Robinson+Cole

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Via Hand Delivery and Electronic Mail (siting.council@ct.gov)

July 1, 2021

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

Re: PETITION NO. 1443 - SR North Stonington, 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 9.9-megawatt AC solar photovoltaic electric generating facility on five parcels located north and south of Providence New London Turnpike (State Route 184), west of Boombridge Road and north of Interstate 95 in North Stonington, Connecticut, and associated electrical interconnection

Dear Attorney Bachman:

SR North Stonington, LLC (Petitioner) hereby submits its responses to the Connecticut Siting Council's (Council) Late-Filed Exhibit requests, issued on June 9, 2021 in connection with the above-referenced Petition. The Petitioner's responses also include additional information related to certain inquiries the Council made during the June 8, 2021 evidentiary hearing session.

Attachment 6 and Attachment 7 to these responses are being filed as bulk exhibits. As such, only two (2) full copies of these attachments are being provided in this filing. However, for the Councilmembers' ease of review, the Petitioner has included fourteen (14) copies of Appendix C to Attachment 6 (Site Civil Design) on 11 x 17 paper.

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Due to the size of the Attachments to these responses (approximately 107 MB) a link¹ to download a copy of Attachments 1 through 14 is being provided to the Council in order to access an electronic version.

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

Sincerely,

Jonathan H. Schaefer

Enclosures (One original and fifteen copies of Responses to Late-Field Exhibits (a) through (q) and Attachments 1-5, 8-14; Two copies of Attachments 6 and 7; Fourteen copies of Appendix C to Attachment 6)

¹ https://transfer.rc.com/message/agnu18fRyLnF7ifa7uRblt

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

:

A PETITION FOR A DECLARATORY : PETITION NO. 1443

RULING, PURSUANT TO CONNECTICUT GENERAL STATUTES §4-176 AND §16-50K,

FOR THE PROPOSED CONSTRUCTION,

MAINTENANCE AND OPERATION OF A 9.9-MEGAWATT AC SOLAR PHOTOVOLTAIC

ELECTRIC GENERATING FACILITY ON

FIVE PARCELS LOCATED NORTH AND

SOUTH OF PROVIDENCE NEW LONDON

TURNPIKE (STATE ROUTE 184), WEST OF BOOMBRIDGE ROAD AND NORTH OF

INTERSTATE 95 IN NORTH STONINGTON.

CONNECTICUT, AND ASSOCIATED :

ELECTRICAL INTERCONNECTION : JULY 1, 2021

LATE-FILED EXHIBITS RESPONSES OF SR NORTH STONINGTON, LLC

During the June 8, 2021 evidentiary hearing session, the Connecticut Siting Council ("Council") made numerous inquiries of SR North Stonington, LLC ("Petitioner") that warranted additional responses upon further review and consideration.

On June 9, 2021, the Council issued a Council Evidentiary Hearing Continuation Memorandum, which included five late-field exhibit requests. Responses to the Council's late-filed exhibit requests are provided in (a) through (e) below.

The Petitioner is also providing additional information related to certain inquiries the Council made during the June 8, 2021 evidentiary hearing session. This additional information is found in the responses (f) through (q) below.

(a) Difference in cost between the originally proposed project and the revised project.

Response

The Project, as currently designed, is estimated to be a total capital investment of between \$15 million and \$25 million, which includes project costs, land acquisition, and interconnection grid improvements.

(b) Incremental cost to underground all of the on-site electrical interconnection routes from the solar facility to the point of interconnection (e.g. a riser near the existing Eversource distribution line).

Response

As discussed at the June 8, 2021 evidentiary hearing, the Petitioner committed to working with Eversource to install all of the electrical interconnection facilities for the Project underground before connecting to the aboveground Eversource distribution system. After the June 8, 2021 evidentiary hearing session, the Petitioner reached out to Eversource regarding the cost to underground these interconnection facilities. Recently, Eversource requested more time to develop the costs for the pad-mounted designs consistent with the Council's request and the requested cost differential was not provided by the filing deadline for these late-filed exhibits. The Petitioner will provide the Council with the incremental cost information once Eversource provides that information. While the Petitioner awaits a written estimate from Eversource, the Petitioner anticipates that the cost will be more significant than originally anticipated, thus potentially making this option unworkable.

(c) The MW AC of each of the four solar array areas (that would total about 9.9 MW AC).

Response

Referencing the areas indicated on Attachment 2 (Revised Map) to the Petitioner's June 1, 2021 responses to the Council's Interrogatories, the MWac of each of the four solar array areas is:

Area 1 - 0.93 MWac

Area 2 - 0.62 MWac

Area 3 - 5.35 MWac

Area 4 - 3.00 MWac

(d) The post-construction percent development areas for the Critical Terrestrial Habitats for Vernal Pool 1 and Vernal Pool E.

Response

For the Critical Terrestrial Habitat ("CTH") for Vernal Pool 1, the area of disturbance associated with the original Project design's limit of disturbance ("LOD") was approximately 12.15 acres, or approximately 43.3% in the proposed developed condition. The LOD within the CTH for Vernal Pool 1 for the current Project design has now been reduced to approximately 6.90 acres, or approximately 26% for the proposed developed condition. If just the fenced limit of the current Project design is considered, approximately 6.06 acres, or approximately 23% of the CTH for Vernal Pool 1 would be developed.

For the CTH for Vernal Pool E, the area of disturbance associated with the original Project design's LOD was approximately 16.21 acres, or approximately 35.6% in the proposed developed condition. The LOD within the CTH for Vernal Pool E has been increased to approximately 21.1 acres, or approximately 48% for the current Project design in the developed condition. If just the fenced limit of the current Project design is considered, approximately 19.3 acres, or approximately 44% of the CTH for Vernal Pool E would be developed. The majority of

the increase in the LOD within Vernal Pool E's CTH is located more than 300 feet from the vernal pool edge for both the southeast and northeast corners of Area 3. The southeast corner of Area 3 is associated with solar panels that have been added to offset those removed from the parcels north of Route 184 and in the northeast corner of the Project area as requested by the Town. The increase is associated with shifting of the stormwater basin outside of the vernal pool envelope to Vernal Pool E.

This information does not change the assessment and conclusions provided in Petitioner's response to the Council's Interrogatory No. 37.

(e) Similar drawing (with distances to nearest residences and property lines) as response to interrogatory #10, Attachment 6 that depicts the originally proposed project.

Response

Attachment 1 to these responses includes a map showing the distances to the nearest residences and property lines for the original Project design. The redesigned Project maintained or reduced distances to the nearest residences and property lines in Areas 1 and 4. In Area 3, some of the distances on the western boundary were moderately reduced in some locations with the redesigned Project. In Area 2, in order to reduce impacts to Wetland C-2 and increase the setback of the limit of disturbance to Wetland C-2 to more than fifty feet (50'), the distance between the eastern limit of disturbance and the property line for 477 Providence-New London Turnpike and the residence on that property was decreased with the redesigned Project.

(f) Acres of core forest proposed to be impacted under the original Project design.

Response

The original Project design contemplated approximately 3.51 acres of core forest impacts. The redesigned Project reduces the overall impact on core forest to approximately two-

tenths (0.20) of an acre area.

(g) Updates on planned fencing and/or buffer with the property located at 476Providence-New London Turnpike.

Response

The Petitioner met with the owner of the abutting parcel at 476 Providence-New London Turnpike on June 18, 2021 and again on June 22, 2021 to discuss the redesigned Project filed on June 1, 2021 and further revised Project design filed with these Late-Filed Exhibits. Based on this owner's concern about her dog's line of sight and proximity to the property line through the dog kennel during construction, the Petitioner and this property owner have thus far agreed to, at Petitioner's expense, Petitioner will deploy straw bales across a portion of this property owner's southern and western property line for the duration of construction to block views of the Project from the home and dog kennel as well as provide noise mitigation from construction.

(h) Photos of sheep grazing and paddocks at one of Petitioner's existing projects.

Response

See Attachment 2 of these responses for two photos showing sheep grazing in a paddock at one of Petitioner's existing projects. Additional pictures and information may be found at the Petitioner's website – www.regenerativeenergy.org.

(i) Table comparing wetland impacts for the original Project design and the revised
 Project design.

Response

The current Project design has two (2) wetland impact areas and three (3) wetland crossings compared to four (4) wetland impact areas and four (4) wetland crossings in the original Project design. The original Project design had a total wetland impact of approximately

4,006 square feet. The amount of wetland impact area has been reduced by eliminating one wetland crossing (Culvert 2 (Wetland B-2)) and redesigning the remaining crossings.

The crossing at Culvert 1 (Wetland A-2) was reduced by using longer wingwalls, which allowed for less fill to be placed on side slopes that extended into the wetlands. The crossing at Culvert 3 (Wetland B/1B) was also reduced. Culvert 4 (Wetland A/1A) was enlarged and now can span the wetlands to avoid all permanent impacts. The current Project design has reduced overall wetland impacts to approximately 2,720 square feet. This is broken down between Culvert 1, with approximately 628 square feet of impacts, and Culvert 3, with approximately 2,092 square feet of impacts.

	Square Feet of Wetland Impact (approx.)	
	Original Design	Current Design
Wetland A-2 (Culvert 1)	1,136	628
Wetland B-2 (Culvert 2)	257	n/a
Wetland B/1B (Culvert 3)	2,334	2,092
Wetland A/1A (Culvert 4)	279	0
Totals	4,006	2,720

(j) Average annual shading loss percentage for the revised Project design.

Response

The average annual shading loss percentage for the revised Project design is 3.64%

(k) Copy of Petitioner's land management manual.

Response

See <u>Attachment 3</u> to these responses for Petitioner's Vegetation Standard Operating

Procedure. The Petitioner is also including a copy its Emergency Action Plan for the Project as

Attachment 14 to these responses.

(l) Modifications to Area 1 and Area 2 to address the Council's stormwater concerns.

Response

During the first evidentiary hearing session on June 8, 2021, Councilmember Robert

Hannon raised some questions about potential adverse stormwater impacts in discrete portions of
the solar array Areas 1 and 2. Following the evidentiary hearing session, the Petitioner asked its

Project engineers to review the proposed stormwater infrastructure plan. The Petitioner
undertook this review with the goal to further minimize potential environmental and visual
impacts of the Project. The following is a brief summary of the further revisions to the revised

Project design to address these questions. These changes are reflected in Attachment 4

(Preliminary Site Layout Plan – July 1), Attachment 5 (Overall Civil Plan of Further Redesigned

Project), Attachment 6 (Stormwater Pollution Control Plan – July 1; including Site Civil Design

(Appendix C)), Attachment 7 (Drainage Assessment – July 1), Attachment 8 (Comparison Map –

Original Design v. July 1 Design), and Attachment 9 (Comparison Map – June 1 Design v. July 1

Design).

Site-Wide Revisions. All solar panels in the Project are now a minimum of one hundred feet (100') from all wetlands on the Site. All construction activity is now a minimum of fifty feet (50') from any downgradient wetland area on the Site. As prescribed in Appendix I, Section 2(b) of the Connecticut Department of Energy and Environmental Protection, General Permit for the Discharge of Stormwater and Dewatering Wastewater from Construction Activity, reduction of the one hundred foot (100') buffer is permitted where there is not existing dense herbaceous vegetative ground cover. The existing forested area located in the areas where the wetland setback is less than one hundred feet (100') is not considered dense herbaceous vegetative

ground cover. Therefore, setbacks in these areas may be reduced if all of the requirements of Appendix I, Section 2(b) are met. The further revised Project design satisfies the requirements of Appendix I, Section 2(b), because the Project now provides a sediment load reduction of ninety percent (90%), the solar array has been treated as effective impervious (as also applied in Section 1(a)), and the outfalls of the stormwater discharges are on slopes less than or equal to fifteen percent (15%). In addition, any development activity that may take place within one-hundred feet (100°) of wetlands on the Site is associated with stormwater and erosion control infrastructure.

Area 1 Revisions. In response to the Council's inquiries, the Petitioner has reduced the length of the diversion berm by approximately ten feet (10') on the northeast side of the solar array in Area 1.

Area 2 Revisions. In response to the Council's inquiries, the Petitioner was able to move certain solar panels to the south and east to provide both a one hundred-foot (100') setback from the Wetland B-2 for the solar panels and a minimum construction activity setback of fifty foot (50') setback from Wetland B-2. Also, the solar inverter that was previously located near the southeast portion of the solar array in Area 2 has been moved approximately thirty feet (30') further from the Site's eastern property line to provide additional relief to the abutting property at 477 Providence-New London Turnpike. Thus, maintenance on the solar inverter will be conducted further from the property line and any noise impact on the abutting property from the solar inverter will be decreased.

Area 4 Revisions. The inverter that was located near the northern property line has been relocated to the south to provide relief to the abutting property owner at 476 Providence-New London Turnpike. Thus, maintenance on the solar inverter will be conducted further from the

property line and any noise impact on the abutting property from the solar inverter will be decreased.

(m) Modifications to the Petitioner's on-site fuel storage plans.

Response

As the Council is aware, the Petitioner has engaged Miller Brothers to be the general contractor for the construction of the Project. As such, Miller Brothers will be primarily responsible for installation, maintenance, and removal of the on-site fuel storage containment equipment, as well as spill prevention measures and response.

Following the June 8, 2021 evidentiary hearing, and the Council's inquiries regarding the Petitioner's proposal to maintain an on-site fuel storage containment during construction, the Petitioner engaged in extensive discussions with Miller Brothers regarding the pros and cons of an on-site fuel storage containment system and a mobile refueling system during construction.

It is the opinion of Miller Brothers, and the Petitioner, that on-site fixed fuel storage poses a fewer risks for fuel spills than the use of a mobile refueling system.

In coming to this opinion, the following information was considered:

- Mobile fueling trucks typically contain more than two thousand (2,000) gallons of fuel, whereas the Petitioner is proposing to locate three (3) five hundred (500) gallon tanks for a maximum of one thousand five hundred (1,500) gallons.
 - Due to the greater volume of fuel on-site in a mobile refueling truck, a spill
 event could have a more significant impact than the on-site fuel storage
 containment.
 - The addition of large fuel trucks to an active and busy construction site, with
 its large construction equipment and ancillary vehicles increases the

potential for safety incidences, especially given the small size of the project staging area.

- Utilizing a central on-site fixed fuel storage area provides the following proactive mitigation measures:
 - Secondary containment would be utilized to provide an additional layer
 of protection against a fuel leak, not typically available with mobile
 refueling trucks.
 - The secondary containment for each on-site fuel storage tank remains in place 24/7;
 - The location of the on-site fixed fuel storage area will be predetermined, allowing established protocol to promote safe access for both delivery and refueling operations.
 - A factor in siting the location of the on-site fixed fuel storage area is to ensure safe, effective, and timely spill cleanup, if needed.
 - An additional factor to siting the on-site fixed fuel storage area is the proximity to the construction operations center (construction trailer) for additional oversite of refueling operations.

Please reference <u>Attachment 10</u> of these responses for the Fuel Containment Specification Data Sheet, which provides the detailed specifications for the on-site fixed fuel storage area, and <u>Attachment 11</u> of these responses for a summary of Miller Brothers' capabilities.

Also, in <u>Attachment 12</u> of these responses the Petitioner has provided an updated Spill Prevention, Control, and Countermeasures Plan ("SPCCP"), which updates the previous draft

SPCCP (Attachment 13 to the Petitioner's June 1, 2021 responses to the Council's Interrogatories). In addition to fuel, the following chemicals will be stored on-site in small quantities:

- PVC glue
- Cable clean
- Pulling lubricant

Each of these chemicals will have clean up protocols pursuant to their individual Safety Data Sheets.

(n) Further explanation for why solar arrays cannot be completely moved to the southern parcels.

Response

Embedded in many of the requests the Petitioner has received, primarily from Town of North Stonington officials, to relocate all of the solar arrays to the southern parcels (*i.e.*, not locating any solar arrays on the northern parcels), is a perception that the former sand and gravel pit areas on the southern parcels do not maintain sensitive environmental resources worthy of protection. This perception, however, is not accurate and ignores the significant and sensitive environmental resources that the Petitioner has documented through extensive and on-going field reviews by members of the Project team. For example, see Petition at pages 24 to 34, Petition Exhibit U, and June 8, 2021 Hearing Transcript at page 118, lines 1 through 9.

Xeric sparsely vegetated and scarified habitats occur naturally as sand barrens and some well-drained floodplains, but also develop from anthropogenic activities such as sand and gravel mining operations. Many small- to moderate-sized parcels of scarified land, especially abandoned sand and gravel pits, serve as important habitat for several state listed amphibian and

reptile species including the eastern spadefoot (*Scaphiopus holbrookii*), eastern box turtle (*Terrapene c. carolina*), and eastern hog-nosed snake (*Heterodon platirhinos*).

In many areas of Connecticut, currently abandoned and overgrown sand and gravel pits offer excellent opportunities to expand early successional habitats for these species, especially when embedded within a mosaic of upland and wetland habitats. To protect this habitat and its diverse species assemblage, the arrays in the southern parcels were relocated to minimize environmental impacts. Management practices to promote habitat value of the sand and gravel pit areas on the southern parcels will include leaving buffers around ephemeral seasonal wet depressions that may not be identifiable as regulated wetlands but are nonetheless valuable breeding areas for amphibians (especially eastern spadefoot and Fowler's toad (*Bufo fowleri*)).

Although species surveys are still being conducting which will guide additional habitat management on the subject property, the Project planning and design process has taken into consideration the importance of this xeric landscape and the long-term role this habitat may play in conserving future regional and statewide biological diversity.

(o) Proximity of the northeast access roadway to the eastern property line of the property located at 477 Providence-New London Turnpike.

Response

In the most-recent Project redesign, the northeast access roadway to the Area 2 solar array would be located approximately twenty-three feet (23') from the eastern property line of 477 Providence-New London Turnpike. As mentioned above, the Petitioner has also relocated the solar inverter in Area 2 away from the property line adjacent to 477 Providence-New London Turnpike to further reduce impact on this neighbor.

(p) Update on visual mitigation discussions with abutting property owners.

Response

Prior to the June 8, 2021 evidentiary hearing, the Petitioner reached out to all abutting property owners. Many of the abutting property owners attended the site walk that the Petitioner held in March 2021. Several of the abutting property owners have reached out to the Petitioner with questions, including questions about visual impacts and mitigation. The Petitioner has engaged in numerous conversations with all of the abutting property owners that expressed an interest in options for visual mitigation. In addition to the property owner of 476 Providence-New London Turnpike, the discussions with which are summarized in (g) above, the following are brief summaries of the ongoing discussions with the other abutting property owners that have contacted the Petitioner concerning visual impacts and mitigation:

- 477 Providence-New London Turnpike. Petitioner spoke with the property owner most-recently on June 24, 2021 to discuss the revised Project design filed on June 1, 2021 and preview of the additional Project design revisions being filed with these Late-Filed Exhibits. This property owner requested the Petitioner evaluate installing a screening fence along a portion of the shared property line (in addition to the security chain link fence that is part of the Project) and replace existing native vegetation with infill evergreen trees. The Petitioner is currently evaluating this request and is committed to working in good faith towards a visual screening solution.
- 116 Boombridge Road. Petitioner spoke with this property owner on June 8, 2021 immediately following the public hearing to address the owner's comments and concerns. The Petitioner and the property owner are continuing to engage in a dialogue to address her comments and questions. However, based on the current Project design, the owner will have limited seasonal views of the Project from her home. The back of the property owner's

residence has a southwest orientation and is more than five hundred feet (500') from the Project's limits of disturbance. Furthermore, between this home and the Project boundary, on the owner's property, are a significant stand of mature trees, the property owner's own ground-mounted solar arrays and an open lawn area. These existing visual obstructions on this property owner's parcel are in addition to more than forty feet (40') of existing mature trees that will remain undisturbed on the Site and this property to the north of the Project's limit of disturbance closest to this property owner's property line. All of these existing buffers, which will remain after construction of the Project, are visible on Attachment 6 (Map Identifying Project Property Lines and Abutters Closest to Projects Limit of Disturbance) and Attachment 14 (Photographs), Part 2, Photos 8 and 9, all of which were included in the Petitioner's June 1, 2021 responses to the Council's Interrogatories.

- 435 Providence-New London Turnpike. Petitioner has had several conversations with this property owner and is evaluating a visual screening solution. Petitioner will continue to engage with this property owner on a screening solution. This property owner has been receptive and cooperative during discussions with the Petitioner.
- (q) Additional TCLP information regarding the new solar panels.

Response

See Attachment 13 of these responses for a letter from the manufacturer of the new solar panels regarding the TCLP report provided as Attachment 18 to the Petitioner's June 1, 2021 responses to the Council's Interrogatories (Toxicity Characteristic Leaching Procedure Report) and the new solar panels.

CERTIFICATE OF SERVICE

I hereby certify that on the 1st day of July 2021, a copy of the foregoing was sent, via electronic mail, to:

Robert A. Avena North Stonington Town Attorney Suisman Shapiro 20 South Anguilla Road P.O. Box 1445 Pawcatuck, CT 06379 ravena@sswbgg.com

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