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***Via Electronic Mail (siting.council@ct.gov)***

April 2, 2021

Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **PETITION NO. 1442 - SR Litchfield, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 19.8-megawatt AC solar photovoltaic electric generating facility on 6 contiguous parcels located both east and west of Wilson Road south of the intersection with Litchfield Town Farm Road in Litchfield, Connecticut, and both east and west of Rossi Road, south of the intersection with Highland Avenue in Torrington, Connecticut, and associated electrical interconnection**

Dear Attorney Bachman:

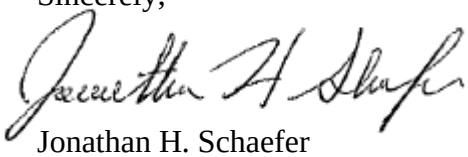
SR Litchfield, LLC hereby submits its initial responses to the Connecticut Siting Council's (Council) Interrogatories 1-34, 36-39, 41, 42, 44-46, 48, 52-59, 63-73, and 75-80, as well as Attachments 1 and 2, issued on March 12, 2021 in connection with the above-referenced Petition. The written responses and Attachment 1 are attached hereto. Due to the size of Attachment 2 (approximately 175 MB) a link[1] to download Attachment 2, Parts 1 through 11, is being provided to the Council in order to access an electronic version.

SR Litchfield hereby requests an extension of time from the Council to provide responses to Interrogatories 35, 40, 43, 47, 49, 50, 51, 60, 61, 62, and 74. SR Litchfield requires additional time to provide complete responses to these questions and requests until Friday, April 16, 2021 to provide responses to the Council. As always, to help expedite the Council's review, responses to individual interrogatories will be filed as soon as they are available.

[1] https://transfer.rc.com/message/nZmi2aznHECkd9gGH7Dvrt

If you have any questions concerning this submittal, please contact me at your convenience.

Sincerely,



Jonathan H. Schaefer

Enclosures (Responses to Interrogatories 1-34, 36-39, 41, 42, 44-46, 48, 52-59, 63-73, and 75-80; Attachment 1)

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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| IN RE: | : | |
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| A PETITION FOR A DECLARATORY RULING, PURSUANT TO CONNECTICUT GENERAL STATUTES §4-176 AND §16-50K, FOR THE PROPOSED CONSTRUCTION, MAINTENANCE AND OPERATION OF A 19.8-MEGAWATT AC SOLAR PHOTOVOLTAIC ELECTRIC GENERATING FACILITY ON 6 CONTIGUOUS PARCELS LOCATED BOTH EAST AND WEST OF WILSON ROAD SOUTH OF THE INTERSECTION WITH LITCHFIELD TOWN FARM ROAD IN LITCHFIELD, CONNECTICUT, AND BOTH EAST AND WEST OF ROSSI ROAD, SOUTH OF THE INTERSECTION WITH HIGHLAND AVENUE IN TORRINGTON, CONNECTICUT, AND ASSOCIATED ELECTRICAL INTERCONNECTION. | : | PETITION NO. 1442 |
| | : | APRIL 2, 2021 |

RESPONSES OF SR LITCHFIELD, LLC
TO CONNECTICUT SITING COUNCIL INTERROGATORIES, SET ONE

On March 12, 2021, the Connecticut Siting Council ("Council") issued Interrogatories, Set One to SR Litchfield, LLC ("Petitioner"), relating to Petition No. 1442. The Petitioner offers the following responses to Interrogatories 1-34, 36-39, 41, 42, 44-46, 48, 52-59, 63-73, and 75-80.

## Project Development

Question No. 1

If the project is approved, identify all permits necessary for construction and operation, and indicate which entity will hold the permit(s).

Response

As currently proposed, the following permits will be required for construction and operation of the Project:

a. Connecticut Department of Energy and Environmental Protection, Permit for the Discharge of Stormwater and Dewatering Wastewater from Construction Activity.
b. United States Army Corps of Engineer Section 404 Permit
c. Building and Electrical Permit from Town of Litchfield and City of Torrington
d. Municipal Road Opening Permit

Question No. 2

Does the Petitioner have a contract to sell the electricity and renewable energy certificates it expects to generate with the proposed project? If so, to which public utility? If the electricity is to be sold to more than one public utility, provide the percentage to be sold to each public utility.

Response

The Project has separate Power Purchase Agreements ("PPAs") for the energy and environmental attributes with Eversource Energy ("Eversource") and United Illuminating Company ("UI"), who will take 80.36% and 19.64% of the Project's output, respectively.

Question No. 3

After the 20-year expiration of the two Power Purchase Agreements, what other revenue mechanisms are anticipated for the power produced by the facility?

Response

There are currently no contracted revenue mechanisms in place following the expiration of the PPAs. However, subject to regulatory approval, the parties to the PPAs have the opportunity

to extend the duration of each agreement. If the PPAs are not extended, the opportunity to seek a market-based solution will be evaluated.

Question No. 4

Referring to Petition p. 10, if the project footprint was reduced, leading to a reduced project output that is below 19.8 MW AC, would the Petitioner no longer pursue a solar facility at the proposed site?

Response

The Petitioner is committed to the development of the SR Litchfield solar facility. Any modification to the terms of the current power purchase agreement (PPA), including a reduction in project energy output, must be approved by Eversource, and UI, as parties to the PPA and the Public Utilities Regulatory Authority (PURA).

Question No. 5

Referring to Petition p. 13, what ISO-NE Forward Capacity Auction would the Petitioner participate in? What is the capacity commitment period(s)?

Response

Currently, there are no plans to participate in the ISO-NE Capacity Auction. The option will be evaluated at each annual auction milestone.

Question No. 6

Referring to Petition p. 15, did the Petitioner receive any comments from the mailers sent out on September 22, 2020. If so, how many abutters responded and how were their concerns addressed?

Response

The Petitioner was contacted by seven (7) abutting property owners in response to the September 22, 2020 postcard mailer. These property owners expressed an interest in viewing the site layout to better understand the limits of the project area, and potential impacts including visibility, stormwater, traffic, noise, and property values. Conversations with two (2) abutters, Ronald Viola (68 Wilson Road, Litchfield, CT 06759) and Dianne Trivella (347 Wimbledon Gate N., Torrington, CT 06790) are ongoing. The Petitioner is exploring ways to address each Mr. Viola's and Ms. Trivella's concerns for visual and stormwater impacts on these abutting parcels.

**Proposed Site**

Question No. 7

Is the site parcel, or any portion thereof, part of the Public Act 490 Program? If so, how does the municipal land use code classify the parcel(s)? How would the project affect the use classification?

Response

No.

Question No. 8

Has the State of Connecticut Department of Agriculture purchased any development rights for the project site or any portion of the project site as part of the State Program for the Preservation of Agricultural Land?

Response

No.

Question No. 9

Is any portion of the site currently in productive agricultural use? If so, how many acres? Are any portions of the "Project Area" under lease by another party? If yes, when does the lease expire?

Response

Approximately fifty-five (55) acres of the existing open fields were previously leased for hay production. That lease expired in 2020. The Petitioner expects to reintroduce agricultural production through its Regenerative Energy Land Management Program following the completion of site construction. (*See* Petition Exhibit M).

Question No. 10

For the solar array areas proximate to residential areas, provide the distance, direction and address of the nearest property line and nearest off-site residence from the solar field perimeter fence.

Response

The perimeter fence along the easterly side of the northeast solar arrays extends to within nine (9) feet of the property line and within seventy-eight (78) feet of the residence at 517 Wimbledon Gate North in Torrington.

Question No. 11

Petition Appendix J (Phase 1 ESA) states the Site Plan (App. D) is pending. Was site plan completed? If so, please submit. Clarify the differing parcel numbers on pp. 8,9 and 12,13.

Response

Yes. The Site Plan referenced in the Phase I ESA (Petition Exhibit J) was completed and included in Petition Exhibit A.

When Silicon Ranch purchased City of Torrington Tax Parcels 217-014-075 and 217-014-074, the former become a portion of the later on the City's land records.

Question No. 12

Petition pp. 18-19 states sheep would be allowed to graze at the site.

a. Is there a potential of damage to the panels/wiring from grazing?

b. Is the specified seed mix for the solar array area specific to livestock grazing?

c. Is a shed/shelter necessary/proposed for the site? If so, where would it be located?

d. Would livestock grazing increase or decrease project maintenance costs?

e. Referring to p. 19, how would livestock grazing increase biodiversity?

f. Was livestock grazing discussed at the two community outreach meetings? If so, what comments, if any, were received?

g. Does the Petitioner intend to allow livestock grazing in areas adjacent to residences? Were these residences notified that livestock grazing would occur at the site?

h. If temporary electric fence is used to create paddocks, what types of safety measures are in place to protect the public and emergency response personnel from electric fence shock hazards?

i. The Integrated Vegetation Management Plan (Ex. M) states the site is 38 acres. Does this value only pertain to proposed sheep pasture areas? Please clarify.

Response

a. There is a potential of damage to the panels/wiring from any vegetation management strategy. Over the course of two and a half years of managing other Silicon Ranch projects

with sheep, far fewer incidences of damage and less severe damage have been seen from sheep grazing compared to mechanical control methods.

b. No, the specified seed mix accommodates sheep grazing while also meeting industry standard soil stabilization requirements.

c. No shed or shelter is necessary or proposed.

d. Livestock grazing has the potential to lower operational and maintenance costs associated with vegetation management over time.

e. Sheep are managed using Adaptive Multi-Paddock Grazing (AMP Grazing) techniques, in which a flock of sheep is rotated throughout the project area in a very controlled manner, in order to allow vegetation adequate time to recover after a grazing event. This strategy will result in more desirable deep-rooted perennial species over time, which will have outcompeted the annual non-desirable weed species. Because vegetation is allowed to express its full life cycle due to the rotational grazing, at any given time during the growing season there will be some amount of vegetation in flower, attracting pollinators to both grass species and broadleaf species. More, the rotational grazing results in a 'storied' architecture within the grassland ecosystem. This creates multiple layers and heights of vegetation creating various habitats for additional fauna.

f. Yes, the Regenerative Energy concept was discussed during Project meetings with the Town of Litchfield. As discussed in the Petition, municipal officials in Torrington did not respond to the Petitioner's requests for a meeting prior to the filing of the Petition.

g. Areas within the Project's perimeter fence are intended to be managed using an integrated land management approach, including areas adjacent to residences. The regenerative

agriculture program was discussed with municipal officials and several of the abutting land-owners.

h. The public will not have access the interior the solar array, and therefore are not at risk from electric fence. All emergency response personnel will be trained to deal with the potential additional hazards created by temporary electric fence.

i. The thirty-eight (38) acres referenced is the area within the array fencing where sheep may be utilized for vegetation management.

Question No. 13

Is livestock grazing an integral component of the Project or can the Project proceed without livestock grazing?

Response

Livestock grazing is not an integral component of the Project; however, an integrated land management approach (mechanical and biological) allows the Petitioner to manage the land in a holistic manner.

**Energy Output**

Question No. 14

Is the project being designed to accommodate a potential future battery storage system? If so, please indicate the anticipated size of the system, where it may be located on the site, and the impact it may have on the PPAs.

Response

The Petitioner has no plans to incorporate a battery energy storage system into the Project.

Question No. 15

Does the design of the Project, including the method of interconnection, allow it to serve as a microgrid?

Response

The Project was not contemplated to serve as a microgrid and would require extensive design changes to do so, including, but not limited to the inclusion of an energy storage component.

Question No. 16

Referring to petition p. 21, it states it is possible to isolate sections of the Project down to the PV module string level to allow for partial power production under the necessary conditions. Is this type of action performed remotely or by manual switching?

Response

This action requires manual switching. Local O&M personnel would be dispatched to the site if this type of local isolation is required.

Question No. 17

Do solar facilities present a challenge for the independent system operator for balancing loads and generation (to maintain the system frequency) due to the changing (but not controlled) megawatt output of a solar facility? What technology or operational protocols could be employed to mitigate such challenges?

Response

Solar facilities do not present a challenge for the independent system operator for balancing loads and generation. The utility completed a distribution System Impact Study which assesses the steady state impacts of the proposed Project on the distribution systems. The study found the Project to be compliant with all requirements detailed in the Eversource and UI Generation

Interconnection Technical Requirements document. The Project will reduce active power when frequency is too far above 60Hz, if required to by the utility. Due to interconnection limitations, Petitioner does not have underfrequency control. Because the interconnecting utility manages underfrequency events, Petitioner is unaware of any challenges that ISOs may have. The interconnecting utility has indicated that the Project will manage reactive power and power factor under a set voltage schedule, which schedule has not been provided yet. The utility completed a distribution System Impact Study which assesses the steady state impacts of the proposed Project on the distribution systems. The study found the Project to be compliant with all requirements detailed in the Eversource/UI Generation Interconnection Technical Requirements document.

**Site Components and Solar Equipment**

Question No. 18

Is the wiring from the panels to the inverters installed on the racking? If a portion of the wiring is external, how would it be protected from potential damage from weather exposure, vegetation maintenance, or animals?

Response

All exposed wiring is UV-rated USE-2 Solar Wire commonly used as solar power cable in green energy applications. The cross-linked insulation is a general purpose, chemically cross-linked polyethylene compound combining the best properties of rubber and polyethylene to provide a thermosetting material with excellent thermal, electrical and physical properties. This is secured to the hardware supporting the solar modules (racking) by UV-rated stainless-steel bundle straps at a minimum of three feet (3') above grade to protect it from small animals and

damage during mowing operations. The Petitioner does not anticipate that the protected wiring systems will be adversely impacted by wildlife or vegetation management efforts.

Question No. 19

What type of racking system is proposed for the site? (The decommissioning plan mentions a tracker system whereas the petition narrative describes fixed tilt system)

Response

The Project will utilize a fixed-Tilt racking system.

Question No. 20

Referring to Petition p. 8, what is the slope tolerance for the racking posts? Do driven piles have a different slope tolerance than a ground screw auger installation system?

Response

Screw slope tolerance can traditionally accommodate a thirty-six percent (36%) slope tolerance in all directions, with a tilt of five (5) to thirty-five (35) degrees. Driven pile solutions have a slope tolerance of twenty-five percent (25%), with a tilt angel of five (5) to forty (40) degrees.

Question No. 21

Referring to Petition p. 7, provide more information regarding "additional energy harvesting from the rear side of the modules". Would the use of bifacial modules allow the facility to produce more power over the course of a day? If so, would this have an effect on the Renewable Energy certificates sold for this project? Is the module output rating based on mono-facial or bi-facial sunlight exposure?

Response

Yes, the use of bifacial modules allows the Project to produce more power over the course of a day. This additional capability does not have an effect on Renewable Energy Credits because the Project's output rating was based on the use of bi-facial sunlight exposure.

Question No. 22

What is the row width of the installed solar panels?

Response

Inter-row spacing for the Project is 10.22 feet.

Question No. 23

Referring to Petition p. 8, does the National Electric Code require barbed wire on top of a seven -foot fence? If not, why was this extra security measure selected for this site? In regards to the statement *with mesh size to be determined but no greater than one and a quarter inch (1.25") in accordance with Siting Council requirements*, please explain what requirement the Petitioner is referring to?

Response

Section 691.4(2) of the National Electrical Code (NEC), 2020 Edition notes that, "Access to PV electric supply stations shall be restricted by fencing or other adequate means in accordance with 110.31…" Section 110.31 notes that for over 1,000 Volts, "…a wall, screen, or fence shall be used…A fence shall not be less than 7 feet in height or a combination of 6 feet or more of fence fabric and a 1 foot or more…utilizing barbed wire or equivalent."

The Petitioner's reference to a smaller (1.25") chain link fence mesh size relates back to a prior Council directive that was intended to make the security fence more difficult to climb. As an alternative to the smaller mesh size, on other projects the Petitioner has installed privacy slats in

the fence that can make the fence more difficult to climb. However, Petitioner has found the smaller mesh size to be more effective and easier to maintain.

Question No. 24

What alternative fence designs could be employed at the site? What is the cost differential in the fence design options?

Response

The Applicant hasn't identified any other suitable alternative options that provide the same safety protections to the Project and general public, while promoting the ability to use regenerative agriculture practices for ongoing vegetation maintenance, as the proposed fence.

Question No. 25

Referring to Site Plan C-504- what does the hatched area east of Basin 8/10 represent?

Response

This area is a temporary laydown area, which will be restored following completion of construction activities.

Question No. 26

Why are 16-foot wide gravel access roads required for a majority of the project if a 12-foot wide road can be utilized in the northern array area?

Response

The Petitioner's "standard" road width is sixteen feet (16'). The Petitioner made an exception in the northerly array area to reduce impacts to wetlands in that area.

**Interconnection**

Question No. 27

Is the project interconnection required to be reviewed by ISO-NE?

Response

No. ISO-NE did, however, review and approve the Project's Distribution System Impact Study in July 2020.

Question No. 28

Is the existing distribution three-phase or would it have to be upgraded from single-phase to three-phase?

Response

The Project requires an extension of approximately 5.35 miles of an existing three-phase distribution line.

Question No. 29

What is the status of the Facilities Study referenced on p. 12 of the Petition?

Response

Eversource reviewed and approved the Facilities Impact Study on February 15, 2021.

**Public Safety**

Question No. 30

Is the project designed to comply with CT State Fire Prevention Code, Ground Mounted Photovoltaic System Installations section 11.12.3? Has the Petitioner had any discussions with the local Fire Marshal regarding the site design?

Response

Yes. The Petitioner has reached out to the Fire Marshals for the Town of Litchfield and City of Torrington and plans to have detailed discussions before construction and again after operations commence for site specific orientation and training.

Question No. 31

Are there any drinking water wells on the site or in the vicinity of the site? If so, how would the Petitioner ensure wells and/or water quality are not impacted from construction activities?

Response

There are no drinking water wells on the Project site. Residences along the easterly and northern sides of the Project site, along Highland Avenue and Wimbledon Gate North, are supplied by public water serviced by the Torrington Water Company. Private well information in the vicinity of the Project site has been requested from the Torrington Area Health District and will be provided to the Council once it is received.

The final design of the racking system has not been determined. Racking will consist of a combination of driven posts, drilled piers and/or ground screws, with maximum depths extending to approximately ten feet (10'). Subsurface conditions will dictate the specific type of support mechanism to be employed at the post locations.

Based on this data, and the separating distances from the Project Area to neighboring properties, the Petitioner does not anticipate construction activities will affect surrounding wells or water quality. Inserting the racking posts into these soil conditions is not expected to cause excessive vibrations beyond the Project Area and would therefore not represent a concern for causing sediment releases to nearby wells. Although the specific construction of these wells is unknown, it is likely that any potable drinking water wells are installed within the bedrock aquifer, not in the overburden material, at depths far exceeding the construction zone. As a result, no disruption to well water flow or water quality is anticipated and therefore no special precautions are warranted.

Question No. 32

Describe fluid leak/spill containment for the proposed transformer equipment.

Response

Petitioner will implement an appropriate Spill Prevention, Control, and Countermeasure ("SPCC") plan at the Site. Drip pans and containment around equipment will be utilized. Spill kits will be readily available in close proximity to the transformer equipment and any leaks that occur will be contained and cleaned. Personnel on-site will be trained in industry standard practices and will work pursuant to a written environmental health and safety plan.

Question No. 33

Does the Petitioner intend to consult with the DEEP Dam Safety program regarding permitting requirements, if any, for the proposed stormwater basins?

Response

Yes.

Question No. 34

Has the manufacturer of the selected solar panels conducted Toxicity Characteristic Leaching Procedure (TCLP) testing to determine if the panels would be characterized as hazardous waste at the time of disposal? If so, please submit relevant information. If the project is approved, would the Petitioner commit to the installation of solar modules that are not classified as hazardous waste through TCLP testing?

Response

The selected module manufacturer is Longi. On behalf of Longi, ICP-OES conducted a Toxicity Characteristic Leaching Procedure (Test Method USEPA 1311:1992). The results show

that the metals used to construct the panels are not present in levels that would be considered toxic by the USEPA. A copy of the TCLP report provided by Longi is included as Attachment 1.

**Environmental**

Question No. 36

Different tree clearing quantities are provided in the Petition narrative (40 acres) and Exhibit L- Tree Analysis (30 acres). Please clarify.

Response

The Project will require clearing of a total of forty (40) acres of trees (approximately 2,640 trees).

Question No. 37

Petition p. 6 states 4.8 acres of tree clearing would occur around the periphery of the solar fields to reduce project shading effects. Page 17 states the shading analysis used a tree height of 45 feet. Why was this height selected when the visibility analysis used actual tree measurement that determined tree heights were an average of 75 feet in the Project area?

Response

Default assumptions used for design did not contemplate the field survey data as it was not known at the time of design. This will be updated accordingly through detailed design.

Question No. 38

Different wetland disturbance quantities are provided in the Petition narrative (10,000 square feet) and Exhibit V- Stormwater Pollution Control Plan (8,000 square feet). Please clarify.

Response

The reference to approximately 10,000 square feet of wetland disturbance included approximately 1,300 square feet of temporary impacts. The 8,000 square feet referenced in the Stormwater Pollution Control Plan is a reference to permanent wetland disturbances.

Question No. 39

What are the host municipalities' wetland setbacks?

Response

The Town of Litchfield Inland Wetlands and Watercourses Regulations (revised July 2013) does not include specific wetland setbacks, but does define as "Regulated Activity" "(i) any operation or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution of, such wetlands or watercourses, and (ii) any earth-moving, filling, construction, or clear-cutting of trees or installation of septic systems within one hundred (100) feet, measured horizontally from the boundary of the wetlands . . ."

The City of Torrington Inland Wetlands and Watercourses Regulations (amended December 13, 2011) does not include specific wetland setbacks, but does define as "Regulated Activity" "any operation or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, and any earth-moving, filling, construction or clear-cutting of trees within 75 feet of wetlands . . ."

Question No. 41

How would Project design/output be affected if the project was designed with a 100-foot wetland buffer?

Response

This change would result in a reduction in Project output of approximately 3 MWdc, a 11.95% reduction.

Question No. 42

How many acres of the Project Limit of Disturbance occur within the 100-foot buffer of Gulf Stream?

Response

Approximately 0.83 acres.

Question No. 44

The site plans show an underground electric line extending from the solar array east of Rossi Road to the solar array south of Town Farm Road. The proposed route of the electric line traverses a wetland and a tributary of Gulf Stream. How will this line be installed? Describe the amount of clearing/disturbance to wetlands required to install the line.

Response

This line will be installed as shown on Plan Sheet PV-104 – Array Details using the open cut trenching method. Prior to clearing, grubbing, and cable installation, Petitioner will install silt fencing around the proposed construction area. Taking into consideration that the construction area will include a wetland area associated with a tributary of Gulf Stream, if possible, Petitioner will perform this work during the dry seasons to minimize the environmental impact. Groundwater may be encountered in this area and, if necessary, minor pumping of water will be performed within the trench. Pumped water will be discharged to a small sediment basin built out of stone and surrounded by haybales for filtration. Sand bags will also be used if necessary. A combination

of stone and sand will be used in the bottom of the trench for bedding and trench bottom stabilization.

For the crossing of the tributary of the Gulf Stream, Petitioner plans to, if necessary based on water levels, construct a small sandbag dam upstream and downstream of the crossing and installing an eighteen inch (18") (or other required size) temporary pipe to carry the water from the upstream dam to the downstream dam. The proposed cable will be installed under the temporary pipe. Once backfilled, the temporary dams and temporary pipe will be removed, and the tributary will be restored to its original location. All disturbed areas will be seeded and stabilized, as necessary

Question No. 45

The Site Plans show three bottomless arch culverts to cross watercourses on the site. Describe how the culverts would be constructed. What are anticipated wetland and watercourse impacts from construction? Quantify the amount of tree clearing in wetlands that is necessary to install each culvert.

Response

The bottomless culverts will be concrete arches set on stone pads on either side of the stream. The roadway will be backfilled up to grade as segmental walls are constructed. This process will not impact the stream. Wetland impact & tree clearing in wetland areas is approximately 9,357 square feet.

Question No. 46

Does the design of the culverts comply with the 2008 DEEP Habitat Conservation and Enhancement Program, Stream Crossing Guidelines?

Response

Yes, culverts have been designed to comply with the 2008 DEEP Habitat Conservation and Enhancement Program, Stream Crossing Guidelines. All culverts are bottomless and have the minimum span required along with vertical headwalls.

Question No. 48

Is it possible to relocate the Rossi Road Access Road to the solar arrays to a location on Wilson Road, south of where Gulf Stream crosses the road? Please explain.

Response

Yes, although this would have a larger impact than the designed crossing of the Gulf Stream. The proposed location of the access road has already been in use as an unimproved road for farming without a culvert or bridge for crossing (*see, e.g.,* Attachment 2, Part 2 of 11 (Photo 7)). The area referenced for possible relocation is one of the steepest on Site, with a twenty percent (20%) slope in some areas, and is known to have a rock outcropping. Thus, Petitioner would either have large fill and cut slopes, disturbing more area in proximity of the stream and wetlands than currently designed, and most likely would also involve either blasting or major ripping of the bedrock outcropping.

Question No. 52

How will the continual grazing of the solar field vegetation by sheep impact water quality and stormwater runoff characteristics? Will stormwater runoff be contaminated by animal manure, thereby directly affecting the water quality of downgradient wetlands and watercourses?

Response

Any grazing that may happen onsite will not be continuous grazing. A very specific variant of rotational grazing will be used – Adaptive Multi-Paddock Grazing (AMP Grazing). Using AMP

Grazing, the Site is subdivided into various paddocks using electric fencing, and sheep will be rotated rapidly through each paddock, grazing no more than three (3) days in any given paddock, thus preventing overgrazing. Vegetation will be allowed to recover fully before the next grazing event (four (4) to six (6) weeks in some cases, but is based on photocycle, precipitation, temperature, and plant response variables to grazing impact). As the sheep are rotated through the project, manure is evenly distributed across the Site, at low concentrations, and will actively decompose on the surface of soils, fertilizing existing vegetation and increasing soil health and biodiversity of micro and macro soil organisms over time. Sheep are not allowed to graze in wetlands, streams, vernal pools, etc. With the above practices, there is no impact to water quality of downgradient wetlands and watercourses.

Question No. 53

Referring to Petition pp. 23-25 and Exhibit Y, how many abutting residences would have year-round views of the facility?

Response

Fourteen (14) abutting residences may have a year-round view of some portion of the solar facility. Those residences are located at 1167 Highland Avenue, 1119 Highland Avenue, 517 Wimbledon Gate North, 431 Wimbledon Gate North, 417 Wimbledon Gate North, 403 Wimbledon Gate North, 389 Wimbledon Gate North, 377 Wimbledon Gate North, 361 Wimbledon Gate North, 347 Wimbledon Gate North, 66 Town Farm Road, 236 Rossi Road, 229 Rossi Road, and 255 Rossi Road.

Question No. 54

The Site Plans show rows of landscaping along the perimeter fence in select areas. What type of landscaping is proposed and what is the height at planting? At what height would

landscaping be maintained? Would these plantings be replaced if they die off? Was a staggered arrangement of plantings considered to create a denser growth pattern to shield views?

Response

Landscaping will be of a species, age, and height to promote year-round screening. This typically consists of an arborvitae or holly variety, which can average fifteen feet (15') to thirty feet (30') at maturity, and will be planted in a staggered arrangement to create immediate screening of impacted viewsheds. Any trees that do not establish will be replaced.

Question No. 55

Where is the nearest parcel used for publicly accessible recreational purposes? Describe the visibility of the proposed project from this parcel.

Response

Borzani Park is located east of the Project, approximately 7,500 feet from the closest part of the Project. The Project will not be visible from Borzani Park.

Question No. 56

Referring to Petition p. 6, does the Petitioner intend on removing Prime Farmland Soils or Statewide Important Farmland Soils from the site? If not, does the Petitioner intend on removing the top layers of soil for site re-use?

Response

No Prime Farmland Soils or Statewide Important Farmland Soils will be removed from the site. The petitioner anticipates that these soils will be redistributed and used elsewhere on the site.

Question No. 57

Is any of the prime farmland soil at the site being stockpiled for re-application during project decommissioning? If so, estimate the quantity of soil to be stockpiled and provide the stockpile locations.

Response

No stockpiling of farmland soils is anticipated.

Question No. 58

Referring to Site Plan C-600, can the security fence along the Rossi Road Access Road 1 culvert crossing of Gulf Stream be eliminated to facilitate wildlife movement along the stream corridor?

Response

Yes, Petitioner will remove the security fence to facilitate wildlife movement along the stream corridor and will install gates at each end of the Limit of Disturbance to close off the array.

Question No. 59

Can another location for a laydown area at the site be developed to avoid disturbance to the 100-foot vernal pool envelope at VP-01?

Response

Yes, Petitioner will remove the laydown yard within the vernal pool envelope at VP-01 and reduce the laydown area to be exclusively outside of the vernal pool envelope. Flagging will be used to demarcate the envelope prior to construction.

Question No. 63

Please submit photographic site documentation with notations linked to the site plans or a detailed aerial image that identify locations of site-specific and representative site features. The

submission should include photographs of the site from public road(s) or publicly accessible area(s) as well as Site-specific locations depicting site features including, but not necessarily limited to, the following locations as applicable:

For each photo, please indicate the photo viewpoint direction and stake or flag the locations of site-specific and representative site features. Site-specific and representative site features include, but are not limited to, as applicable:

1. wetlands, watercourses and vernal pools;
2. forest/forest edge areas;
3. agricultural soil areas;
4. sloping terrain;
5. proposed stormwater control features;
6. nearest residences;
7. Site access and interior access road(s);
8. utility pads/electrical interconnection(s);
9. clearing limits/property lines;
10. mitigation areas; and
11. any other noteworthy features relative to the Project.

A photolog graphic must accompany the submission, using a site plan or a detailed aerial image, depicting each numbered photograph for reference. For each photo, indicate the photo location number and viewpoint direction, and clearly identify the locations of site-specific and representative site features show (e.g., physical staking/flagging or other means of marking the subject area).

The submission shall be delivered electronically in a legible portable document format (PDF) with a maximum file size of <20MB. If necessary, multiple files may be submitted and clearly marked in terms of sequence.

Response

*See* Attachment 2, Parts 1 through 11.

**Facility Construction**

Question No. 64

Referring to the Stormwater Pollution Control Plan, the amount of land disturbance on p. 3 and on Sheet C 002 does not match. Please clarify.

Response

The amount of land disturbance in the Civil Quantities on Sheet C 002 are meant for a grading contractor to bid on the approximate area of grading acreage. The land disturbance in the Stormwater Pollution Control Plan is the correct overall disturbance with clearing, grading, fence, etc. and is ninety-nine (99) acres.

Question No. 65

How many acres of the site require re-grading? What is the purpose of the site grading as shown on the Site Plans? Why can't existing grades be utilized to a greater extent to minimize soil disturbance?

Response

There are approximately seventy-three (73) acres of the Site that require grading. Due to the guidelines outlined in Draft Appendix I, Stormwater Management at Solar Array Construction Sites and the requirements to treat the solar panels as impervious area, stormwater basins were required for treatment of the runoff. Placement of these basins on the downhill portions of the Site

created significant grading of these slopes to provide areas for the basins, this then has an affect across the area designed for the solar arrays, which needs to stay under fifteen percent (15%) for the solar racking system specifications. There are equipment solutions available with up to twenty-five (25%) slope tolerance and would reduce the amount of grading required. Petitioner intends to request DEEP to consider this as an alternative solution to the extensive grading required to meet the fifteen percent (15%) criteria in Appendix I.

Question No. 66

The Site Plans indicate there is excess cut and debris from stonewall/stone pile removal. Where will this excess material be disposed of?

Response

Any excess cut and debris from the site will be removed and disposed of at a permitted offsite location or assembled/stored on-site.

Question No. 67

What areas of the site have post-construction slopes that are equal to or greater than 15%?

Response

The only post construction areas which are greater than or equal to fifteen percent (15%) are the tie-in slopes for the site grading and detention basin side slopes.

Question No. 68

According to the Petition, the Petitioner filed for a Stormwater Permit on October 20, 2020. The submitted Stormwater Pollution Control Plan (Ex. V) contains no mention of Draft Appendix I, Stormwater Management at Solar Array Construction Projects. Has the project been designed to conform to Draft Appendix I? If so, list measures that were incorporated into the Project design.

Response

As currently designed, the Project was designed to confirm with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and Stormwater Pollution Control Plan in effect in 2020. The current design treats the panels as impervious area and diversion ditches were designed to direct runoff to stormwater basins for treatment. The Petitioner understands that as currently designed, the Project may require an individual permit from DEEP.

Question No. 69

What effect would runoff from the drip edge of each row of solar panels have on the site drainage patterns? Would channelization below the drip edge be expected? Are energy dissipators, as depicted in DEEP's draft Appendix I, Stormwater Management at Solar Array Construction Projects-Figure 2, proposed for this Project? If not, why not?

Response

The rows of solar panels are not considered "closed systems," because there are gaps between each module (both north/south and east/west). As such, the drip edge of each solar panel will not have an impact on the Site's drainage patterns, as stormwater will flow off the panels at multiple locations as the panels follow the contours of the existing land. For the same reason, after construction is complete and the Site is fully stabilized, channelization along the drip edge is not expected.

Question No. 70

Referring to Petition Exhibit V pp. 4-5 Construction Sequence- how will the Petitioner cross wetlands/watercourses to access areas for the construction of stormwater basins (Initial

Clearing and Grubbing Phase) before the access road arch culverts are installed (Site Construction Phase)?

Response

During the initial clearing and grubbing phase, for each of the three (3) crossings, Petitioner will either install the temporary pipe crossing (see below) if accessible without clearing or Poled Fords (corduroy crossings) in accordance with the Stream Crossing section of the DEEP "Best Management Practices For Water Quality While Harvesting Forest Products." Following the completion of the initial clearing and grubbing operations, but prior to earthwork cuts and fills, Petitioner will remove the Poled Fords (corduroy crossings) and install temporary reinforced concrete pipe (RCP) culverts, in the vicinity of the proposed pipe arches, to convey the existing stream water from high point to low point. Earth fill will then be placed over the top of the pipe, along with a layer of surface gravel, to support heavy equipment for earthwork operations, which will provide access to the stormwater basin areas.

Question No. 71

Referring to Petition Exhibit V pp. 4-5 Construction Sequence, what is the time interval between the completion of grubbing/grading and stabilization (Initial Clearing and Grubbing Phase #6) and the commencement of the Site Construction Phase?

Response

Petitioner anticipates conducting initial site work in the winter months to minimize runoff. The anticipated schedule anticipates one (1) week for tree removal and two (2) months for conducting site grading and access road installation. Completion of site grading and access roads is anticipated to be completed within ninety days of starting site work. A Stormwater Pollution Prevention Plan will be created and adhered to and silt fencing installed. The

commencement of the Site Construction Phase will have some overlap with the completion of grubbing/grading and stabilization on the overall project.

Question No. 72

The stormwater basins are specified as "pond" detention basins. What specific types of stormwater ponds are being proposed at this site?

Response

These basins will be dry detention basins and the term pond was used interchangeably.

Question No. 73

The Site Plans (C-402) show reinforced concrete pipe (RCP) outlets extending from Stormwater Ponds 2 and 7 into wetland areas. Why was a direct wetland discharge point chosen? The Site Plans do not include any construction details for the RCPs. Provide construction details including excavation and site clearing information.

Response

To meet the requirements of discharging water onto slopes equal to or less than five percent (5%), discharges were moved to the bottom of the slopes which placed them next to the wetland areas. Discharge pipes were designed to have proper velocity dissipation to prevent erosion. Also, by still discharging upstream of the wetlands, it was designed to maintain the existing runoff to these wetlands. Construction details for the RCP pipe will be provided to the Council when they are available.

## Maintenance/Decommissioning

Question No. 75

Would the installed solar panels require regular cleaning or other, similar, maintenance? If so, describe cleaning procedures including substances used. Would this maintenance activity have any impacts to water quality?

Response

The amount of precipitation each year is typically adequate to keep the panels free of any heavy soiling which could impact production. However, Petitioner's performance engineering team monitors soiling impacts on a weekly basis and has tools to determine if soiling ever becomes heavy enough such that washing is needed. This module washing would utilize simply be washing off dust kicked up from the surrounding soil with tap or deionized water, so there would not be any impacts to water quality.

Question No. 76

Would the Petitioner remove snow that accumulates on the panels? Would snow accumulation on the solar panels affect the output of the facility? Under what weather circumstances would snow be removed? Describe snow removal methods.

Response

No, this is not common solar industry practice. Following a major snow event, modules will warm up in the sun and melt any accumulated snow. Snowfall is factored into the production estimates for the Project.

Question No. 77

How would sediment be removed and transported from stormwater features? Where would sediment be disposed of?

Response

Sediment will likely be removed and transported from the stormwater features via a skid-steer loader. The sediment can be spread and stabilized within upland areas on site or disposed of offsite in accordance with applicable laws and regulations.

Question No. 78

Would the Petitioner store any replacement modules on-site in the event solar panels are damaged or are not functioning properly? If so, where?

Response

Yes, a spare quantity of approximately 0.3% of installed modules would be stored on-site, located within the fenced facility area. Petitioner will endeavor to keep these storage areas out of the line of site from area roads or adjacent residential properties.

Question No. 79

What precautions would be taken to ensure any application of herbicide does not affect down gradient wetland/watercourse resources?

Response

Herbicides will not be used on this site, unless required to eradicate noxious weeds pursuant to local or State requirements. If herbicides are required for noxious weed eradication, spot spraying at the minimum rates required for the target species will be performed by a contractor with a current herbicide applicators license.

Question No. 80

The Project Decommissioning Plan (Ex. D) did not mention the stormwater management system. Provide information as to what procedures, if any, would be used to remove the stormwater management system.

Response

The Petitioner does not intend to remove or modify the stormwater management system at the point of decommissioning. The system could reasonably be left in place with no maintenance.

CERTIFICATE OF SERVICE

I hereby certify that on the 2nd day of April 2021, a copy of the foregoing was sent, via electronic mail, to:

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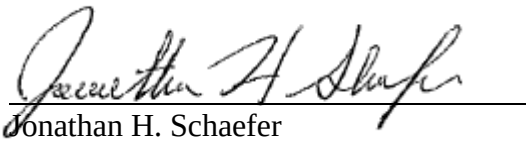

Jonathan H. Schaefer