construction.

The Petitioner submitted a request to DEEP for NDDDB for review of the Property and the Facilities' footprint. DEEP responded on January 24th, 2019, attached as Exhibit G (Determination Letter). The NDDDB review stated, "I do not anticipate negative impacts on State-listed species (RSA Sec. 26-306) resulting from your proposed activity at the site." DEEP recommends conducting on-site surveys required for environmental assessments as a means to enhance existing data within their database. Due to the previous and relatively cleared nature of the Site, an in-depth field survey for species and habitat was not performed. Additional surveys that identify any potential additional populations of species and locations of habitats of concern will be addressed to comply with the standards and requirements set by DEEP.

G. Water Resources and Storm Water Management.

The Facilities will not adversely impact surrounding water resources. The sites current grading design conceptually implements the state of Connecticut's 2002 CT Guidelines for Erosion and Sedimentation Control as well as the permeant stormwater treatment requirements outlined by the 2004 CT Stormwater Quality Manual to ensure adequate areas are available for stormwater control measures.

Most of the site where the solar racking and modules will be installed will remain unaltered from a grading standpoint. Due to the rocky nature of the site, ground screws will be the likely solar racking foundation design. Ground screws can penetrate almost any surface without major ground disturbances during the racking foundation installation. Existing topography of the site is gradual enough for the racking to follow the existing grade without any major site grading. During construction, the contractor will follow the requirements to maintain site stabilization per the requirements of the General Permit, and upon completion of construction, the site will be seeded in all areas with groundcover as illustrated on Sheet 7 of Exhibit A. The solar racking provides adequate height above the ground to promote vegetative growth underneath the solar array and allow for natural overland drainage and infiltration to continue to occur on site. Stormwater runoff from the solar array field will be directed into sediment traps via graded perimeter conveyance swales. The sediment traps will be maintained throughout construction and will ultimately remain as permeant Stormwater management system for post-construction runoff.

The Petitioner will register the Facilities final stormwater design and SWPCP under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities at least sixty (60) days before commencing any construction activities. The Petitioner intends to request coverage under the existing Connecticut General

Permit, DEP-PED-GP-015, by submitting a complete and accurate General Permit Registration Form and Transmittal before construction activities and following applicable rules at the time of filing. This information will also be submitted to the CSC at the time of submitting a development and management plan for approval prior to construction.

VII. ADDITIONAL INFORMATION

The Council has previously reviewed petitions for other solar facilities similar to the ones being proposed by the Petitioner. In these other dockets, the Council has sent out interrogatory requests with multiple questions about each facility. This section will attempt to pre-emptively answer some of those questions that were not addressed in previous sections of this petition.

Q01. How did the Petitioner become aware of the Site?

A01. The Site was actively being listed for sale at the time that the Petitioner was searching for an acceptable location for the Facilities.

Q02. Did the Petitioner investigate any other properties as potential locations for the Facilities? If so, identify these properties.

A02. The Petitioner investigated a large number of properties that were listed for sale. The Site was selected based upon favorable characteristics.

Q03. Has the Petitioner conducted a shading analysis of the Site? If so, provide the results.

A03. No, a shading analysis was not performed but the array was set back from the clearing limits to minimize major shading of the array for preliminary project modeling.

Q04. What is the efficiency of the photovoltaic module technology that would be employed by the Petitioner at the proposed project? Does this efficiency decrease over time?

A04. The efficiency will be in the range of 16 to 19 percent, depending on the manufacturer and model of solar module selected for construction. The efficiency does decrease over time, at a predicted average rate of 0.5% per year.

Q05. Would the angles of the Facilities' solar modules be adjusted during the year to maintain optimal alignment with the sun's changing path?

A05. No. The solar modules will be installed on a fixed-tilt racking system at 25°.

Q06. Approximately what percentage of the proposed project's maximum possible output would occur during those times of the year when Connecticut normally experiences its peak demand for electricity?

A06. Energize Connecticut (www.energizect.com) defines the peak electricity demand in Connecticut as occurring weekdays between noon and 8 pm, during the summer months of June through September. The Facilities will create approximately 14% of their total annual output during this timeframe.

Q07. Does the Petitioner have contracts to sell the electricity it expects to generate with the proposed Facilities?

A07. A contract for the sale of the renewable energy credits with UI has been executed for two of the Facilities. No other contracts have been executed as of now for the sale of renewable energy credits or electricity.

Q08. Are the Facilities located near any Important Bird Areas designated by the Connecticut Audubon Society?

A08. No.

Q09. What would be the construction timeline of the Facilities from groundbreaking to full operation?

A09. Approximately 5 months.

Q10. Describe how the project would be decommissioned at the end of its useful life.

A10. A decommissioning memo is included as Exhibit I.

Q11. Describe the land use within a 0.5-mile radius of the Site.

A11. Low density developed residential lots as well as undeveloped forestry area.

VIII. CONCLUSION

The Facilities will provide numerous and significant benefits to the Town of Ansonia, the State of Connecticut and its citizens while producing significant environmental benefits with minimal undesired environmental impact. Pursuant to CGS § 16-50k(a), the Siting Council shall approve by declaratory ruling the construction or location of customer-side distributed resources project or facility with a capacity of not more than sixty-five (65) MW, as long as such project meets DEEP air and water quality standards. As shown in the attached exhibits and correspondences with regulatory officials, the Facilities meet these criteria. Each Facility is a “customer-side distributed resources facility” and a “grid-side distributed resources” facility, as defined in CGS § 16-1(a)(40), because the facilities involve “the generation of electricity from a unit with a rating of not more than sixty-five megawatts on the premises of a retail end-user within the transmission and distribution system including, but not limited to . . . photovoltaic systems and, as demonstrated herein, each Facility will meet DEEP air and water quality standards. The Facilities will not produce air emissions, will not utilize water to produce electricity, were designed to minimize wetland impacts, will employ a stormwater management plan that will result in no net

increase in runoff to any surrounding properties, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources ("DER"). Additionally, as demonstrated above, the Facilities will not have an adverse environmental impact in the State of Connecticut.

Accordingly, the Petitioner respectfully requests that the Siting Council approve the location, construction, and operation of the Facilities by the declaratory ruling.

Respectfully Submitted,
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