

Witness: **Jacob Weiser (CS Energy) – 8/4/2020**

Question CSC-32:

Regarding Response 4 and the accompanying diagram, provide the following:

- a) Provide the acreage of actual wetland tree clearing (Spadefoot report lists 1650 SF of wetland impact);
- b) Sheet CL-200 indicates the area to be grubbed is 110 acres. Does this value include both field and forest areas? If so, why is grubbing necessary in the existing field areas?
- c) What ground cover currently exists in the former farm fields?
- d) The tree clearing/grubbing notation was not used in the Array #4 area, please clarify. Was this area included in the tree clearing quantities provided on Sheet CL-200?

Response:

- a) The total acreage of actual wetland tree clearing is 1,822 SF. The 1,650 SF of wetland clearing listed in the Spadefoot report is included in this value. 1,822 SF of wetland clearing has been cut to provide an overhead utility corridor to the interconnection point. This area was hand-cut with no grubbing as approved by CT DEEP as part of the project's Phase I SWPPP. We have updated the clearing plan Exhibit A to add additional clarity.
- b) 110 acres accounts for the total area inside of the array fence, both forested and field. This total area consists of 50.3 acres of field areas and 59.7 acres of forested areas. We have updated sheet CL-200 to reflect that we will be mowing the fields and grubbing the forested areas.
- c) Currently, no crops are being cultivated on any of the fields. The fields consist mostly of native grasses.
- d) Array #4 is a field and did not contain trees that would need to be cleared or grubbed. This area is not included in the tree clearing quantities on Sheet CL-200. This area is only contained within the Area to be Grubbed (Area Inside Security Fence) calculation shown in Clearing Plan Note #8 on sheet CL-200. As mentioned in our response to point b of this question, this area will be mowed and not grubbed.

Witness: Jacob Weiser (CS Energy) – 8/4/2020

Question CSC-33:

Please clarify Response 21, - Is the intent not to do grubbing as indicated on the site plan. If grubbing of stumps is proposed, why is tree stumping only limited to a specific area if the entire utility line corridor is forested?

Response:

The entire length of the utility corridor will be cleared but not grubbed. We are keeping the stumps in place. While the clearing plan color coding shows this correctly with all regions in yellow denoting clearing with no grubbing, the underlying cross-mark hash denoting tree clearing with grubbing for the limited region is incorrect.

We have corrected both the clearing plan Exhibit A and the civil plans Exhibit B to fix this error.

Witness: Jacob Weiser (CS Energy) – 8/4/2020

Question CSC-34:

Referring to p. 17 of the September 2019 Spadefoot Toad report, have Mitigation Tasks 5 & 6 been completed to date? If not, when is completion anticipated? *(#5 Breeding pool reconstruction – completed no later than March 15th, 2020. #6 Breeding pool plantings, April 2020)*

Response:

The breeding pool reconstruction under mitigation task 5 was completed on May 12th, 2020. The environmental monitor, All Points, had subcontracted Quinn Ecological to provide direct supervision of this reconstruction. The area of the pool was stabilized with seed approved by the environmental monitor. Please see the letter from Quinn Ecological, LLC noting their review and approval of the reconstruction Exhibit C.

The breeding pool plantings under mitigation task 6 have not been completed as we are waiting for Quinn Ecological, LLC to complete an upcoming hydrology report for the area. The letter from Quinn Ecological, LLC in Exhibit C also highlights their approved plan for handling the plantings.

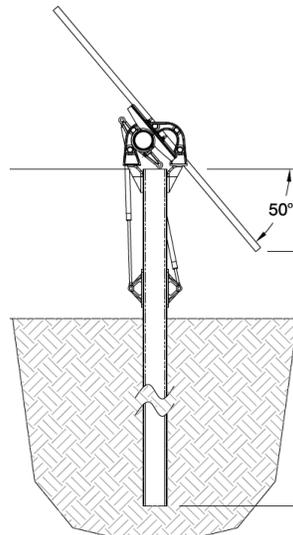
Witness: Jacob Weiser (CS Energy) – 8/4/2020

Question CSC-35:

What is the anticipated minimum and maximum height above grade of the solar panels?

Response:

Since this system is a single-axis tracker the height varies depending on the angle of the panel table to horizontal. The height of the system will be at its maximum 9ft-0in when its angle from horizontal reaches 50 degrees. The height of the system will be at its minimum 4ft-6in when the panel table lays flat at 0 degrees from horizontal. The bottom of edge of the solar panels will maintain a minimum of 1ft-0in from grade.



Witness: Jacob Weiser (CS Energy) - 8/4/2020

Question CSC-36:

The Grading & Drainage Site Plan sheets have a notation for *Stormwater Flow Control*. Provide more information/detail as to how these areas are designed and what materials will be used for construction.

Response:

Stormwater flow control design elements and materials are included in the G&D detail sheets (refer to Exhibit B). We have provided updated G&D plan sheets with additional linework to make the controls easier to see. Flow controls consist of swales and detention basins with outfall pipes and emergency spillways. In general, the system is sized to reduce post construction stormwater flows from the 25-year storm and emergency spillways (where appropriate) sized for the 100-year storm, to pre-construction flows. Additionally, the intent of the stormwater design is to be in conformance with low-impact development practices and minimize disruption of flow to existing wetland areas. Construction materials consist of natural soils, structural fill in select locations, corrugated metal pipe, steel trash racks, and riprap.

Witness: Jacob Weiser (CS Energy) – 8/4/2020

Question CSC-37:

After the Council’s approval of this Project in October 2018, the DEEP Stormwater Division has issued Proposed Modifications of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities which includes an Appendix I that specifically pertains to Solar Projects.

- a) Has NSSC discussed this Project with the DEEP Stormwater Division regarding adherence to Appendix I? If so, when and with whom? What specific changes, if any, has DEEP requested to conform to Appendix I? If not, has NSSC reviewed Appendix I, and if so, what modifications to the Project have been made to conform to Appendix I?
- b) Appendix I Section 1e requires a 100-foot buffer between any part of the solar array and wetlands. Given that portions of Arrays 1 & 2 do not conform to the buffer, what areas of the site are available for possible relocation of solar modules? Approximately how many modules/rows would have to be relocated to accommodate the 100-foot wetland buffer?

Response:

CS Energy (NSSC’s contractor) spoke with Neal Williams of the State of Connecticut Department of Energy and Environmental Protection, Bureau of Materials Management & Compliance Assurance, Water Permitting & Enforcement Division on August 5, 2020 regarding Appendix I. CS Energy and Mr. Williams discussed the 100-foot buffer question in subsection b above. Mr. Williams explained that Section (1)(e) of Appendix I only applies if all solar panels in the array have not been included as “effective impervious cover” for purposes of the Water Quality Volume calculation used to design sufficient stormwater controls.

Section (1) of Appendix I states:

“Roadways, gravel surfaces and transformer pads within the solar array are considered effective impervious cover for the purposes of calculating Water Quality Volume (WQV). In addition to these impervious surfaces, all solar panels in the array should also be considered effective impervious cover for the purposes of calculating the WQV if the proposed post-construction slopes at a site are equal to or

greater than 15% *or* if the post-construction slopes at a site are less than 15% and the conditions in (a) – (e), inclusive, below have not been met:

....

(e) A one hundred (100) foot buffer should be maintained between any part of the solar array and any “watercourses” as that term is defined in Conn. Gen. Stat. § 22a-38. The buffer shall consist of undisturbed existing vegetation or native shrub plantings” (emphasis added).

Mr. Williams explained that if the project has been designed with large enough stormwater controls to capture the Water Quality Volume calculated to include all solar panels within the array as impervious cover, then subsection (e) requiring a 100 foot buffer between the solar array and any watercourses does not apply. He explained that if all solar panels within the array are not included in the Water Quality Volume calculation, then the conditions in subsections (a)-(e) in Section (1) of Appendix I (for sites with post-construction slopes of less than 15%) apply.

For this project, the Civil Engineer of Record has performed calculations, attached as Exhibit D, to confirm that the project’s current design includes stormwater controls that are sufficient to capture the total Water Quality Volume calculated to include as effective impervious cover all solar panels within the array, as well as the roadways, gravels surfaces and transformer pads within the array. Therefore, NSSC does not need to rely on conditions (a)-(e) to support its calculation of Water Quality Volume for the project.

CT DEEP did not request any changes to conform to Appendix I during our call. However, due to other project priorities and deadlines, the CT DEEP is still completing its review of the registration application for coverage under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities for the construction and installation of the Project that was submitted to CT DEEP on May 28, 2020.

After drafting this response to CSC-37, CS Energy provided the draft response to Mr. Williams and to Mr. Chris Stone of the Stormwater Section, Water Permitting & Enforcement Division, Bureau of Materials Management & Compliance Assurance, Connecticut Department of Energy and Environmental Protection. In an email, dated August 11, 2020, Mr. Stone confirmed that this response is accurate.