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July 29, 2024

Via Electronic Mail

Ms. Danielle Chesebrough, First Selectman
Town of Stonington
152 Elm St.
Stonington, CT 06379

Mr. Fred Allyn, III, Mayor
Town of Ledyard
741 Colonel Ledyard Highway
Ledyard, CT 06339-1511

Re: Proposed Greenskies Clean Energy Solar Project

Dear Ms. Chesebrough and Mr. Carlson:

I am writing to you as a representative of Greenskies Clean Energy. As you may be aware, Greenskies Clean Energy is seeking to develop a solar photovoltaic project near Lantern Hill Road, Stonington, Connecticut. As part of that process, Greenskies Clean Energy will be applying for a Certificate of Environmental Compatibility and Public Need for this project with the Connecticut Siting Council.

Pursuant to Conn. Gen. Stat. § 16-50l(e), the Towns in which the project are to be located shall be provided with copies of the draft application prior to the application being filed with the Siting Council. While the project will provide each Town with a hard copy set of the draft application later today, we thought that given the current remote working situation of many individuals, an electronic version might be more useful to you.

To that end, we are providing you with a share-file link where you can access the draft of the application and the accompanying site plans. That information can be accessed at: <https://vhb-my.sharepoint.com/:f/p/skochis/EiFjqL-wVoJltrvuSnwrGaAB0NqP1dVDstDHdBME4CTJmg?e=JQ4eoA> This link will remain active for twenty-one (21) days. Please be aware that the application itself consists of over 500 pages. In addition, as this version of the application is a draft, it will be subject to change as more information becomes available to the project.

As I am sure you are both well aware, pursuant to the applicable statutes, each Town has up to sixty (60) days to review this information and provide comments back to Greenskies Clean Energy. Obviously, if we can be of assistance to speed that process along, we would be most willing to do so. Should you have any questions or comments concerning the project or if you wish to meet with us in person, please feel free to contact me at the number above.

Thank you in advance for your consideration of this project. We look forward to completing this renewable energy project and working with the Towns of Stonington and North Stonington to do so.

Kind regards,

Dennis Hicks

Project Developer
Greenskies Clean Energy

Enclosure

cc: Lee Hoffman
Steve Kochis
Jean-Paul LaMarche

**Application by Greenskies Clean Energy LLC for a
Certificate of Environmental Compatibility and Public
Need, Pursuant to Connecticut General Statutes § 4-176
and § 16-50k, for the Proposed Construction, Operation
and Maintenance of a 4.99 MW AC Ground-mounted
Solar Photovoltaic Electric Facility Located at Lantern
Hill Road, Stonington, Connecticut**

**Prepared for
The Connecticut Siting Council**

DRAFT

July 29, 2024

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1. Introduction

This is an Application for a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the development, construction, operation and maintenance of a proposed solar photovoltaic Project (the “Project”) proposed by Greenskies Clean Energy LLC (“GCE” or “Applicant”) in the Town of Stonington, Connecticut. The Project consists of the development of a 4.999-megawatt (“MW”) alternating current (“AC”) ground-mounted solar photovoltaic (“PV”) system (“Facility”) located on Lantern Hill Road, Stonington CT 06355 (“Property” or “Project Site”). See Figure 1 – Site Location Map and Figure 2 – Proposed Project Areas Aerial.

GCE has been working to develop this Project since 2021. In April 2023, GCE was awarded funding for the 4.999 MW solar array through the Shared Clean Energy Facility (“SCEF”) program, which has been designated #SCEF 4-8725. The generation from renewable energy resources such as this proposal and diversification of the State’s renewable energy portfolio are important goals the State of Connecticut has pursued with the SCEF program. The Tariff Terms Agreement Approval Date or In-Service Date for this portion of the Project is June 7, 2026.

Authorization by the Connecticut Siting Council (“Council”) via approval of this Application would allow Applicant to construct the Project and assist the State of Connecticut in achieving its goal of energy conservation and sustainability. Pending approvals, the Project will commence financing, detailed engineering, procurement, and construction efforts in 2025, with commercial operation planned for the entire Project in 2026.

The Project would be wholly located within the Town of Stonington, within the Greenbelt Residential Zone GBR-130 zoning district. More specifically the Project is comprised of approximately 28 acres on a 72.34-acre parcel in Stonington. See Figure 3 – Zoning Map. The Stonington parcel is listed by the Town of Stonington’s Assessor’s Office as ID 8351.

The parcel is currently owned by The Lantern Hill Farm Inc. See Figure 4 – Tax Parcel Map and Figure 5 – Site Survey.

1.A Authority and Purpose

Pursuant to Conn. Gen. Stat. §§ 4-176(a) and 16-50k and Regs. Conn. State Agencies § 16-50j-38 *et seq.*, Applicant hereby submits this Application for a Certificate of Environmental Compatibility and Public Need for the proposed construction, operation and maintenance of the Applicant’s proposed installation and development of a 4.999-megawatt (“MW”) alternating current (“AC”) ground-mounted solar photovoltaic (“PV”) system located at Lantern Hill Road, Stonington, Connecticut.

Conn. Gen. Stat § 16-50k(a) states, in relevant part:

Except as provided in subsection (b) of section 16-50z, no person shall exercise any right of eminent domain in contemplation of, commence the preparation of the site for, commence the construction or supplying of a facility, or commence any modification of a facility, that may, as determined by the council, have a substantial adverse environmental effect in the state without having first obtained a certificate of environmental compatibility and public need, hereinafter referred to as a “certificate”, issued with respect to such facility or modification by the council. Any facility with respect to which a certificate is required shall thereafter be built, maintained and operated in conformity with such certificate and any terms, limitations or conditions contained therein. 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 (A) the construction of a facility solely for the purpose of generating electricity, (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect, or 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, and (C) the siting of temporary generation solicited by the Public Utilities Regulatory Authority pursuant to section 16-19ss.

Conn. Gen. Stat § 16-50k(a). In accordance with this provision, GCE respectfully requests that the Council issue this Project a Certificate.

2. Legal Name, Background and Address of Applicant

GCE is a limited liability company with offices at 127 Washington Ave, North Haven, CT 06473. GCE is a fully integrated development platform that develops, finances, designs, constructs, owns, operates, and maintains clean, renewable-energy Projects throughout the United States. In conjunction with its affiliate, Clean Focus Yield, GCE offers integrated solar and battery-storage solutions to commercial and industrial (“C&I”), municipal, and utility customers. From beginning to end – origination through construction and then lifetime operation – customers work with a single delivery team. GCE focuses on delivering clean energy, peak performance, and maximum energy savings. Since 2009, GCE and other affiliates of Greenskies have constructed and are operating over 315 MW of renewable energy facilities across 600 sites in 19 states. The power generated by the portfolio is sold under long-term contracts that are typically 20 years, and the majority of the buyers have investment-grade credit ratings.

GCE has developed, owns and operates other large-scale ground-mount Projects in Connecticut, including but not limited to, a 16.78 MW AC facility in Waterford, a 5 MW AC facility in North Haven, a 5 MW AC facility in Stonington, a 5 MW AC facility in East Lyme, a 5 MW AC facility in North Stonington, and a < 1 MW AC system at the East Haven Landfill. As the Council is aware, GCE has other Projects under construction in Connecticut. GCE’s commercial clients include Target Corporation, Walmart, Inc., and Amazon.com, Inc., and our Projects with them represent 136 MW across 276 sites in 16

states. According to the Solar Energy Industry Association, Target, Walmart, and Amazon are in the top six solar users at US-based facilities as of 2021. GCE is the partner of choice for large corporations and owners of real estate seeking to take a company- or portfolio-wide approach to solar energy adoption, and GCE is consistently ranked as one of the top solar developers in the United States.

As a vertically-integrated company, GCE manages every step of the solar development and implementation process. From Project origination to design and engineering to construction and, ultimately, operation and maintenance, GCE brings years of industry knowledge and expertise at every level. Moreover, with hands-on management of on-site performance and sophisticated reporting processes in place, both during construction and operation and maintenance, the company is able to ensure safety, quality control and optimal electrical generation throughout the life of each Project.

Correspondence and communications regarding this Application should be addressed to both of the following individuals:

Dennis Hicks
Project Developer
Greenskies Clean Energy LLC
127 Washington Ave
West Building, Garden Level
North Haven, CT 06473
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Pullman & Comley, LLC
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¹ See, <https://www.seia.org/news/solarmeansbusiness2022>

3. Project Description

3.A Site Selection

The Project Site was selected by GCE because it is suitable for a solar PV Project and would have minimal natural resource and environmental impacts. The Project as designed will not have adverse effects on quality forested areas, agricultural land, or the designated wetlands, and the Project will not diminish the quality of life of those who live in the vicinity. It was also important to GCE to select a site that allows interconnection of the generation facility to a feeder and substation of the utility company that is compatible with its grid and goal of better serving customers. The proposed Project Site allows for interconnection to the Eversource distribution grid at a cost that is viable and avoids negative impacts to the electrical grid. Every attempt is made to minimize adverse effects of development on the land.

GCE conducted an extensive search of both public and private land, resulting in the selection of the Property. GCE uses third party consultants combined with site visits, thorough internal analysis and minimal impact requirements, and review of public data for environmental classifications/hazards to understand the biological, environmental, historical, and archeological impacts of solar development on selected sites. While all development has an impact on the area and community, the social and environmental impacts of this Project are a net positive.

3.B Project Description

The current PV array on the site plan has a nameplate capacity of 4.999 MW AC and is designed with 443 strings of 26 modules, for a total of 11,518 modules with 12.5ft aisle width between rows (“Project Area”). There would be 40 125kW inverters that are to be centralized within the array and mounted to or adjacent to the equipment pads. The DC capacity is 6.220 MW. The DC to AC ratio is designed as 1.24. The power from the inverters would be directed to a transformer, meter, disconnects and switchgear prior to

interconnecting with utility distribution feeder. The power will interconnect to the pole on Lantern Hill Road next to the site's access road as shown on the electrical plans.

Applicant proposes a 7-foot high Agricultural Style fence to be installed around the perimeter of the solar array field to provide site security, as well as to address National Electric Code requirements. The perimeter fencing would extend around the array. There would be access gates, with locking hardware, proposed along the perimeter for access to the array and permanent stormwater basins. See Appendix A – Sheet C-2.0- Layout and Materials Plan.

Historically the site of the proposed solar project was used to grow vegetables by Julia and Aldo Gasparino. In 1953 the land was purchased by Robert and Shirley Falk. The land was then converted over to a dairy farm and later had a bottling plant constructed on site. In 1968 the livestock and equipment were sold off, but ownership of the land was retained and leased to neighboring farmers for growing feed corn. In 1996 the land was transferred to Robert's daughter, Noreen Falk Wienges. The remaining family members were not interested in continuing farming operations and the agricultural lease payments became inadequate to sustain the ownership of the property so alternative sources of income were sought. GCE and Noreen have been working together since 2016 to obtain approval of this proposal.

GCE has explored opportunities to continue and expand farming activities on this Property. In order to gain the endorsement of the Department of Agriculture, GCE had to submit to requirements that were overly burdensome and more administrative, rather than substantively agricultural. Thus, GCE opted to not obtain the Department of Agriculture's approval for this Application. GCE is willing to work with a farmer to ensure that the soils are protected, used for agricultural purposes during the solar Project operations, and that the land is preserved for future agriculture use once the Project is decommissioned. While GCE does anticipate a reduction in potential acreage used for agricultural uses, the Project, as proposed would result in greater agricultural use as well as improvement of soil health.

According to the Town of Stonington's Zoning Map, the principal use of the Property is in the Greenbelt Residential Zone GBR-130 zoning district. Access to the Property will be through the access road attached to Lantern Hill Road. All construction, maintenance, and all other activities related to the Project Area will use the access road. Greenskies has taken every precaution and designed the Project to have as minimal impact as possible. The zone allows for a variety of uses including the keeping of livestock. Additionally, by special permit, uses such as the bottling of agricultural products, wineries, lumbering and lumber mills, Private and Public elementary schools, and golf courses are allowed. Solar and Energy Conservation equipment is allowed in the area as an accessory use within the GBR-130 Zone. Applicant believes that the proposed Project falls within the intensity of the uses allowed with a special permit in the Greenbelt Residential GBR-130 Zone of Stonington.

This Project is five and three quarters miles Northeast of the Town of Stonington, and four miles North of the center of the village of Mystic. The Project Area is bounded by Lantern Hill Road to the east, Water company land to the Northeast, neighboring agricultural fields to the South and Whitford Brook along the North and Northwest. Whitford Brook is also the border between Stonington and Ledyard. The surrounding land uses are primarily rural agricultural land, rural residential land, or undeveloped open space. To the south is the Stonington Gardens Gardening Center, and a small neighborhood on the opposite side of Lantern Hill Road. Shewville Rd in Ledyard is on the opposite side of Whitford Brook and also has mixed rural agriculture and residential uses. Further South Lantern Hill Rd and Shewville Rd both intersect Rt-184 New London Turnpike, which has more intensive uses with various auto repair and sales shops, restaurants, and a Department of Transportation facility.

The primary access point to the Project will be a constructed gravel road off of the existing gravel road that is used by the Water Company to access their land. The gravel road then connects to Lantern Hill Rd. Applicant would construct 5,100 linear feet of internal gravel roadway for accessing the proposed solar array, electrical equipment, and stormwater detention basins. Applicant proposes the construction of the roadway on prepared

subgrades with a gravel topping which would match existing grades to the greatest extent feasible. See Figure 6 – Proposed Project Layout and Appendix A – Sheet C-2.0 Layout and Materials Plan – Overall.

3.C Interconnection

The interconnection application for the solar array was submitted to Eversource Energy on June 27, 2023. The proposed Project is proposed to interconnect with the Mystic 13K Substation via the 13.8kV 13K1 feeder. The point of interconnection will be at a pole on the same side of the street as the access road on the southeastern side of the parcel along Lantern Hill Road. Eversource is in the process of completing a transmission cluster study that is expected to be completed by Q2 or Q3 of 2025.

The Applicant is aware that the electrical plans are not consistent with the site civil plans at the time of this Application submission. The electrical plans (Appendix B) are still being finalized between GCE and the utility provider (Eversource Energy), and it is the intent of the Applicant that the electrical layout shown on the site civil plans (Appendix A) should be considered to be the most current electrical layout at this time. The Applicant intends to provide the Council with updated electrical plans as appropriate once the ongoing consultation with the utility provider is completed.

3.D Operations and Management

GCE has a dedicated O&M team that currently monitors and maintains all operational assets in the GCE portfolio. This team would manage the efficient operation of the Project after it is turned on and the construction is complete. A team of individuals including system analysts and field operators would monitor the system 24 hours a day, 7 days a week. The operation center utilizes Also Energy's platform for site monitoring and generation reporting, along with a custom-built in-house platform designed for improved site analytics. Custom alarm management provides instantaneous notifications. System performance analytics would be completed weekly to better understand the health of each

asset and find trends in under producing systems. See Appendix C – Operations & Maintenance Plan.

4. Project Benefits

The Project is anticipated to provide multiple benefits to the Town of Stonington, the State of Connecticut, and the rest of New England. As the Council is aware, the State of Connecticut aims to meet specific clean energy goals that this Project helps support. Solar Projects supply renewable energy that helps reduce greenhouse gas emissions, supports regional habitat conservation, promotes energy independence, and supports a robust and reliable grid.

High levels of greenhouse gas emissions have been linked to changes in the climate, as well as health risks for the population. The resulting climate change alters regional and nation-wide habitat and threatens our natural resources. The Project is able to produce energy in a way which sheds significantly fewer greenhouse gases than fossil fuel generation over the course of the Project's lifetime. With fewer harmful emissions, this Project is also able to help mitigate the health risks people face by smog and similar poor air quality conditions. Further, leaving behind a need for fossil fuel generation directly corresponds to an ability for National energy independence. Reducing the need to purchase fuel from foreign countries enables the United States to keep more financial capital within the country.

The Project's energy generation will also align with Connecticut's seasonal and time of day peak energy needs. Given that the Project will produce energy during the day when power is generally consumed, it is anticipated that it will have benefits that the Council has recognized pursuant to Conn. Gen. Stat. § 16-50p. The timing of this generation can help the grid support changes in the loading of the system and thus supports a more robust grid. The ability of this solar Project to generate electricity in a de-centralized way means that the grid can support customers more reliably during day-to-day and emergency circumstances.

The Project has received a 20-year PPA through the SCEF program. This further demonstrates that the State has evaluated the Project and has determined that the Project will help to satisfy the State's need to meet its clean energy and zero-carbon goals.

As the proposed location is currently actively farmed for animal feed, GCE is actively pursuing options to continue farming on the location. These efforts are ongoing and any finalized decisions would be communicated to the Council and Department of Agriculture. Maintaining farming operation in the area would be in keeping with the nature of the surrounding area and consistent with the land use of the Property. Agrivoltaics present a mutually beneficial solution to the otherwise conflicting nature of locating solar arrays on Farmland. Given recent research on agrivoltaics, Applicant anticipates that the production of the crops and farming operations will be continuous over the entire lifespan of the Project and farming operations may continue after the Project.² Any time the Project Area does not have farming operations during a growing season, Applicant will allow vegetative ground cover growth with mowing and maintenance as is the standard practice on all other non-Farmland solar arrays.

5. Public Outreach

GCE has been in communication with and has engaged state and local regulators regarding the design and development of the Project since 2021. On June 1, 2021 GCE attended the Town of Stonington Planning and Zoning Meeting. At this meeting a smaller, previous version of the Project was presented to the Commission. That previous version was located in the same location, but in a smaller footprint than the current proposal. At that meeting GCE and engineering partners detailed the access path, stormwater basins, and potential presence of protected species on site. It was further communicated that GCE and partners will abide by all regulations and intend to have the lightest impact on the site as possible. The Commission expressed concerns about the presence of PFAS and the protection of the wetland and floodplain in the area. GCE and Civil partners confirmed

² See, <https://www.nrel.gov/solar/market-research-analysis/agrivoltaics.html>.

none of the panels contain PFAS or derivative compounds, and the intent to protect the water resources of Stonington and the State.

On XXXX 2024, GCE conducted outreach to abutting neighbors of the Project to inform them of the intent to develop a solar array. GCE also conducted follow up correspondence to address neighbor questions. More recently, on XXXX, 2024, GCE sent letters to each abutter of the Property, informing them of GCE's intent to file this Application with the Council. In addition, on XXXX, and on XXXX 2024, GCE filed a legal notice regarding this Project and GCE's Application to the Siting Council in The New London Day, a newspaper of general circulation in the area. Copies of all written public outreach are contained in Appendix M.

6. The Project will not cause adverse environmental effects

The proposed Project is not expected to create any adverse impact with regard to public health or safety issues. The proposed Project will meet or exceed all local, state, national and industry health and safety standards and requirements.

Potential pollutants that might be used on the Project Site would include polyvinyl chloride ("PVC") glue for use with electrical conduit installations and carbon-based fuels for vehicles and equipment. Applicant anticipates that there will be less than one gallon of PVC glues and less than 25 gallons of fuel stored on-site. Applicant would keep all flammable liquids in code compliant cabinets and containers. Applicant would also keep spill kits in all vehicles and equipment on-site. Applicant would monitor chemical usage daily to ensure compliance to requirements. No risk of release to the environment is anticipated.

Eastern portions of the Project Area lie within a known Aquifer Protection Area according to available CTDEEP mapping. GCE will follow Best Management Practices for the protection of these areas which includes, but is not necessarily limited to, refueling vehicles and storing hazardous chemicals outside of this area.

6.A Natural Environment and Ecological Benefits

The Project Area consists of approximately 28 acres proposed to be developed on an overall parcel of land, which lies in a rural agriculture zone. The overall land use of the development area is for agricultural feed corn production and has been owned by Noreen Wienges and her family for decades prior to the Project.

The Project intends to minimize impact to the existing land and grade. In addition, a pollinator-friendly seed mix will be used on the perimeter of the Project Area, which will support native pollinators and attract pollinators to crops that will be growing in the interspacing of the solar modules. The Project would have the added benefits of allowing for the replenishment of soil nutrients while still allowing for the refilling of natural aquifers. Pollinator habitat is of significant importance for farmland areas as pesticides can negatively affect their population but are crucial to crop production. Solar presents a light touch solution to energy production where environmental disturbance is minimized and the Project is removed at the end of its life.

6.B Public Health and Safety

The proposed Project is not expected to create any adverse impact with regard to public health or safety issues. The proposed Project will meet or exceed all local, state, national and industry health and safety standards and requirements. During construction and post-construction operations and maintenance, workers and personnel would follow all health and safety standards applicable to solar energy generating facilities.

A site-specific construction health and safety plan is typically developed prior to initiation of any on-site Project-related tasks. During the construction phase of development, all contractors, sub-contractors and personnel will be appropriately trained and briefed on any potential site health and safety issues. There will always be a designated construction manager and/or site safety officer or representative present during construction, and such individuals will be responsible for overseeing/implementing the site construction health and safety plan.

Construction traffic relative to the site includes standard construction trucks, small earth moving equipment, and all-terrain forklift equipment. Vehicle trips would be relative to scheduled deliveries of the major materials such as solar racking, solar panels, electrical equipment to serve the solar site, and fencing materials to be installed around the perimeter of the solar field. Construction activity and associated traffic would generally take place from 6:30 AM to 5:00 PM daily Monday through Fridays. Notice will be provided to the Council in the event that Saturday work is planned.

6.C Air Quality

Because the Project is a solar energy generating facility, no air emissions will be generated during operations and, therefore, an air permit would not be required. Temporary, potential, construction-related mobile source emissions would include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities can be considered *de minimis*. Such emissions would be mitigated using available measures including limiting idling times of equipment; proper maintenance of all vehicles and equipment and watering/spraying to minimize dust and particulate releases. In addition, all on-site and off-road equipment would meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency (USEPA) and, with the above mitigation measures, should reduce the exhaust emissions.

6.D Scenic and Recreational Values

The Project Site is not located in close proximity to any publicly used spaces, such as parks, trails or ballfields. The closest residential area includes the neighboring houses to the southeast of the Project, however, the existing tree line will provide appropriate screening, presumably even during leaf-off seasons due to the density and topography. A visual cross section was prepared for the single property closest to the edge of the development area and is attached as Appendix I.

6.E Historic and Archaeological Resources

A Phase 1A cultural/historic resource survey dated April 2021, prepared by Heritage Consultants concluded that the majority of the reviewed Project Area contained a moderate/high sensitivity for archaeological resources and recommended a Phase 1B study be performed. A Phase 1B cultural resource reconnaissance survey, dated April 2024, was performed which concluded that there were five (5) potential loci that required further investigation. A Phase 2 investigation of these five (5) loci is underway. All documentation received to date is included in Appendix F.

6.F Habitat and Wildlife

An application was submitted to the Connecticut Department of Energy and Environmental Protection (“CT DEEP”) Wildlife Division, Natural Diversity Database, and a Final Determination dated October 20th 2023 was received indicating the possible presence of Spotted Turtle *Clemmys guttata* on or near the Project Area. The Project will incorporate the best practices and suggested protection measures laid out in the letter prepared by CT DEEP. A copy of the letter is included herewith as Appendix H.

6.G Water Quality

The maintenance of vegetation at the Project Area, spacing of the tracking panels, and a minimis amount of infrequently trafficked impervious cover suggests that water quality will be maintained from existing conditions with no direct sediment loads proposed. The stormwater basins proposed as part of the Project will remain throughout the lifespan of the Project to further treat water quality.

6.H Stormwater Management

A comprehensive stormwater control plan has been compiled for use in managing the impact of construction and the overall Project development on the surrounding

environment. The stormwater control plan outlines procedures for installing erosion and sediment controls and monitoring these controls as well as the stormwater features to ensure they remain in proper functioning order. All guidance provided to Project personnel through the control plan is in adherence with the latest CT Stormwater General Permit, CT Stormwater Quality Manual and CT Guidelines for Soil Erosion & Sediment Control. The results of the stormwater analysis and report conclude that the conversion of active farmland to permanent vegetation will reduce peak rates of runoff from the Project Site as a result of the Project.

6.I Noise

Potential Project-related noise is regulated by Connecticut General Statutes Section 22a-69. For a Class A Emitter to Class A Receptor, which the Property and surrounding receptors, are located in, the General Statutes prescribes a maximum level of 55 dBA for daytime hours and 45 dBA at Property boundaries for nighttime hours. Construction noise is exempt from the statute.

Due to the nature of the use, facility design, required equipment and distance from potential noise receptors, the proposed Project is expected to have no adverse noise-related impact on the surrounding area. The properties around the perimeter of the Project Site are residential and existing woods or open fields.

The primary noise generators on site will be the inverters. The selected inverter has an acoustic noise rating of 73 dBA at 1 meter distance and 67 dBA at 3 meters distance as noted in the inverter specification sheet provided in Appendix B. The western equipment pad is the closest to a property line and will have 20 inverters located on it. Based off these data points and using the inverse square law to calculate the noise levels from a bank of 20 inverters operating simultaneously, at a distance of 118 feet, the noise level will be less than 55dBA. No noise will be generated at night when the sun is not present and therefore this Project will abide by the 45dBA sound requirement during nighttime hours. All other selected system equipment will typically generate the same or lower levels of noise.

The nearest abutting property line to a noise generating equipment pad is to the northwest of the array and is the Campbell Living Trust in Ledyard, CT which is 172 feet from the western equipment pad. Since sound dissipates with distance, Applicant does not anticipate that any Project-generated noise would be detectable by potential residential receptors and will be below regulated limits as shown in Appendix N.

6.J FAA Determination

The Applicant used the Federal Aviation Administration (“FAA”) Notice Criteria Tool to screen the Project Area to assess if the Project triggers the FAA Notice Criteria. The result of the initial screening on May 14, 2024 is that no additional notice is required for FAA. See Appendix J, FAA Determination.

6.K Visibility

The Applicant selected the Project’s location, among other reasons, due to its limited impact on public viewsheds. The Project should also have limited visual impact to abutters. The Project has been sited on land which is generally low visibility from surrounding roads, residences, and any designated public recreation area (i.e. playing fields, walking trails, or parks). Visual impacts of the Project from multiple directions are naturally mitigated due to distance, topography, and existing vegetation. Discussions between the Applicant and abutting parcel owners to the Project are ongoing.

6.L Electric and Magnetic Fields

Existing sources of electric and magnetic fields (“EMF”) along the boundaries of the Project Area include the EMF associated with the Eversource 13.8-kV overhead distribution line to which the electricity from the solar arrays will connect. During Project operation, electric and magnetic fields on the Project Site are expected to derive from the following sources: (1) the DC solar panels; (2) the DC cables that connect the solar arrays to the power inverter; and (3) the AC power inverters that convert the DC power to AC power. The proposed DC solar panels, AC power inverters, and AC transformers will be located more than 100 feet from the boundaries of the Project Site, with the nearest

residences even further away. DC magnetic-field levels from cables connecting the solar arrays to the inverters will produce a DC magnetic field, however, it is anticipated that this EMF would represent a small fraction of the earth's natural static (i.e., DC) geomagnetic field. The higher-frequency AC fields from the inverters, like the DC fields from the solar panels, generally decrease to near background levels within a few of feet of distance from the panels. Thus, the operation of these sources is not anticipated to appreciably change the EMF levels outside the Project Area. Based on the considerable distance of the Project Area from the boundaries of the Project site, the EMF from the solar panels, power inverters, and related equipment, collectively, are not anticipated to affect the EMF levels outside the Project Site's boundary.

Further, according to the Council's revised EMF Best Management Practices dated February 7, 2014, the Council recognized that a 2010 guideline established 2,000 mG as an acceptable exposure level to EMF. The Council also recognized that there is scientific consensus that there is no cause-and-effect link with EMF and any health effect, and that "scientific evidence to date does not warrant the establishment of MF exposure limits" surrounding transmission lines. In 2015, the Massachusetts Department of Energy Resources, Department of Environmental Protection, and Clean Energy Center released a solar guide that states that PV arrays generate EMF in the same extremely low frequency range as electrical appliances and wiring found in most homes and buildings and that the measurements at three commercial PV arrays in MA gave off less than 0.5 mG at the sites' boundaries and typically PV arrays give off less than 1.0 mG within three inches of the panels, whereas a vacuum cleaner three feet away from a motor is approximately 2.0 mG.

Finally, GCE would note that the Council has addressed this issue in previous proceedings before it. GCE refers the Council to Exponent, Inc.'s report entitled Research on Extremely Low Frequency Electric and Magnetic Fields and Health, August 1, 2012 – August 31, 2016, dated April 11, 2017, which can be found at: https://portal.ct.gov/-/media/CSC/1_Docketsmedialibrary/Docket_474/1_Application/4742GHCCPApplicationVolume2pdf.pdf. That report can be found on page 431 of the link above. Based on the

foregoing, GCE does not anticipate any adverse impacts from EMF associated with the Project.

6.M Whitford Brook Flood Analysis

FEMA mapping from July 18, 2011 depicts that approximately half of the development site would be affected by the a 100-year rainfall event flood of Whitford Brook. Petitioner's engineer-of-record prepared an independent floodplain delineation of Whitford Brook for the 100-year rainfall event using published watershed data and federal hydraulic modelling software. The results of this study shifted the 100-year flood hazard area closer to the brook and accordingly, no portions of the electrical infrastructure are proposed within a floodplain. The results of this study are included as Appendix K.

7. Conclusion

The Project clearly meets the standards set forth in Conn. Gen. Stat. §16-50k(a). Specifically:

- The Project meets CT DEEP's air and water quality standards, with no material emissions associated with either construction or operation, and water quality standards associated with construction and operational stormwater management a primary focus of the Project's design;
- The Project has been configured to avoid any substantial environmental impacts by utilizing land which has been unused and left fallow for decades; and
- The Project will not alter areas of core forest.

In addition, the Project would not be visible from any public viewsheds or from surrounding properties, nor will there be any impacts from noise.

Given the benefits this Project will provide to the State of Connecticut, GCE respectfully requests that the Council approve this Project as currently designed and issue a Certificate of Environmental Compatibility and Public Need.

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