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April 25, 2023

**Via E-Mail and Hand Delivery**

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

**Re: Docket Number 514 - Glenvale LLC Application for a Certificate of Environmental Compatibility and Public Need for the Construction, Operation and Maintenance of a 4.0 MWAC Solar Photovoltaic Project at 56 River Road in Putnam, Connecticut**

Dear Ms. Bachman:

I am writing on behalf of my client, Glenvale LLC, which is submitting the enclosed Responses to the Pre-Hearing Set One Interrogatories that were directed to Glenvale LLC by the Siting Council on April 4, 2023. I am enclosing an original and fifteen copies of the Responses to the Interrogatories.

I am also enclosing a Motion for Protective Order related to a purchase and sale agreement that is being provided to the Council in response to Responses 8 and 9 and is referenced as Exhibit B to these Interrogatory Responses. One copy of Exhibit B is being provided in a sealed envelope (no electronic copy will be filed, and the Motion for Protective Order is attached to that envelope.

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

Sincerely,

Lee D. Hoffman

Enclosures

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

**Glenvale LLC d/b/a Glenvale Solar application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 4.0-megawatt-AC solar photovoltaic electric generating facility located at 56 River Road, Putnam, Connecticut and associated electric interconnection**

**Docket No. 514**

**April 25, 2023**

Glenvale LLC d/b/a Glenvale Solar hereby submits the following responses to the Pre-Hearing Set One Interrogatories that were directed to Glenvale, LLC by the Connecticut Siting Council on April 4, 2023.

**Project Development**

1. Has the Town of Putnam and/or any abutters provided comments to Glenvale, LLC d/b/a Glenvale Solar (Glenvale) since the application was submitted to the Council? If yes, summarize the comments and how these comments were addressed.

**Neither the Town of Putnam nor any abutters have commented since the application was submitted to the Council on March 7, 2023.**

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

**The following permits are necessary for the construction and/or operation of the Project:**

- **Town of Putnam, Building Permit;**
- **Town of Putnam, Electrical Permit;**
- **Federal Aviation Administration (“FAA”) Notice of Proposed Construction and Determinations of No Hazard; and**
- **CT Siting Council (CSC or Council), Certificate of Environmental Compatibility and Public Need**

**Glenvale will hold these permits.**

**The Project will also require a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, which will be held by the general**

**contractor. Glenvale is working with its contractor, CS Energy, for scope and pricing. Glenvale expects to contract with that contractor, or an equally experienced contractor, on or around September 2023.**

3. What is the estimated cost of the Project?

**The estimated cost of the Project will range from \$6.5-7.6 million.**

4. If the facility operates beyond the terms of the SCEF Agreement, will Glenvale decommission the facility or seek other revenue mechanisms for the power produced by the facility?

**Glenvale would expect the facility owner to seek other revenue mechanisms at the end of the 20-year tariff with Eversource.**

5. Would Glenvale participate in the ISO-NE Forward Capacity Auction? If yes, which auction(s) and capacity commitment period(s)?

**At this time, the Project does not anticipate that it will be participating in the ISO-NE Forward Capacity Auction. The Project reserves the right to participate in the Forward Capacity Auction in the future. However, as of this writing, the Project has no capacity commitments.**

6. Is the project, or any portion of the project, proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant?

**No.**

7. Referring to Application Exhibit C- the January 17, 2023 letter from the Town of Putnam – item 3 states: *Based on recent input from Glenvale, a property boundary modification will most likely be achieved by the use of a boundary line adjustment between 56 River Road and an adjacent parcel, requiring no action by the Planning Commission.* Provide more information as to what property boundary modification is required for the Project.

**The Town of Putnam parcel 037-039, 56 River Road, is the parcel which includes the Project development area plus some 6+/- acres of land to the north of the Project area. The current property owner of parcel 037-039 and the Project company have a purchase and sale agreement to purchase the developable portion of the parcel, approximately 17 acres. That new property boundary is depicted on the survey included in the plans as “proposed new lot line”. The land north of parcel 037-039 is parcel 019-055, 140 Quinebaug Ave, which is also owned by the same landowner. The landowner has agreed to adjusting the southerly property line of 019-055 to combine the unused portion of parcel 037-039 into parcel 019-055. The 6 acres of Project non-developable land is not a conforming residential lot nor appropriate for any other use. See, Exhibit A (Boundary Line Adjustment Map) attached hereto.**

## Proposed Site

8. Would the site be leased or subject to a purchase option? If the site would be leased at any time during site construction activities, are there any provisions in the lease agreement with the property owner related to decommissioning and/or site restoration? If so, please provide any such provisions.

**The Project site is subject to a purchase and sale agreement between the landowner and the Project company, and this sale is planned to close prior to the start of construction. Site restoration will be accomplished pursuant to the Site Decommissioning Plan, which was submitted to the Council as part of this Application.**

9. Provide a copy of any lease agreement or land purchase option per Connecticut General Statutes (CGS) §16-50o.

**A copy of the purchase and sale agreement is being provided as Exhibit B (Land Purchase and Sale Agreement), however, because this purchase and sale agreement contains confidential business information, it is being filed subject to a proposed protective order.**

10. 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?

**The site parcel is currently in the Public Act 490 Program. Based on conversations with the Town of Putnam, the parcel has been in that program for at least thirty years. Once the use of the parcel is converted to a generation facility, Glenvale anticipates that it would no longer be eligible to participate in the Public Act 490 Program, however, that would be a determination to be made by the Town of Putnam.**

11. 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?

**No, the Department of Agriculture (DOAg) has not purchased any development rights for the Project site or any portion thereof.**

12. Provide the distance, direction and address of the nearest property line and nearest off-site residence from the solar field perimeter fence.

**The nearest property line from the solar field perimeter fence is the property line with 34 River Road, ±38' to the north of the fence. The nearest residence is at 34 River Road, ±92' to the north of the solar field perimeter fence.**

13. Referring to Application page 3 and Exhibit A, Site Plan OP-2, the abutting property to the east is owned by the same landowner of the host parcel and is marked as the “Airline Rail Trail.” Is this area developed and open to the public? If yes, how is public access provided?

**Parcel 037-038 is not developed and is subject to an easement with the Town of Putnam for an Airline Trail installation which has not been constructed and is currently not opened to the public. The property owner has discussed a future donation of the land to the Town of Putnam.**

14. Referring to Application Exhibit A (Site Plan SP-1), two concrete pads are shown in the northwest corner of the site, adjacent to the proposed access road. What equipment will be installed on the pads? Provide dimensions of the equipment. What are the noise characteristics of the equipment?

**This equipment will be owned and installed by Eversource. Glenvale has been shown two equipment pad options and is waiting for an update from Eversource on details on both of these options. Glenvale expects that there will be one pad-mounted primary meter and a pole-mounted recloser. Because the project does not have further details from Eversource, it cannot provide details on the dimensions or noise characteristics at this time.**

15. Referring to Application Exhibit A (Site Plan OP-1), was an access road farther to the south on River Road considered to create a larger buffer to the abutting property at 34 River Road? Why was the proposed location of the access road selected?

**The access road was sited to the north of the property to avoid the wetland area in the southwestern portion of the parcel and to achieve the most efficient use of space on the site by minimizing road length and shading structures such as new utility poles.**

16. Referring to Application Exhibit A, Site Plan OP-1, the stormwater from most of the site would drain into three swales which are directed into one large detention basin on the south side of the site. Was a stormwater design considered where two or three detention basins, served by shorter swales, were located around the site perimeter?

**The proposed stormwater design recognizes that the majority of the site drains directly south to the referenced detention basin; the two perimeter swales are intended to collect runoff from the outer portions of the array and direct it to the basin. The terrain on the eastern side of the site is not conducive to installation of a basin. In addition, the proposed design**

**maximizes use of the available developable land for production while providing for effective stormwater management.**

### **Energy Output**

17. 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 SCEF Agreement.

**No battery storage system is currently contemplated for this site. Depending on state or federal programs encouraging battery storage systems in the future, the site plan could be amended to accommodate such systems.**

18. What is the anticipated capacity factor of the project? Would the capacity of the system decline over time? If so, estimate annual losses.

**The anticipated capacity factor is 17%. The Project's energy generation is expected to degrade 0.4-0.5% annually.**

19. What, if any, electrical loss assumptions have been factored into the output of the facility?

**Glenvale retained Solar Design Associates to conduct an energy generation analysis as required by the SCEF Program bid requirements. Using PVSyst, SDA assumed the following losses: soiling from snow, module temperature according to irradiance, DC wiring losses, light induced degradation, module quality, module and string mismatch, AC wiring and transformer losses, and shading. The result of assumed losses is an 87.64% performance ratio.**

20. If one section of the solar array experiences electrical problems causing the section to shut down, could other sections of the system still operate and transmit power to the grid? By what mechanism are sections electrically isolated from each other?

**If one section of the solar array experiences electrical problems that causes that specific section to shut down, other sections comprising the system could still operate and transmit power to the grid. The solar facility will have an internal protection system to shut down, as appropriate, the affected portion(s) of the solar facility (including the entirety thereof), should a fault occur.**

21. Pursuant to CGS §16-50p(c), a public benefit exists when a facility is necessary for the reliability of the electric power supply of the state or for the development of a competitive market for electricity. Public benefit exists if the Council finds and determines a proposed

electric generating facility contributes to forecasted generating capacity requirements, reduces dependence on imported energy resources, diversifies state energy supply mix and enhances reliability. Please respond to the following:

- a) Would the proposed facility be necessary for the reliability of the electric power supply of the state? Explain why or why not.
- b) Would the proposed facility be necessary for the development of a competitive market for electricity? Explain why or why not.
- c) Would the proposed facility contribute to the forecasted generating capacity requirements? Explain why or why not.
- d) Would the proposed facility reduce dependence on imported energy resources? Explain why or why not.
- e) Would the proposed facility diversify the state's energy supply mix? Explain why or why not.
- f) Would the proposed facility enhance reliability? Explain why or why not.

**As the Council is well aware, the state of Connecticut has passed legislation to undertake an ambitious carbon reduction goal, with continuing reductions in carbon emissions generated from the production of electricity, with a goal of attaining zero carbon emissions from the sector by the year 2040.**

**In addition, ISO-NE has estimated that more than 5,200 MW of oil, coal and nuclear power plants retired during the period of 2013-2022, and it estimates that another 5,000 MW of coal and oil-fired generation could be retiring in the coming years. Assuming these facilities all retire, ISO-NE has estimated that approximately 6,300 MW of new or repowered capacity will be needed to maintain reliability in the region. Moreover, five of the six New England states have zero-carbon or low-carbon goals to achieve by 2040 or 2050 (depending on the jurisdiction), therefore, most, if not all of this 6,300 MW of capacity will need to come from zero carbon resources.**

**Moreover, in spring of 2022, ISO-NE issued a report, *On the Horizon*, which reviewed the need for zero carbon emission sources and provided estimates of long-term energy development in light of the five New England states' desire to significantly reduce carbon emissions. According to that report, New England will need to significantly increase its electric capacity over the next several decades as the states with zero carbon goals move to increase the use of electric vehicles in the transportation sector and electric heating for buildings rather than fossil fuel-based heating sources. All of these changes will result in an increase in the need for electric capacity, beyond the 6,300 MW of new capacity mentioned in the previous paragraph to this response. Moreover, according to that report, solar comprises only 9% of the projects in the ISO-NE Queue. This report can be found at: [https://www.iso-ne.com/static-assets/documents/2022/06/2022\\_reo.pdf](https://www.iso-ne.com/static-assets/documents/2022/06/2022_reo.pdf).**

As the Council is also aware, the project was selected and approved as part of the Shared Clean Energy Facility (SCEF) Program. The SCEF program was developed and approved by a combination of the state's electric distribution companies, the Connecticut Department of Energy and Environmental Protection (DEEP) and the Connecticut Public Utilities Regulatory Authority. By including the project in the SCEF Program, these agencies deemed that the project would be a necessary part of achieving Connecticut's zero-carbon emission goals from the electric generation sector.

With that by way of preamble, Glenvale responds to the interrogatories sub-parts as follows:

- a) The proposed facility would be necessary for the electric power supply of the state. As indicated above, ISO perceives a significant need for the development of additional electric generation projects to ensure electric power supplies. This project will assist in that endeavor.
- b) The SCEF program is a competitive bid program whereby the renewable energy projects with the lowest costs are the ones that are selected for contracting. The project is therefore necessary to ensuring a competitive market in renewable electricity generation.
- c) The facility would also contribute to the forecasted generating capacity requirements for the reasons set forth above. ISO-NE is forecasting a significant need for the development of renewable energy capacity, and this project will assist in that endeavor.
- d) The facility will reduce dependence on imported energy resources as the facility will generate electricity solely from solar resources. Therefore, no imported energy resources will be needed for this project to generate electricity.
- e) The facility will diversify the state's energy supply mix. According to *On the Horizon*, two-thirds of the proposed energy projects in the ISO-NE Queue are wind energy projects, and solar is only 9% of the current Queue. Any increase in solar project development will serve to diversify the energy supply mix.
- f) The proposed facility will enhance reliability as it generates the bulk of its electricity during times that are traditionally peak demand times in Connecticut, namely during hot late spring and summer months. Those are the times of year that the facility would be anticipated to generate the most electricity (due to the increased photoperiod during that time of year), therefore the facility would act as a peak shaver. Because the rate for electricity from the project is fixed, pursuant to the requirements of the SCEF program, the facility will not only enhance reliability, but will assist in lowering costs during these peak demand times by displacing older, more costly resources from dispatching to the grid.

### Site Components and Solar Equipment

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



**Yes, the wiring is installed on the racking (secured in steel purlins or CAB cable management systems) and transitioned underground. All wiring is safe to touch, complies with electrical code and UV rated for outdoor use and direct bury, if utilized.**

23. Would the single axis tracker system move along the east-west or north-south axis? Submit a specification sheet of the tracking system.

**The tracker table will run along the North-South axis. The PV modules mounted on the tracker table will rotate along East-West axis. Valmont trackers are currently being contemplated, and the specifications for those trackers are attached as Exhibit C. Although Valmont trackers are currently being contemplated, an equivalent tracker system may be used. Final equipment vendors and systems will be determined immediately prior to construction.**

### **Interconnection**

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

**The Project was reviewed by ISO-NE's Reliability Committee. It was determined to have no significant adverse effect on the reliability or operating characteristics of the transmission facilities and issued a letter under Section I.3.9 of the ISO Tariff on December 17, 2021.**

25. Referencing Application page 8, an abutting property owner expressed concern about electromagnetic safety. How was this resolved?

**Glenvale has had Exponent Inc. review the project. Upon initial review Exponent expects that the project will not produce unacceptable levels of electromagnetic-fields. Glenvale requests that the Council refer to the attached report, Exhibit D, from Exponent titled; "Burlington Solar One Report on Electrical and Magnetic Fields." This report discusses a similarly sized solar development.**

26. What are the industry Best Management Practices for Electric and Magnetic Fields at solar facilities?

**Glenvale has followed industry guidance on Best Management Practices for Electric and Magnetic Fields at solar facilities including locating inverter and transformer equipment away from abutting property lines and using underground cabling where practical.**

## Public Safety

27. Would the project comply with the current Connecticut State Building Code, National Electrical Code, the National Electrical Safety Code and any applicable National Fire Protection Association codes and standards including, but not limited to, NFPA Code Section 11.12.3?

**Yes, the project will comply with all applicable codes and requirements.**

28. In the event of a fire or emergency, describe procedures that will allow emergency responders to shut down the facility.

**In the event of a fire, the recloser will automatically trip the site because it will detect a fault in the system. There will also be a physical disconnect located at the point of interconnection that can be manually disconnected to shut down the site. Local fire department and utilities will have access to the site and shutoff via a Knoxbox. See the attached emergency action plan template for reference, Exhibit E. Additionally, Glenvale's contractor will contact local emergency responders to provide training and information regarding the Project that will be useful to emergency response personnel in the event of a fire or other emergency at the site.**

47. In the event of a brush or electrical fire, how would Glenvale mitigate potential electric hazards that could be encountered by emergency response personnel? What type media and/or specialized equipment would be necessary to extinguish a solar panel/electrical component fire?<sup>1</sup>

**In the event of a fire causing an electrical fault, the project will shut down as described in the response to question 28. A site specific safety plan will be provided to all authorities detailing shut down procedures as the designs are finalized. Standard electrical fire procedures will apply.**

29. Are there are private water wells in the vicinity of the site? If yes, what methods would be used during construction to protect the wells and/or water quality from potential impacts related to post driving/drilling?

**Properties in the vicinity of 56 River Road are not served by a public water supply and therefore developed residential properties are presumed to have private water wells. Vibrations from installation of racking systems for the solar panels are not anticipated to**

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<sup>1</sup> Note: In the Council's original interrogatories, this interrogatory was numbered as #47. This numbering has been kept in these responses to avoid confusion.

cause sediment releases, and there should be no disruption to either well water flow or quality. Glenvale is committed to implementing the Resource Protection Plan that was included in the Application as well as complying with all requirements in the Erosion and Sedimentation Control Plan. Together, they provide protection for both groundwater and surface water.

30. Application p. 8 states the inverter was relocated 366 feet further into the site to move it away from a nearby residence and property; however, page 14 states the inverter is 137 feet from the property line. Clarify.

**The inverter was relocated further to the east from its original location nearer to the point of common ownership with the utility. The inverter's revised location is 137+/- feet from the nearest property line, which will be further than the original proposed location (approx. 70 feet.)**

31. What noise-generating equipment would be installed at the site? Would operation of the proposed facility meet the applicable Department of Energy and Environmental Protection (DEEP) Noise Standards at the nearest property boundary?

**Noise will be generated by a single Medium Voltage Power Station (MVPS), which houses both the inverter and transformer, and by tracker motors when in operation. The equipment is inactive at night, and the MVPS is the primary source of noise. As explained in Section 3.9 of the Environmental Assessment (page 33), operation of the proposed facility would meet DEEP noise standards at the nearest property boundary, 137' north-northwest of the MVPS. The applicable standard is 61 dBA: at the nearest property boundary, the sound level is calculated to be 54.6 dBA.**

### **Environmental**

32. Referring to Application p. 12, has the State Historic Preservation Office provided comment on the project? If so, provide a copy of the response.

**The State Historic Preservation Office (SHPO) issued a letter on March 9, 2023, after the submission of Glenvale's application to the Council. Attached as Exhibit F (SHPO Letter Dated March 9, 2023).**

33. Referring to Application pp. 9-10, does Glenvale intend to graze sheep at the site? If yes, would an on-site water source and outbuildings be necessary? What is the status of discussions with local sheep farmers?

**Glenvale intends to include seasonal sheep grazing as an agricultural co-use of the site. An on-site water source will be required. Glenvale intends to site a drilled well inside the**

**Project's perimeter fence. Glenvale has consulted with a local sheep farmer to plan for the quantity of sheep to maintain the site and resources needed to support the well-being of the sheep. An outbuilding will not be required.**

34. Referring to Application Attachment C, in January 6, 2023 email correspondence to the Town there is reference to "a sheep grazing function which would require drilling a well." Explain.

**Please refer to response to question 33.**

35. If temporary or permanent electric fence is used at the site to create defined pasture areas for livestock within the solar field, what types of safety measures are in place to protect the public and emergency response personnel from electric fence shock hazards?

**Temporary electric fencing will be used to define pasture areas, all of which will be inside the Project's perimeter fencing. The electric fence is not of a voltage high enough to be a health risk to people. The electric fence will have warning signs and be disabled by a switch accessible to fire, safety and maintenance personnel.**

36. Referring to Application Attachment G, Appendix C, in the Department of Agriculture's August 16, 2022 material impact to prime farmland soils determination, DOAg states it is based on:  
*"1) The entirety of the farmed acres will be brought out of production by the project and 2) Glenvale Solar has not provided our Department with concrete plans or commitments to develop significant agricultural co-uses on the project site."* What agricultural co-uses were recommended by DOAg?

**The DOAg did not provide any recommendations for agricultural co-use on the site. Glenvale had two meetings with DOAg staff in which the Department indicated that it would be receptive to co-use ideas such as sheep grazing or pollinator friendly habitat. However, the Department did not indicate a specific set of requirements for DOAg to conclude the Project would have no impact to agriculture.**

**Since those meetings, it has come to Glenvale's attention that the DOAg has now recommended certain standards for sheep grazing and thus, Glenvale intends to adhere to said standards, attached hereto as Exhibit G (Department of Agriculture Standards for Sheep Grazing).**

37. What best management practices could be employed to allow for the future restoration of on-site prime farmland soils?

**One of the simplest predictors of soil health is the quantity of SOM in the soil. In general, higher levels of SOM and reduced levels of mechanical disturbance support greater soil biodiversity. A well-structured soil with higher levels of SOM also improves the moisture holding capacity of the soil, the nutrient density of the soil, and the ability of crops to resist drought. Soil health is most strongly affected by management practices. Tillage is one of the practices that reduces the organic matter level in the soil and should be avoided to prevent soil erosion. In addition to increased rates of carbon sequestration and enhancements to soil biodiversity, a long-term grassland cover will virtually stop the ongoing soil erosion that is occurring at different rates across the different farm fields.**

**Glenvale believes that farmland sites can be developed and managed as a renewable energy facility while preserving and enhancing farmland soils through grassland management during its operation. A return to an agricultural use after decommissioning will more likely be influenced by the economic conditions at decommissioning and whether they favor farmland operations or competing interests for residential, commercial or industrial development.**

38. Referring to Application Exhibit G- Environmental Assessment p. 19, it states the sediment traps will be removed and stormwater basins will be installed. Describe the sediment trap removal process and ground restoration in the sediment trap area(s).

**It is more accurate to characterize the post-stabilization action as a conversion of the sediment traps rather than removal. Upon final site stabilization, the sediment traps will be converted to permanent stormwater management basins by removing any accumulated sediments and sediment baffles if applicable and installing permanent outlet control structures.**

39. Referring to Application Exhibit G- Environmental Assessment p. 22, the weblink for footnote 12 does not connect. Revise to include a connecting weblink.

**The updated link is: <https://clear.uconn.edu/projects/landscape/ct-forestfrag/>.**

40. 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? If not, why not?

**Runoff from the panel drip edges is not anticipated to create significant dripline erosion. The proposed tracker system panel configuration will shed runoff to the east and west with changing aspect throughout the day. As a result, channelization below the drip edge is not expected.**

41. 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.

**The requested photographic documentation is attached as Exhibit H.**

### **Facility Construction**

42. Has Glenvale met with the DEEP Stormwater Division and/or Dam Safety Division regarding permitting requirements for the proposed stormwater basins? If yes, when? Describe any recommendations, comments or concerns about the project provided by the Stormwater Division and/or Dam Safety Division, including, but not limited to, water quality impacts from animal waste related to sheep grazing on the site.

**Glenvale met with representatives of DEEP in a pre-application meeting held on August 2, 2022. Two recommendations were noted:**

- **Stabilize as work is being done and providing extra protection to the drip line where slopes are greater than 10%;**
- **Emphasize to the CSC the preservation of the vernal pool and enhancements to preserve the vernal pool and wetland areas.**

**DEEP presented no comments, concerns or recommendations related to potential agricultural co-uses.**

43. Application Site Plans EC-3 and EC-4 show construction occurring in two phases. Would tree clearing and grubbing be conducted in phases or all at once? What construction activities would be completed in Phase 1 before Phase 2 begins?

**Clearing in Phase 1 would be limited to the areas needed to establish the stormwater management features and installation of perimeter erosion control measures. Phase 2 includes the remainder of the site interior to these control measures. Refer to the plans and notes for more details.**

44. Application Site Plans EC-3 and EC-4 show sediment trap outfalls directing water into perimeter silt sox. How will stormwater outflows be controlled to avoid silt sox overtopping or breaching during heavy rain events?

**Outflow rates from the basins will be controlled by the capacity of the culvert and weir. Moderate flows can typically be tolerated by the proposed silt fence and silt sox. If necessary, based on field conditions during construction, straw bales can be added to the upslope side of the silt fence to provide structure and filtering capability.**

45. What is the minimum road width required for post-construction use? Does this include emergency response vehicles?

**The minimum access road width, including emergency response vehicles, is 12 feet. The plans provide for 2-foot shoulders on each side.**

46. Has a comprehensive geotechnical study been completed for the site to determine if site conditions support the overall Project design? If so, summarize the results. If not, has Glenvale anticipated and designed the Project with assumed subsurface conditions? What are these assumed conditions?

**Further subsurface investigations (pile driving tests) will be conducted before finalizing project design. These will determine the foundation design for the racking. Currently, we are assuming that standard I beams can be driven in the ground. Alternate options could be drilling screws in the ground or pre-drilling 5-9" diameter holes, backfilling with gravel/concrete mix and driving I or C beams.**

47. Would the post-construction stormwater detention basins retain water during the Spring due to an elevated water table? If yes, how would water from the elevated water table affect the stormwater storage capacity of the basin? Would larger basins be required to compensate for lost storage capacity?

**The design accounts for the possibility of seasonally high-water tables. The northern and southern basins have low-level outlet culverts proposed 1-ft above the basin bottom. Long-term standing water above the elevation of the culvert invert is not expected. The smaller basin to the western side of the site does not have a culvert proposed and may experience**

ponding to the invert elevation of the outlet weir (1.5-ft above basin bottom). Even if the starting water surface elevation in these basins is at the invert of the culverts (or weir for the western basin), proposed flow rates are predicted to decrease when compared to existing conditions. Larger basins are not required to compensate for an elevated water table.

### **Facility Maintenance/Decommissioning**

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

**Replacement modules will be stored in an offsite location. Damaged panels would be detected through routine maintenance, inspection, and remote system monitoring.**

49. Has the manufacturer of the proposed 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? Submit laboratory test results that indicate the proposed solar modules would not be characterized as hazardous waste. If test results are not available, and if the project is approved, would Glenvale install solar modules that are not classified as hazardous waste through TCLP testing?

**The project has not made a final selection of panels. However, the project will ensure that it will install solar modules that are not classified as hazardous waste through TCLP testing.**

**Please refer Section 1.2.2 & 1.2.3 of the provided white paper titled “Health and Safety Impacts of Solar Photovoltaics,” attached as Exhibit I.**