Data Request #	Section/ Page	Section	Торіс	Information Request	Applicant Response
Veg-4	Part 4.8; Attachment L	Vegetation	Revegetation	Provide information clarifying how revegetation will lead to restoration. Within the WDFW Wind Power Guidelines, temporary impacts to habitats are those that are restored following construction. Within the definition "the goal of restoration of temporary impacts should be to restore habitats to a condition at least as good as its pre-project condition".	The Vegetation and Weed Management Plan (to be provided in September 2023) will outline the native seed mixes that will be used during revegetation efforts in both grassland and shrubsteppe communities. Attempts to minimize temporary disturbance will be made, particularly temporary disturbance to shrubsteppe communities, which take longer to reestablish during revegetation. Revegetation of grasslands will be completed by the end of the growing season that follows the completion of construction. This will allow for reseeding during post-construction and ample time for the site to receive adequate rainfall, which is a limiting factor for revegetation in Eastern Washington. Shrubsteppe communities will be revegetated to pre- project conditions within five years post-construction. If shrubsteppe is not reestablished by year five the impact will be mitigated as permanent. Reference sites within the Project Siting Area or very nearby will be used to determine if revegetated sites are providing similar habitat function using standard metrics (e.g., shrub height, shrub density, percent ground cover, and percent bare ground).
Veg-5	Part 3.8; Part 4.8; Attachment E	Field surveys were constrained to the Project Siting Area; however, the exact extent of the area reviewed during the surveys is not provided in the ASC. The ASC submittal does not include surveys for special status plants or noxious weeds. The absence of surveys for special status plants and noxious weeds limits the ability to evaluate all Project impacts on special status plants and noxious weeds.		Provide local extent of priority habitat adjacent to the Project Siting Area to provide spatial context to the impacts of priority habitats within the Project Siting Area.	See Attachment Veg-5.
Veg-6	Part 4.8	Vegetation	Vegetation and Weed Management Plan	Provide a draft Vegetation and Weed Management Plan that can be reviewed in consultation with EFSEC, the Benton County Noxious Weed Control Board, and WDFW. The revegetation plan should include specific revegetation and restoration measures that support the classification of impacts as "temporary" and "altered".	A draft Vegetation and Weed Management Plan will be completed and submitted to EFSEC in September 2023.

Data Request #	Section/ Page	Section	Торіс	Information Request Applicant Response	
Wild-2	Part 4.9	Wildlife	Invasive animal species	The ASC does not provide information on invasive animals documented or with potential to occur in the Project Area, which is a SEPA requirement. Provide information on whether invasive animal species are known to or have the potential to occur in the Project Area.	No invasive animals were documented during field surveys. The Eastern Washington Regional List of Invasive Animals includes seven insects, most of which are associated with croplands and would not be present in the Project Area. Of the nine Other Animals listed, five require perennial water, which is not present on the site. Mediterranean white snails are typically found in vineyards or other croplands. Mediterranean white snails were detected at the Port of Tacoma in 2005. This population was addressed through joint efforts by the Washington State Department of Agriculture, the U.S. Department of Agriculture, and the Port of Tacoma. No snails have been detected outside of the port area since. Nonetheless the Washington Invasive Species Council retains it on their Priority list of potential invasive species in Washington. No nutria or feral swine were recorded during field visits, nor was evidence of their presence (i.e., signs of rooting by feral swine). Information retrieved from the Washington Department of Fish and Wildlife and Washington Pest Watch at https://invasivespecies.wa.gov/wp- content/uploads/2019/10/EWARegionalList.pdf and https://invasivespecies.wa.gov/wp- content/uploads/2019/07/MediterraneanSnail-FactSheet.pdf.
Energy-1	Part 2; Part 3.10	Energy and Other Natural Resources	Material quantities - ASC does not include an estimate of quantities of consumption or removal of energy or natural resources during construction or operations	Provide the approximate quantities of materials that the Project would use or consume during construction and operations.	See Part 2 Section B.8.c (Energy), Section B.8.d (Water Use - Construction), and Section B.8.e (Water Use -Operation). Specifics of the local utility connection to Benton Rural Electric Association and on-site backup diesel generator, if needed, will be determined at final design. No other energy or natural resources are anticipated to be used during construction or operations. Station service will be provided by Benton Rural Electric.
Land Use-23	Attachment E	Land Use, Natural Resource Lands & Shoreline Compatibility	Land Use	Clarify what reference was used to estimate that approximately 10 acres of mapped cropland (or 0.002 percent of GMA Agricultural lands) would be permanently disturbed. It is not clear if this calculation is based on the "mapped cropland" identified by the WSDA or mapped cropland identified in the 2022 Wildlife and Habitat Study Report.	The data source used to calculate mapped cropland in Attachment D of the ASC is WSDA Mapped Cropland.
Land Use-24	Attachment D	Land Use, Natural Resource Lands & Shoreline Compatibility	Solar panels and other project components within the Siting Area	Provide a new figure, presenting Figure 3 in Attachment D of the ASC with an overlay of solar panels and other project components within the Siting Area for better presentation of prime farmlands that will be permanently disturbed.	Figure 3 to Attachment D of the ASC is revised and attached to include the preliminary site plan as updated and provided to EFSEC on April 26, 2023. See Attachment Land Use-24 .

Data Request #	Section/ Page	Section	Торіс	Information Request	Applicant Response
Land Use-25	Attachment D	Land Use, Natural Resource Lands & Shoreline Compatibility	Solar panels and other project components within the Siting Area	Provide a new figure, presenting Figure 2 in Attachment D of the ASC with an overlay of solar panels and other project components within the Siting Area for better presentation of WSDA-mapped croplands that will be permanently disturbed including lands identified for vineyards and Conservation Reserve Program	Figure 2 to Attachment D of the ASC is revised and attached to include the preliminary site plan as updated and provided to EFSEC on April 26, 2023. See Attachment Land Use-25 .
Land Use-26	pt. 1 pg. 5	Land Use, Natural Resource Lands & Shoreline Compatibility	There is a potential to expand the Project in the future to accommodate growing local, regional, and industrial renewable energy demand. Before the Applicant commits to expanding the solar site, the Applicant wants to ensure the expansion will be able to maintain the same development standards as the initial Project including agrivoltaics and a thoughtful approach to cultural and natural resource preservation.	Have lease agreements been made/secured to enable future expansion?	BrightNight does have land secured that could be used for an expansion of the Project. However, BrightNight is focused on developing the first 500 MWs of the Project and will explore expansion plans with local and state stakeholders when a need develops in the regional energy market.
Noise-1	Part 4.16; Attachment Q, 2.0	Noise	Baseline Noise Calculations	The baseline calculations do not appear to refer to the correct reference. The below FHWA guide does not provide a means to calculate baseline noise levels, was it in reference to the FTA Transit Noise and Vibration Impact Assessment Manual (2018)?	The baseline calculations were made in reference to the FTA Transit Noise and Vibration Impact Assessment Manual (2018). This reference will be corrected in an update to Attachment Q
				 FHWA (Federal Highway Administration). 2006. FHWA Roadway Construction Noise Model User's Guide, FHWA-HEP-05-054 	which will be provided to EFSEC in August 2023.
Noise-2	Part 2, 3.4; Attachment Q	Noise	Hydraulic pile driver noise	Part 2, 3.4 mentions the use of a "hydraulic pile driver and/or auger". Include hydraulic pile driver noise levels in construction noise assessment as it is likely the loudest source between the two possible options presented.	See the Applicant's response to Data Request 1, Const-2. WAC 173.60.050 exempts temporary construction noise from the state noise limits. Nonetheless, the Applicant's noise assessment evaluates potential construction-related noise in ASC Attachment Q. The noise assessment addresses equipment noise from a hydraulic driller but did not include an impact pile driver. If needed during construction, adding the impact pile driver to the assessment does not significantly increase noise levels received at receptors (see Const-2 Response Memo). The temporary received noise levels at receptors identified in Table 7 of ASC Attachment Q will increase by approximately 3 dBA on average in areas where temporary impact pile driving is used. Construction may generate noise levels that exceed the ambient levels and has the potential to cause a temporary and short-term disturbance. As identified in the construction noise mitigation measures in Section 3.3 of Attachment Q, the Project will make reasonable efforts to minimize the impact of noise resulting from construction activities. The Const-2 Response Memo will be included in an update to Attachment Q. Specifically, the source sound level for impact pile driving will be added to Table 6 of Attachment Q, while the resulting modeled sound levels will be updated in Table 7 to Attachment Q.
Noise-3	Allachment Q, 3.2	Noise	Noise impacts	Table 7.	added to Table 7 of Attachment Q.
Noise-4	Part 4.16aC.1	Noise	Solar inverters	Confirm number of solar inverters used in the operational assessment.	There were 150 solar inverters modeled in the operational acoustic assessment.

Data Request #	Section/ Page	Section	Торіс	Information Request	Applicant Response
Noise-5	Part 4.16; Attachment Q, 4.2	Noise	500-kV transmission line	Incorporate the 500-kV transmission line into the model or the final noise impact results from Project operations once the layout is finalized.	Attachment Q will be updated to include the 500-kv transmission line option.
Noise-6	Part 4.16; Attachment Q, 4.2	Noise	Tracking system noise impacts	Provide noise impacts from the tracking system motors, outlined in the ASC, during operations. This possible source of noise should be included in the analysis of noise impacts and added to Table 8, Appendix Q.	Table 8 of Attachment 8 will be revised to include the tracking motors planned as part of the Project; however, they were not incorporated due to their low sound power level. With a sound power level of 50 dBA, at a distance of 10 feet from the resultant sound pressure level would be less than 29 dBA. Even though the Project incorporates a multitude of tracking motors, their cumulative sound contribution is not expected to materially affect offsite received sound levels The reason is related to both the low-level sound emissions of tracking motors and the logarithmic relationship between additive sound sources. Because the decibel scale is a logarithmic scale, if we have two different sound sources combining together we can't simply add the sound power or pressure levels. For instance, two sound sources with a sound power level of 50 dBA result in a combined sound power level of 53 dBA, as opposed to 100 dBA.
Noise-7	Part 4.16; Attachment Q	Noise	Noise sources	Provide which sources in Attachment Q, Table 8 were provided by an equipment manufacturer with the make and model; which were based on information contained in reference documents and what references; and which were based on empirical methods and what those methods are.	The sound power level information for the Project's operational equipment was compiled from a number of sources. The sound power levels for the step-up and substation transformers were calculated using the methodology recommended by the Electric Power Plant Environmental Noise Guide (Volume 1, 2nd edition) (Edison Electric Institute 1983), which is a methodology that is generally accepted by regulatory agencies. The sound power level for the inverters was obtained from the manufacturer specification provided by SMA. This reference will be added as a footnote to Table 8 in Attachment Q as well as to the references section. The sound power level for the BESS units was derived based on consultation with BrightNight and Tetra Tech's experience on other utility-scale solar facilities of similar size and capacity. The sound power level for the tracking motors were provided by Nextracker.
Noise-8	pt. 4 pg.123	Noise	The Applicant will include a backup generator for the O&M building.	How will the generator impact noise levels? Please include assement of noise impacts when in operations as well as when the generator is in standby.	At this stage of design, the details of the O&M building and its backup generator have not yet been determined. Furthermore, it is not standard engineering practice to evaluate noise impacts associated with emergency generators as they are not considered part of normal operations. Typically generators produce low-level sound in standby mode unless additional support is needed to service emergency events.
Noise-9	Part 4.16; Attachment Q, 4.3	Noise	Noise source locations	Locate active noise sources in Figure 2 and Figure 3. Sources should be differentiated by symbol and added to the figure legend. Included a zoomed in figure insert of the Solar Array Siting Area to detail the source locations from that area, or include as separate figures if needed.	A new Figure 4 will be added to Attachment Q to show the locations of active noise sources within the Solar Array Siting Area.

Data Request #	Section/ Page	Section	Торіс	Information Request	Applicant Response
Air-3	pt. 4 pg.123	Air	The Applicant will include a backup generator for the O&M building.	Please include an assesment of Air impacts that may result from storing and operating a backup generator.	At this stage of design, the details of the O&M building and its backup generator have not yet been determined. Use of emergency generators, if needed, is temporary as they are not considered part of normal operations and used to service emergency events.
Visual-1	N/A	Visual	Visual Disturbance	Please include a visual assessment of the (potential) O & M building and associated lighting.	The report titled Hop Hill Solar Energy Project Visual Resources Technical Report from October 2022 will be updated to include additional discussion on the O&M building and lighting in the impacts section.
Visual-2	N/A	Visual	Visual Disturbance	Please include a visual assessment of the portion of the Transmission Line alternative that would extend north of Cold Creek Rd to the Midway Substation.	A visual assessment will be completed during the federal NEPA process for the portion of the Transmission Line alternative that would extend north of Cold Creek Rd to the Midway Substation.
Visual-3	N/A	Visual	Visual Disturbance	Please include a visual assessment of the portion of the Transmission Line alternative that would diverge to connect to Wautoma Substation.	The report titled Hop Hill Solar Energy Project Visual Resources Technical Report from October 2022 will be updated to include option 2 POI and option 3 POI.
Rec-1	Part 3.17	Recreation	Hunting	According to the ASC, during operations, hunting could be limited in areas where the gen-tie line structures would occur within the eastern boundary of the Transmission Line Corridor Siting Area. Provide the area of hunting ground that will be excluded at gen-tie line structures and the percentage limited due to the Project compared to the total area of hunting grounds within the Project Area.	There are 3,373 acres of private hunting lands in the Siting Area, and 0.009 acres of permanent impact from gen-tie poles within the hunting area (0.0002%). The Project does not preclude access to private hunting lands or the ability to hunt in the Transmission Line Corridor Siting Area. The pole locations take up a negligible amount of space on the east side of the private hunting area and will not reduce the ability to hunt on the property. See Attachment Rec-2 .
Rec-2	Part 3.17	Recreation	Hunting	Provide a figure showing existing hunting areas and access points. On the figure, identify potential land exclusions, including areas for hunting.	See Attachment Rec-2 . Potential land exclusions are limited to the pole structure locations. The Project does not preclude access to private hunting lands or the ability to hunt in the Transmission Line Corridor Siting Area, transmission line easement, or on the surrounding private hunting lands.
Rec-3	Part 3.17	Recreation	Hunting	Provide more detail as to why the areas containing the gen-tie structures would limit access to hunters. The ASC states that the gen- tie line will be limited to the proposed easement area and will not preclude access or use of public lands under the line	See Attachment Rec-2 . Potential land exclusions are limited to the physical pole structures. The Project does not preclude access to private hunting lands or the ability to hunt in the Transmission Line Corridor Siting Area, transmission line easement, or on the surrounding private hunting lands.
Arch-1	Part 4.18; Attachment M	Archaeological and Historical Resources	Archeological and Historical Resources	Update descriptions and mapping of the area(s) investigated for archaeological and historical resources.	Arch-1 through Arch-4 are updated and incorporated into the draft Cultural Resources Report. The IDP will be provided as an attachment to the final Cultural Resources Report.
Arch-2	Part 4.18; Attachment M	Archaeological and Historical Resources	Archeological and Historical Resources	Provide definition of direct impacts (physical disturbance, visual effect, setting disruption, etc.).	See the Applicant's response to Arch-1.
Arch-3	Attachment M	Archaeological and Historical Resources	Inadvertent Discovery Plan (IDP)	Provide the Inadvertent Discovery Plan (IDP) referenced in Attachment M.	See the Applicant's response to Arch-1.
Arch-4	Part 4.18; Attachment M	Archaeological and Historical Resources	Archeological and Historical Resources	Provide correct references to the applicable federal, state, and local regulations within the ASC and Attachment M.	See the Applicant's response to Arch-1.
Arch-5	Part 4.18; Attachment M	Archaeological and Historical Resources	Archeological and Historical Resources	Provide results of additional archaeological and historical resources surveys within the Solar Array siting Area and on adjacent parcels.	Updated survey results will be provided in the final Cultural Resources Report.

Data Request #	Section/ Page	Section	Торіс	Information Request	Applicant Response
Arch-6	Part 4.18; Attachment M	Archaeological and Historical Resources	Archeological and Historical Resources	Provide concurrence letters from DAHP regarding the results of all archaeological and historical resources surveys	Following completion of additional survey work, the revised Cultural Resources Report will be provided to DAHP for concurrence. DAHP will not issue concurrence until surveys are reporting are complete.
Public Health and Safety-1	pt. 3 pg. 70	Water	Fire response	Will a water cistern be on site for firefighting?	Fire suppression equipment and resources are determined through coordination with the local fire authority. Should a water source for fire suppression be required, a water tank will be installed on the Project facility.

Attachment Veg-5

Veg-5: Provide local extent of priority habitat adjacent to the Project Siting Area to provide spatial context to the impacts of priority habitats within the Project Siting Area.

In order to address the question regarding the local extent of Priority Habitat types adjacent to the Project Siting Area a summary of habitat types within one mile of the Solar Array Siting Area has been provided (Figure to Attachment Veg-5). Field surveys were not conducted within one mile of the Solar Array Siting Area so desktop data from the National Land Cover Dataset was used instead. Field verification of habitat types was conducted inside the Solar Array Siting Area so more detailed habitat mapping has been completed and previously provided. Because of that, field verification and similarities between habitat types and land use inside and outside of the Solar Array Siting Area, some assumptions were made regarding habitat types outside of the Solar Array Siting Area regarding habitat classification. Land cover types in the NLCD was cross-walked into the Washington Department of Fish and Wildlife habitat classifications in the 2009 Wind Power Guidelines (Table 1). The main implication of that is that the areas shown as Herbaceous on Attachment Veg-5 have been recategorized as Croplands, Pasture, Urban and Mixed Environs because they are likely heavily grazed rangelands similar to what has been observed in the Solar Array Siting Area.

Project Habitat Type	Johnson and O'Neil (2001) Habitat Type	WDFW (2008) Priority Habitat	WDFW (2009) Wind Power Guidelines Habitat Type	WDFW (2009) Wind Power Guidelines Classification
Shrub/Scrub	Shrub-steppe	Shrub-steppe	Shrub-steppe	Class II
Hay/pasture				
Cultivated crops	Agriculture, Pastures		Croplands, Pasture,	Class IV
Herbaceous	and Mixed Environs	Not a Priority	Environs	
Barren land		Habitat		
Developed	Urban and Mixed Environs		Urban and Mixed Environs	
Open Water			Open Water	

Utilizing those cross-walked habitat classifications habitats inside and outside of the Solar Array Siting Area can then be compared and the context requested in the Data Request is available. Table 2 summarizes the acres of each habitat type inside and outside of the Solar Array Siting Area. In general, the land use across the region is consistent and includes primarily cropland and grazed rangeland, with some interspersed areas of shrub-steppe. The proportion of the Solar Array Siting Area that includes shrub-steppe is 23 percent, while the proportion of the one-mile buffer around the Solar Array Siting Area is 15 percent. So, there is less shrub-steppe habitat, proportionally outside of the Solar Array Siting Area, within one mile.

WDFW Habitat	Acres Within One Mile of Solar Array	Percentage of Area Within One Mile of Solar Array	Acres In Solar Array Siting	Percentage of Solar Array	Total Acres in Solar Array Siting Area and One-
Category	Siting Area	Siting Area	Area	Siting Area	mile Buffer
Shrub-steppe	2,260.60	15%	2,552.00	23%	4,812.60
Croplands, Pastures and	12,533.29	83%	8,572.00	77%	21,105.29
Mixed Environs					
Urban and Mixed Environs	310.16	2%	54.00	0%	364.16
Open Water	6.87	0%	0.00	0%	6.87
Wetlands	3.33	0%	0.00	0%	3.33
Total	15,114.25	100%	11,178.00	100%	26,292.25

Table 2. Percentage of Habitat Types Inside and Outside of Solar Array Siting Area

Table 3 provides a summary of the permanent, altered, and temporary impacts to habitat types compared to the amount of habitat available in the Solar Array Siting Area and in the Solar Array Siting Area and the one-mile buffer, to provide the region context. Shrub-steppe is the only Priority Habitat type in the region. The Project will result in permanent impacts to 1.3 percent of the shrub-steppe in the Solar Array Siting Area and one-mile buffer (region), 30.4 percent of shrub-steppe in the region will be altered (behind the fence of a solar array), and 1.5 percent will be temporarily impacted and restored post-construction.

WDFW Habitat Category	Total Acres in Solar Array Siting Area and One-mile Buffer (acres)	Permanent Impacts (acres)	Percentage of Solar Array Siting Area and One- mile Buffer from Permanent Impacts	Altered Impacts (acres)	Percentage of Solar Array Siting Area and One-mile Buffer from Altered Impacts	Temporary Impacts (acres)	Percentage of Solar Array Siting Area and One-mile Buffer from Temporary Impacts
Shrub- steppe	4,812.60	60.82	1.3%	1,463.05	30.4%	71.13	1.5%
Croplands, Pastures, and Mixed Environs	21,105.29	116.36	0.6%	3,122.61	14.8%	257.43	1.2%
Urban and Mixed Environs	364.16	2.82	0.8%			0.36	0.1%
Open Water	6.87						
Wetlands	3.33						
Total	26,292.25	177.54		4,585.66		331.39	

Table 3. Acres By Impact Type and Percentage of Habitat Type Impacted in Solar Array Siting Area and One-Mile Buffer



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Hop Hill Solar and Storage Project
Field Verified Habitat and NLCD Land Cover
Benton County, Washington
 Siting Area (22,020 acres) Solar Array Siting Area (11,179 acres) Transmission Line Corridor Siting Area (10,841 acres) Solar Siting Area 1-mile Buffer Proposed Project Components Solar Array Power Conversion Systems Perimeter Fence Project Service Road Road Improvement O&M Structure
Collector Substation Battery Energy Storage System Gravel Parking Area Temporary Laydown Area Site Entrance Gate
 Access Gate Road and Collector Crossing 230- to 500-kV Gen-tie Line (Overhead) Gen-tie Line Easement (150 feet wide) Basemap Features County Boundary
Field Verified Habitat Type Cultivated Crops Developed Hay/Pasture Herbaceous Shrub/Scrub

NOT FOR CONSTRUCTION

Attachment Land Use-24



	Hop Hill Solar and Storage Project
	Figure 3 Prime Farmland
	Benton County, Washington
240	Siting Area (22,020 acres) Solar Array Siting Area (11,179 acres) Transmission Line Corridor Siting Area (10,841 acres) Proposed Project Components Solar Array Power Conversion Systems Perimeter Fence Project Service Road Road Improvement O&M Structure Collector Substation Battery Energy Storage System Gravel Parking Area
nell!	 Site Entrance Gate
SIN 12	▲ Access Gate
St. JEREN	× Road and Collector Crossing
12/02/	230- to 500-kV Gen-tie Line (Overhead)
	Gen-tie Line Easement (150 feet wide)
	Basemap Features
French	— — - Existing Transmission
main	Existing Substation
1 and 1	Project Parcels
	County Boundary
	Farmland Classification
N	Prime Farmland if Irrigated Farmland of Statewide Importance
	Farmland of Unique
2 Miles	Not Prime Farmland
	NOT FOR CONSTRUCTION

Attachment Land Use-25



	Hop Hill Solar and Storage Project
	Figure 2 WSDA Cropland
	Benton County, Washington
	Benton County, Washington Siting Area (22,020 acres) Solar Array Siting Area (11,179 acres) Transmission Line Corridor Siting Area (10,841 acres) Proposed Project Components Solar Array Power Conversion Systems Perimeter Fence Project Service Road Road Improvement O&M Structure Collector Substation Battery Energy Storage System Gravel Parking Area Temporary Laydown Area Site Entrance Gate Access Gate Road and Collector Crossing 230- to 500-kV Gen-tie Line (Overhead) Gen-tie Line Easement (150 feet wide) Basemap Features Existing Transmission Existing Substation Project Parcels County Boundary WSDA Crop Group County County Boundary
	Cereal Grain Orchard
K	Vineyard
R	Utner Otner
lles	NOT FOR CONSTRUCTION

Attachment Rec-2

