

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

**GRE GACRUX LLC petition for a declaratory ruling
for the proposed construction, maintenance and
operation of a 16.78-megawatt AC solar photovoltaic
electric generating facility in Waterford, Connecticut.
Reopening of this petition based on changed conditions.**

Petition No. 1347A

June 4, 2020

**SECOND SET OF INTERROGATORIES DIRECTED TO GRE GACRUX LLC
FROM SAVE THE RIVER-SAVE THE HILLS, INC.**

Save the River-Save the Hills, Inc. ("STR-STH") asks that the petitioner, GRE GACRUX LLC ("GRE"), respond to the following interrogatories:

72. In response to STR-STH interrogatory No. 1, which sought specifics with respect to how knowledge of the environmentally sensitive nature of the parcel had informed GRE's project design, GRE responded in part: "Petitioner's consultation with the NDDB at CTDEEP confirmed the Site would be an appropriate location for the Project and would not adversely impact the surrounding environment." Please identify the persons at CTDEEP who made this declaration.

73. In response to STR-STH interrogatory No. 1, GRE responded in part that it has designed the project to "[p]reserve[e] pre-development drainage patterns. However, the site plans will result, post-development, in concentrated flows being discharged from stormwater basins onto slopes that, pre-development, have only seen overland flow. How is that not a change to the pre-development drainage patterns? Does GRE acknowledge that changing overland flow to concentrated flow will increase erosion of upland soil slopes?

74. In response to STR-STH interrogatory No. 2, GRE stated that stormwater runoff exiting basins will "cool across forested floor before reaching one of the brooks." How will that

occur if the site has been clear-cut except for a minimal buffer zone around wetlands, thereby removing the forest floor vegetation and litter layer?

75. In response to STR-STH interrogatory No. 3, which asked how GRE will ensure silt and other fine sediments will not be discharged into the trout-spawning habitat of the nearby tributaries, GRE provided only a boilerplate answer that it has designed the project to comply with DEEP standards. Claiming adherence to the minimum requirements for a solar installation, which STR-STH's engineer disputes have even been met, does not answer the question. This is an environmentally sensitive area due to the proximity to two trout-bearing streams flanking the site. Please identify the specific precautions GRE is taking to protect the surrounding watershed.

76. In response to STR-STH interrogatory No. 4, GRE took issue with STR-STH's use of a layman's term describing the Antares Solar Farm as a "stormwater engineering failure." Is GRE stating that the East Lyme Antares design was intended to result in more than 800 cubic tons of sediment being released into wetlands and an unnamed tributary to Cranberry Brook? If it was in fact designed to prevent such a release of sediment, how can it be considered anything other than a failure?

77. STR-STH assumes that over the past several years, since the East Lyme Antares Solar Farm was approved and constructed, that engineering designs for solar installation stormwater management have "evolved" and improved. To that end, has GRE studied the runoff patterns that lead to the release of sediment in order to improve its future designs? If so, please identify the lessons learned and how they have impacted the design of this project.

78. In response to STR-STH interrogatory No 5, GRE admitted that approximately 300 panels are proposed to be installed within 200 feet of an on-site wetland, against the recommendation of its consultant, Matt Davison. GRE then stated that it "is amenable, however,

to removing these solar panels, if the Connecticut Siting Council so desires.” Will GRE now commit to removing from those approximately 300 panels within such proximity to on-site wetlands? If not, why not, given the recommendations of GRE’s own consultant?

79. With respect to GRE’s response to STR-STH interrogatory No. 7, how will GRE ensure that the topsoil and the upper layer of the organic subsoil layer consisting of either sandy or silty loam created by the earthwork phase will not be swept away by stormwater during the earthwork and build phases?

80. In response to STR-STH interrogatory No. 9, GRE again claims that it used the Minnesota Drainage Manual’s solar panel calculator methodology for purposes of calculating the water quality volume (“WQV”). However, those Minnesota standards/methodology state that “solar panels are to be considered impervious” for the purposes of the calculation of the WQV. GRE has repeatedly admitted that it did not consider the panels to be impervious in calculating the WQV. Again – why didn’t GRE consider the panels impervious in making its WQV calculations, given its claim of adherence to the Minnesota Drainage Manual’s solar panel calculator methodology?

81. In responses to STR-STH interrogatory Nos. 9 and 16, GRE stated that based on consultations with “CTDEEP Stormwater Staff, it was determined that it was acceptable to utilize the Minnesota Drainage manual’s solar panel calculator methodology for purposes of calculating required water quality volumes from a solar array.” Please identify the individual members of the CTDEEP Stormwater Staff who told GRE and/or its consultants who made that determination, when that determination was made, and whether it was made in writing from CTDEEP.

82. In regard to GRE’s responses to STR-STH interrogatory Nos. 26 and 27: Sand filters are infiltrative practices and must provide a 3-foot vertical separation to groundwater;

otherwise, they do not work. They are a type of practice to reduce runoff volumes by infiltration, so adding a liner, as GRE appears to be proposing, would not allow infiltration to occur. Similarly, if basin #5, an infiltration basin, is located situated below seasonal high ground water, it will not work as intended. If the infiltrative practices planned, such as sand filter basins #3 and #10 and infiltration basin #5 will not actually work as designed, as GRE appears to be admitting, why has GRE proposed them? Would not sound engineering practices require a different approach to stormwater mitigation in these areas?

83. In response to STR-STH's interrogatory No. 38, GRE states that the VHB "supplemented" the Davison Environmental report and that the VHB report "provided there were no temporal restrictions to clearing." Where in the VHB wildlife report are there any statements or conclusions with respect to temporal restrictions to clearing? And if the VHB report is indeed a "supplement" to the Davison report, doesn't that mean the Davison report's conclusions remain valid? Or is GRE saying the VHB report has superseded, not supplemented the Davison report?

84. In regard to GRE's responses to STR-STH interrogatory No. 38: Where in the February 28, 2020 NDDDB letter from CT DEEP did the agency state that it "concurred with the findings contained" in the VHB report? STR-STH only sees the word "concur" with respect to specific recommendations to protect the Eastern ribbon snake, but Davison Environmental's recommendation with respect to temporal limitations on clearing was not limited to concerns about that single species. In fact, doesn't the February 28, 2020 NDDDB letter state that "[c]onsultations with the NDDDB should not be substituted for on-site surveys required for environmental assessments"? Why did GRE conclude that it "may engage in construction activities, regardless of the season, without adversely impacting wildlife"?

85. In regard to GRE's responses to STR-STH interrogatory Nos. 39 and No 41: Why did GRE conclude that the NDDB Determination, which examines for the presence of endangered, threatened, and species of special concern, is the *only* information that need be presented with respect to fish and wildlife issues related to this project?

86. With respect to the NDDB determination, why, if VHB listed five bird species (see Appendix I, Attachment 5 (one state-endangered, four state special concern)), was a survey only completed for the whip-poor-will?

87. Why has GRE not examined more completely the terrestrial and aquatic wildlife species and habitats potentially impacted by its project, particularly when this issue was pointed out in the CT DEEP letter of August 20, 2018 (see Appendix I) and was stated as a reason for the Council's denial of Petition No. 1347?

88. In regard GRE's responses to the Town of Waterford's interrogatory No. 11: Please provide specific citations to where, in GRE's submitted materials, it has addressed water quality, aquatic habitats, and aquatic life in nearby streams.

89. Please provide specific citations to where, in GRE's submitted materials, it has presented monitoring data on water quality parameters and aquatic species populations for the present un-impacted condition of the nearby streams.

90. In reviewing the plans, STR-STH noted that all of the wet ponds only have a spillway as an outlet, so there will be a permanent pool which averages 3 feet deep in each wet pond. That water will be exposed to bright sunlight and will heat up. As new runoff enters the basin, the hot water already in the basin will be discharged to upland areas on moderate to steep slopes, where the trees have been cleared, so it is unlikely to be cooled down. There also is a possibility of this standing water supporting algal blooms, including cyanobacteria (formerly known as blue-green algae), which can fix atmospheric nitrogen, thereby increasing nutrient

loading to streams and wetlands upon discharge. If there will be water stored within the constructed stormwater basins (i.e., wet ponds), and these basins are exposed to sunlight, how will the water temperature of the impounded water be moderated once water is finally released from the basins? What plans will be in place if a person monitoring the stormwater systems notices algal blooms in the wet ponds?

91. The word “thermal” appears once in GRE’s Appendix H (Wetland and Biological Assessment), where GRE states: “Management of stormwater should promote infiltration, as the runoff from solar array fields in general considered [sic] clean with respect to significant pollutant loads. This will help to insure there are no thermal impacts to downstream resources.” In GRE’s Appendix B (Stormwater Report), how many times are the words “thermal” or “temperature” found? What analyses and studies were made to ensure that there will be no thermal impacts to downstream resources? What engineering practices were influenced by planning to ensure there will be no thermal impacts to downstream resources?

92. The total amount of precipitation and the frequency of heavy precipitation events has risen in the Northeast. Between 1958 and 2012, the Northeast saw more than a 70% increase in the amount of rainfall measured during heavy precipitation events, more than in any other region in the United States. (NRWP - Pg 47-8) Projections indicate intense precipitation events will continue and have the potential to cause more inland floods, particularly in valleys. Has GRE taken the increase in frequency and intensity of rainfall into consideration, given the fact that this Site is the headwaters to Stony Brook, a tributary to the Niantic River Estuary?

93. Stormwater, whether discharged directly to a water body or to a storm drainage system, is the most widespread and one of the top contributors of NPS pollution in the Niantic River watershed. (NRWP - pg 54) Will the stormwater mitigation structures created throughout this Site be cleaned? How often? Who will do it?

94. GRE referenced making revisions to its site plans in response to multiple interrogatories from both STR-STH and the Town (*see* GRE Response to STR-STH Interrogatories, dated Apr. 27, 2020, Q21, 23, 37; GRE Response to Town Interrogatories, dated Apr. 27, 2020, Q24, 25, 27, 38). When will the revised site plans be submitted?

95. If this project is constructed, will GRE commit to copying STR-STH on the weekly inspection reports on which it has offered to provide the Town (*see* GRE Response to Town Interrogatories, dated Apr. 27, 2020, Q22)?

96. If the town requires Oil Mill Road to be widened to 24 feet to handle construction traffic (*see* Town interrogatory #5), how will the runoff from the increased impervious surface be handled to minimize non-point pollutants, such as metals and hydrocarbons from being discharged to Oil Mill Brook? How will the increased runoff volumes from the road widening be handled so as not to impact the stream channel morphology of Oil Mill Brook?

97. Has GRE submitted its Phase 1B assessment to the Tribal Historic Preservation Offices for assessment of the 99 stone groupings discovered on the site, as suggested by SHPO in its April 7, 2020 letter (Ex. C to GRE responses to STR-STH interrogatories)? If not, why not? If so, please provide any responses received.

98. Based on GRE's response to STR-STH interrogatory No. 70, STR-STH understands that JLC Infrastructure now owns Greenskies Clean Energy, which is the development company working with GRE to develop the project. What entity owns GRE, identified as the "Project Company"?

99. In regard to GRE's response to STR-STH interrogatory No. 32: Although GRE states that the ERTEC E-fence system is not being used as an erosion control barrier, according to the plans, the E-fence is being used below the outlet spreaders from the various stormwater basins. Otherwise, siltation fence backed by a wood chip is the sole perimeter erosion control

measure. The E-fence is shown as a wildlife exclusion fence on the website (<https://ertecsystems.com/wp-content/uploads/2019/05/ertec-brochure.pdf>), with the open orange poly fence being about 3 feet tall. The erosion component is only 14 inches in height, which is about half the height of a standard silt fence, so how is this an effective erosion barrier at the outlet of the basins? How wide and tall will the wood chip berm be? Is the wood chip berm being placed uphill or downhill of the siltation fence barrier? Is the wood chip berm being installed adjacent to the siltation fence barrier?

100. In regard to GRE's response to STR-STH interrogatory No. 22: As GRE has admitted that the infiltration basins will not be installed in an off-line configuration to prevent the clogging of the basins as 2004 Storm Water Quality Manual strongly recommends, and GRE states that it only plans to clear the basins prior to the completion of the project, sometime after the site is entirely stabilized, how does GRE propose to keep stormwater mitigated and prevent silt and sediment runoff from the site during and post construction, prior to site stabilization?

101. In regard to GRE's response to STR-STH interrogatory No. 31: As it takes more than one year in the Northeast for hydroseed to stabilize a site to support construction activities, how will this fact be incorporated into GRE's construction plans? Will GRE be taking the position that as "a full growing season ... is not required in any applicable regulation or guidance document" (GRE response to Town interrogatory No. 19), it need not wait for actual site stabilization to occur?

102. In response to STR-STH interrogatory No. 34, GRE stated: "All areas that are proposed to be regraded are tributary to either a proposed sediment trap or basin, where the associated stormwater runoff from these areas will be treated prior to discharge from the Site." How and where will the stormwater be treated?

SAVE THE RIVER-SAVE THE HILLS, INC.

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CERTIFICATION

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