Goose Prairie EFSEC review – Data Requests, Questions, Notifications to Applicant

Note: Information requested for SEPA purposes is often also needed for a SCA decision. However, because the timing for SEPA comes first, that is the only category identified so that the applicant understands the time sensitivity of the request.

Comment Category[1]	ASC Section	Item	Question or Information request.	Applicant Response
SEP-1	1.B Project Summary	The document mentions "flow battery technology".	There did not appear to be any other discussion explaining what flow battery technology is. Please provide a little more info so we can understand how it might differ from regular battery storage (e.g., indicate what amount of hazardous/ dangerous chemicals or materials are involved and whether the housing for this technology is any different than for regular battery storage).	
SEP-2	2.A.2.f Major equipment – Solar Modules	"This increases the output of each module by capturing additional energy from sunlight reflected off the ground to the back of the module."	Please provide a little more information on how this works. Does it affect heating of the earth or solar rays potentially absorbed by vegetation on the ground?	

[1] **SEP** – Info needed for SEPA determination; **SCA** – Info needed for SCA decision; **Pre-C** – Info needed prior to construction, **CLA** – Clarification information, **INF** – Information for the applicant

SEP-3	2.A.2.g Construction	Once the facility construction begins, the onsite head count would begin to increase and peak at approximately 300 workers. Vehicle traffic for onsite personnel is expected to be at a ratio of 0.5 vehicles per worker.	How much acreage and what surface area type is planned to be used for construction parking and construction laydown? This temporary disturbance should not occur on any high value difficult-to- restore-habitat.	
SEP-4	2.A.5 BMPs – Noise	Limit use of major excavating and earth-moving machinery to daytime hours.	What are considered daytime hours? How will that be monitored?	
SEP-5	2.A.5 BMPs - Noise	To the extent practicable, schedule construction activity during normal working hours on weekdays…. Some limited activities such as concrete pours, would be required to occur continuously until completion;	"To the extent practicable" is not a commitment that can be monitored or tracked. What other limited activities would need to occur continuously? What is the definition of continuously? How do you define normal working hours, 7 a.m. to 5 p.m.? How loud would those activities, that needed to occur continuously, be at the property boundary? Please provide additional information addressing these concerns.	

SEP-6	2.A.5 BMPs – Noise	Limit possible evening shift work to low noise activities such as welding, wire pulling, and other similar activities, together with appropriate material handling equipment;	Is this the criteria that would be used to limit evening shift work?	
SEP-7	2.A.5 Mitigation Summary – Habitat – Activities in the draw	The only Facility components in this area will be the collector electrical infrastructure and civil road infrastructure necessary to connect the Facility.	Provide additional detail on proposed stream crossing construction, location, and potential impacts to wildlife, water quality, and wetlands. Include info about the civil road infrastructure near the draw. Could there be a road crossing over the draw? If yes, it may be important to avoid using a culvert in the draw in order to retain the current functions of the corridor.	
SEP-8	3.2, 4.2 Air emissions	Information in Section 4.2.C.1 does not include any quantification of expected emissions during construction. This information is required by WAC 463-60-225 (1).	Please provide calculations and quantitative summary of expected emissions during construction associated with all expected air emission sources including construction equipment, fugitive dust and concrete batch plant[2].	

[2] The application provides very little to no information about a concrete batch plant. Several data requests ask for information about the concrete batch plant.

SEP-9	3.3,4.3, Attach. O Wetlands	The provided wetland report did not identify any wetlands located within the project limits. Several areas of interest were identified on aerial imagery.	Ecology field visit required to field verify application information will need to be conducted in April or early May.	
SEP-10	3.3,4.3, Attach. O Wetlands	The Goose Prairie Solar Project Wetland Delineation Report (Tetra Tech 7/2020) identifies soils pits.	Provide a map or aerial images showing the location of the soil pits identified in the report.	
SEP-11	3.4, 4.4 Water Quality wastewater discharges, 3.7 Water Quantity	Section 2.B.8.e. references washing solar panels two to four times per year, requiring 250,000 gallons of water each time. The area is listed as an aquifer recharge area.	Section 3.4 does not address how this water would be disposed of or discharged after use. Please provide information regarding disposition of wash water and potential impacts including but not limited to; erosion, water quality, stormwater management, vegetation management, and the aquifer recharge area.	

SEP-12	3.4, 4.4 Water Quality wastewater discharges	Section 2.B.8.e references washing solar panels two to four times per year, requiring 250,000 gallons of water each time.	Section 3.4 does not address the composition of wash water. Please provide information regarding the composition of the wash water and any additional detergents, additives, or other substances to be used during panel washing. Include information on any potential impacts these substances may have relating to but not limited to water quality, vegetation management, and the aquifer recharge area.	
SEP-13	3.9,4 4.9, Attach. G Wildlife	Additional information is needed to aid in evaluating and calculating impacts to existing shrub-steppe and CRP habitat.	Please provide the following information: row spacing, panel height at solar noon, the size of a panel, and the number of panels in each of the three project area fenced polygons.	
SEP-14	3.11.a Waste Management	Depending on the battery system technology	Please describe in further detail lifecycle of battery and battery	

		selected for the Facility, batteries would need to be replaced every 5 to 20 years and would follow specific protocols for disposal of battery components at an approved facility for disposal or recycling.	disposition. Include information as to capacity of disposal facilities to accept battery waste, options for disposal vs. recycling, and which protocols for disposal are proposed.	
SEP-15	3.16, 4.16, Attach. J Noise, Glare, Aesthetics	Key observation point visual impact imulations are provided for KOP #1 and KOP #6	Please provide either; simulations available for other KOPs, or a rationale for these not being provided.	
SEP-16	3.16, 4.16, Attach I Noise, Glare, Aesthetics	Noise impacts from construction were calculated at varying distances from the equipment, but with no calculated impacts at receptors.	Calculate noise levels and impacts during construction using receptors identified in noise impact analysis for operation outlined in Appendix I.	
SEP-17	3.16, 4.16, Attach. K Noise, Glare, Aesthetics	Anti-reflective measures identified in application (4.9.C.1, 4.16b.D) do not appear to be reflected in Attach. K	Please clarify if the anti-reflective measures identified in the application were incorporated into the analysis in Attach. K.	
SEP-18	3.20, 4.20 Traffic and Transportation	Section 4.20.C.1 references a temporary concrete batch plant and directs the reader to Section 2.B.8.d. There is no discussion of water use for a temporary concrete	Identify the possible locations for the temporary concrete batch plant on the site map provided in Appendix B and discuss the water use or wastewater disposal	

		batch plant in Section 2.B.8.d.	considerations covered in Section 3.4.	
CLA	2.A.2.f Inverters and Transformers	The inverters and step-up transformers are mounted on concrete pads through the Facility.	Please provide approximate number of inverters and step-up transformers.	
CLA	2.A.2.i Site Restoration	"Due to the…anticipated benefits to local soil quality.."	Describe and provide support for anticipated benefits to soil quality. Please describe or provide reference to where information can be found in application materials.	
CLA	2.A.5 Mitigation Summary	Column 3, Expert agency participation	Does the information in this column indicate agency participation that has occurred?	
CLA	2.A.6 Project Plans and Submittals	Operations Phase Health and Safety Plan – The Construction Phase Health and Safety Plan….	Please verify and correct if needed: It appears this sentence should be corrected to say "The Construction Phase Health and Safety Plan…"	
CLA	2.B.1.a Soils and Slopes		Is the information provided 2.B.1.a. for the soils and slopes within the survey area or the facility area extent?	
CLA	3.18, 3.19, 4.18, 4.19 Attach. H Archaeological, Historical, and Cultural Resources	Application and Attach. H do not accurately reflect criteria for requiring site protection	Application and Attach H (Cultural Resources Survey Report) need to be amended to reflect requirements for site protection specifically in relation to RCW 27.53.	

INF-1	2.A.5 Mitigation Summary – BMPs Fire Prevention	Additionally, the Applicant would provide training to fire responders and construction staff on a recurring basis during the life of the Facility.	Is there a proposed frequency of recurring training? This will be a required component of any training plan developed.	
INF-2	3.16, 4.16, Attach. J		Minimal mitigations are provided related to visual impacts. Additional best practices are available to address the visual impacts of solar facilities based on the BLM Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities (2013). The identification and application of relevant mitigations may further reduce the Project-related visual impact predicted in the analysis (e.g., vegetation screening, color treatment of surfaces).	