WALLULA GAP SOLAR PROJECT

Washington Energy Facility Site Evaluation Council

APPLICATION FOR SITE CERTIFICATION

OneEnergy RENEWABLES

Submitted by:

Wallula Gap Solar, LLC
2003 Western Ave., Suite 225
Seattle, WA 98121

February 2024

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Acronyms and Abbreviations

°F	degree Fahrenheit
AC	alternating current
AHJ	Authority Having Jurisdiction
AINW	Archaeological Investigations Northwest
AOI	Area of Impact
Applicant	Wallula Gap Solar, LLC
ASCE	American Society of Civil Engineers
ASOS	Automated Surface Observing Systems
BCC	Benton County Code
BESS	battery energy storage system
BGEPA	Bald and Golden Eagle Protection Act
BMP	best management practice
BPA	Bonneville Power Administration
BPA-TS	BPA Transmission Services
CAA	Clean Air Act
CadnaA	Computer Aided Noise Abatement
CAO	Critical Areas Ordinance
CARA	Critical Aquifer Recharge Area
CETA	Clean Energy Transformation Act
CFR	Code of Federal Regulations
CO	carbon monoxide
COD	Commercial Operations Date
CSWGP	Construction Stormwater General Permit
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CTWSRO	Confederated Tribes of the Warm Springs Reservation of Oregon
CUP	conditional use permit
CY	cubic yard
DAHP	Department of Archaeology and Historic Preservation
dBA	A-weighted decibels
DC	direct current
DNR	Department of Natural Resources
Ecology	Washington State Department of Ecology
EDNA	Environmental Designation for Noise Abatement
EFSEC	Energy Facility Site Evaluation Council
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act

ESCP	Erosion and Sediment Control Plan
Facility	Wallula Gap Solar
FEMA	Federal Emergency Management Agency
gen-tie	generation tie
GHG	greenhouse gas
GMA	Growth Management Act
GMAAD	Growth Management Act Agricultural District
HMP	Habitat Management Plan
HPA	Hydraulic Project Approval
HPRCSIT	Historical Property of Religious or Cultural Significance to Indian Tribes
Hz	hertz
IBC	International Building Code
IDP	Inadvertent Discovery Plan
IPaC	Information for Planning and Consultation
ISO	International Organization for Standardization
JARPA	Joint Aquatic Resource Permit Application
kV	kilovolt
LOS	level of service
MOVES3	Motor Vehicle Emissions Simulator
MUTCD	Manual of Uniform Traffic Control Devices
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NFPA	National Fire Protection Association
NHD	National Hydrography Dataset
NO_2	nitrogen dioxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O&M	operations and maintenance
OA	Ordinance Agreement
OCP	organochlorine pesticides and/or herbicide
OPP	organophosphate pesticide
PEM	Palustrine Emergent
PHS	Priority Habitats and Species
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter

POI	Point of Interconnection
POP	persistent organic pesticide
PSD	Prevention of Significant Deterioration
PSS	Palustrine Scrub-Shrub
PUD	Public Utility District
PV	photovoltaic
RCW	Revised Code of Washington
RV	recreational vehicle
SCAQMD	South Coast Air Quality Management District
SEPA	State Environmental Policy Act
SWMMEW	Stormwater Management Manual for Eastern Washington
SPCC Plan	Spill Prevention, Control, and Countermeasure Plan
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
TESS	threatened, endangered, and sensitive wildlife and plant species
TIA	Traffic Impact Analysis
U.S.C.	United States Code
UL	Underwriters Laboratory
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WEST	Western EcoSystems Technology
WNHP	Washington Natural Heritage Program
WSDA	Washington State Department of Agriculture
WSDOT	Washington State Department of Transportation
Yakama Nation	Confederated Tribes and Bands of the Yakama Nation

PART 1 – OVERVIEW/SUMMARY

Part 1 – Overview/Summary

A. Basic Information

A.1. Applicant

Name/Contact:	Wallula Gap Solar, LLC, c/o Tanner Gillespie		
Mailing address:	2003 Western Ave, Ste. 225 Seattle, WA 98121		
Phone:	206-900-9931	Fax:	
Email:	tanner@oneenergyrenewables.com		

A.2. Preparer (if different from applicant)

Name/Contact:	Tetra Tech, Inc., c/o Jonathan Thompson		
Mailing address:	1750 S Harbor Way, Suite 400, Portland, OR 97201		
Phone:	503-727-8065	Fax:	
Email:	jonathan.thompson@tetratech.com		

A.3. Property Owner and Location of Proposed Site Use Cross Reference to identify parcels on provided map of site in Part 2.A.4.

Property Owner / Leased?	Address					Contact Information (Email or Phone number)	Public Land Survey System	Legal Description	Cross Reference for map
	Street	City	State	Zip	County				
Farmland Reserve, Inc.	N/A	N/A	N/A	N/A	N/A	Amy Nadeau 509-820-3210 anadeau@agrinw.com	T06N R27W S33	2013 MARLETTE MARLETTE SPECIAL 28X49; SECTION 33 TOWNSHIP 6 RANGE 27 ALL SUBJECT TO EASEMENTS AND RESTRICTION OF RECORD. Benton Co. Assessor's #: 133671000001000	Property 1
Farmland Reserve, Inc.	N/A	N/A	N/A	N/A	N/A	Amy Nadeau 509-820-3210 anadeau@agrinw.com	T05N R27W S04	SECTION 4 TOWNSHIP 5 RANGE 27 ALL, LESS SOUTH 1/2 NORTHEAST AND LESS NORTHEAST SOUTHEAST. LESS 9.34 ACRES TO STATE HIGHWAY 4/20/56 SUBJECT TO EASEMENTS AND RESTRICTION OF RECORD. 05/27/65 - 10/01/57 RIGHT OF WAY 11/18/69 BENTON RURAL ELECTRIC EASEMENT 05/13/72 Benton Co. Assessor's #: 104571000001000	Property 2

Farmland Reserve, Inc.	N/A	N/A	N/A	N/A	N/A	Amy Nadeau 509-820-3210 anadeau@agrinw.com	T05N R27W S04	SOUTH 1/2 OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 5 NORTH, RANGE 27: LESS PORTION TO STATE 03/13/56 - 9.36 ACRES PIPELINE EASEMENT 03/07/57 SUBJECT TO EASEMENT AND RESTRICTION OF RECORD. 12/29/55 - 05/31/72 Benton Co. Assessor's #: 10457100000200	Property 3

B. Project Summary

Wallula Gap Solar, LLC (the Applicant) proposes to construct and operate Wallula Gap Solar (the Facility), a 60-megawatt (MW) solar photovoltaic (PV) project with an optional battery energy storage system (BESS) located in Benton County, Washington. The Facility will utilize solar PV panels to convert energy from the sun into electric power, which will then be delivered to the electric power grid.

The Facility will consist of PV modules mounted on single-axis trackers supported on stationary piles. Each row of solar panels will be strung together in a north-south orientation and the panels will tilt on a single axis (facing east in the morning and tilting toward the west, following the sun, through the course of each day to maximize energy output). Each string of panels is arranged in rows with approximately 8 to 12 feet of space between the rows. The racking system and panels are supported by steel piles driven to a depth of 5 to 12 feet below grade. The top of the panels will stand no higher than 10 feet.

Throughout the Facility, inverters paired with medium voltage step-up transformers convert the generated electricity from direct current (DC) to alternating current (AC) and increase the voltage. The output will be conveyed to a central substation near the Point of Interconnection (POI) to the electrical grid. The central substation will house a generator step-up transformer, which will convert the power to 115 kilovolts (kV) and which will house the controls for the Facility. An optional operations and maintenance (O&M) building may be built adjacent to the substation.

The optional BESS would not exceed the nominal 60-MW capacity of the Facility. As currently designed, the optional BESS would be connected to the DC side of the transformer. The battery would store power generated by the Facility and dispatch it to the electrical grid at a later time. The Facility is currently designed to utilize lithium-ion battery energy technology. However, pending commercial interest, the Facility could be designed to utilize other battery technology.

The Facility will interconnect through a line tap to Benton Public Utility District's (PUD) 115-kV line near the Prior #2 substation. The generation will then be connected to the Bonneville Power Administration's (BPA) facilities at the Plymouth tap (aka Paterson Tap), where Benton PUD and BPA facilities connect at BPA's McNary substation. Benton PUD will upgrade, build, own, and operate the structures which constitute the transmission facilities from the project to BPA's system; BPA Transmission Services (BPA-TS) will install, own, and operate required incremental additions to the McNary substation as well as the metering and the control and communications equipment at the Facility.

The Facility will be accessed by an existing approach from Washington State Route (SR) 14. The Facility will be secured with a fence up to 8 feet in height with access gates for authorized personnel. Internal gravel roads built to the applicable fire code will be used to maintain the Facility. During construction, several temporary lay-down areas will be utilized for delivery of major equipment. Some or all of these areas will convert to parking during operations.

The Applicant intends for the Facility to have a Commercial Operations Date (COD) as early as Q4 2026. To meet this schedule, it is expected that construction would begin in Q4 2025.

C. Site Summary

The Facility will be located approximately 4 miles northwest of the unincorporated community of Plymouth on parcels located north of SR-14, approximately 5 miles west of its intersection with Interstate 82. The coordinates for the center point of the Facility are 45°57'17.18"N and 119°26'52.47"W. The Facility will be located across a portion (approximately 437 acres) of three parcels, known herein as the "Project Area Extent." The parcels are owned by Farmland Reserve, Inc. (Landowner), and are known herein as the "Facility Parcels" (approximately 1,220 acres). The Applicant has entered into a long-term lease with the Landowner for adequate acreage to accommodate the Facility for its operational lifetime. The Facility will be sited within the Project Area Extent, and will consist of multiple fenced areas, and the generation-tie (gen-tie) line, which are herein known as the "Facility Area" (approximately 392 acres). The Facility Area represents the maximum footprint of the Facility. A list of landowners within a 1 mile buffer of the Facility Area is provided as Attachment R.

All Facility Parcels are zoned Growth Management Act Agricultural District (GMAAD). The Facility Parcels are partially developed and have historically been used for agricultural purposes since at least the 1970s, including both crop production and livestock grazing. Historical development on the Facility Parcels has highly disturbed and modified the natural landscape.

The Project Area Extent is mostly flat to gently south-sloping, ideal for solar PV projects and constructability. A few small areas with grades above 10 percent may require grading, though none of these will occur in surface waters, wetlands, or frequently flooded areas. The Project Area Extent is located wholly outside of the mapped Federal Emergency Management Agency (FEMA) floodplains. Two Category IV wetlands are present in the southeast portion of the Project Area Extent, with vegetation dominated by non-native and noxious weeds. Habitat type is primarily pasture (approximately 93 percent) with minor scattered amounts of shrub-steppe and mixed environs. There is no designated Critical Habitat on-site. Vegetation predominantly comprises non-native grasses and forbs, with scattered patches of early successional shrubs and woody vegetation. No rare plant species were historically recorded or identified during the Rare Plant Assessment and Survey. Wildlife surveys identified all raptor nests within 1 mile of the Project Area Extent, finding only one occupied red-tailed hawk nest on site. Bald eagles were observed in the area, but no suitable nesting locations were identified on site. No other threatened, endangered, or protected animal species were observed.

Cultural and archeological surveys were conducted within the Project Area Extent and were informed by consultations with concerned Tribal Governments and the Washington Department of Archaeology and Historic Preservation (DAHP). While no prehistoric cultural resources have been identified in the Facility Area, the presence of tribal sacred sites, Traditional Cultural Properties, and/or Historic Properties of Religious or Cultural Significance to Indian Tribes is unknown. The Confederated Tribes and Bands of the Yakama Nation identified the need for a Traditional Cultural Properties study that has not yet been completed. Both the Confederated Tribes and Bands of the Yakama Nation and the Confederated Tribes of the Umatilla Indian Reservation have requested additional identification efforts be conducted in the form of shovel probes. Additional identification efforts will be completed prior to SEPA determination.

Construction is expected to last 12 to 18 months for a targeted late 2026 COD. The Applicant has prepared a Traffic Impact Analysis (TIA) for the construction period, coordinating with the Washington State Department of Transportation (WSDOT). Results of the TIA show limited traffic impacts during construction and, based on review by WSDOT, no mitigation is required. Additionally, appropriate dust and stormwater management and mitigation plans will be developed in consultation with the Washington State Department of Ecology (Ecology) and Benton County requirements.

D. List of Studies

Note to applicant:

- This is an active, changing list and on-going focus for discussion.
- This information must match the information in Part 4.
- This information is critical to the pre-application stage.

Report No.	Topic	Name of Report and Location for Review	Status (e.g., scoping, contracting for, started)	Date of Completion (past or expected)	Included with Submittal? (Yes/No)
1.	Habitat Mitigation	Attachment B - Draft Habitat Mitigation Plan	In Progress	February 2024	Yes
2.	Land Use	Attachment E - Land Use Consistency Review	Complete	February 2024	Yes
3.	Biological Resources	Attachment F - Tier 3 Wildlife, Habitat, and Plant Survey Report and Addendum (**CONFIDENTIAL; separate redacted version provided for public viewing**)	Complete	November 2023	Yes
4.	Environmental Site Assessment	Attachment G - Phase I Environmental Site Assessment	Complete	February 2023	Yes
5.	Socioeconomics	Attachment H - Socioeconomic Review	Complete	September 2023	Yes
6.	Visual Resources	Attachment I - Visual Impact Assessment	Complete	February 2024	Yes
7.	Acoustics	Attachment J - Acoustic Assessment Report	Complete	September 2023	Yes
8.	Traffic	Attachment K - Traffic Impact Analysis	Complete	January 2024	Yes
9.	Cultural Resources	Attachment L - Cultural Resource Survey (**CONFIDENTIAL**)	Complete, pending Tribal/DAHP concurrence	February 2024	Yes
10.	Wetlands	Attachment M - Wetland Delineation Report	Complete	July 2023	Yes
11.	Land Titles	Attachment N - ALTA/ACSM Land Title Survey	Complete	May 2023	Yes
12.	Airspace	Attachment O - FAA Determination of No Hazard	Complete	December 2022	Yes
13.	Glare	Attachment P - Glare Analysis	Complete	January 2024	Yes

E. List of Stakeholders

Note to applicant:

- This is an active, changing list and on-going focus for discussion.
- This information is critical to the pre-application stage.

Type	Agency*	Contact	Program/Area	Engagement Status**
Local Government	Benton County	Greg Wendt, Michelle Cooke	Land Use, Permitting	Ongoing
State Government	WDFW	Michael Ritter	Wildlife	Ongoing
State Government	Department of Ecology	Lori White	Wetlands	Ongoing
State Government	DAHP	Sydney Hanson, David Witt	Cultural Resources	Ongoing
Tribal Government	Confederated Tribes and Bands of the Yakama Nation (Yakama Nation)	Jessica Lally	Cultural Resources	Ongoing
Tribal Government	Confederated Tribes of the Umatilla Indian Reservation (CTUIR)	Teara Farrow Ferman, Ashley Morton, Bambi Rodriguez	Cultural Resources	Ongoing
Tribal Government	Wanapum	Alyssa Buck	Cultural Resources	Complete
Tribal Government	Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)	Christian Nauer, Robert Brunoe	Cultural Resources	Ongoing
Federal Government	Department of Defense	Kim Peacher	Airspace	Complete
Federal Government	FAA	Daniel Shoemaker	Airspace	Complete
Federal Government	BPA	Christopher Lockman	Interconnection	Ongoing
Landowner	Neighbors	All neighbors within one mile of Facility Parcels	General	Best efforts to contact by phone during Nov/Dec 2022
State Government	WSDOT	Jacob Prilucik	Access/Transportation	Complete
Local Government	Benton County Fire District #6	Rolland Watt - District 6 Fire Chief	Fire Code	Complete
Local Government	Benton County Fire Marshall	Gary Tiplady	Fire Code	Ongoing
Local Government	Benton County Public Works Department	Matt Mahoney – Public Works Manager	Public Services, Permitting	Complete
Local Government	Noxious Weeds Control Board	Konrad Kauer	Vegetation Management Plan	Ongoing

* Entities typically consulted or engaged include Ecology, Washington Department of Fish and Wildlife (WDFW), Washington Department of Natural Resources (DNR), DAHP, tribal governments, the Department of Defense, neighboring landowners, local government, etc. Not all of these may be required for each project but should serve as a starting point for applicant contacts for coordination.

** For example: Intend to contact, contacted, ongoing engagement, engagement complete.

F. Applicant Avoidance and Minimization Commitments Summary

F.1. Earth

Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Erosion and Sediment Control BMPs - Erosion	The Applicant will prepare an ESCP, Construction SWPPP, Operations SWPPP, and Vegetation and Weed Management Plan prior to construction. The ESCP and SWPPPs (for construction and operation) will address stormwater runoff, flooding, and erosion to ensure compliance with state and federal water quality standards. The SWPPPs will include BMPs from Ecology's Stormwater Management Manual for Eastern Washington (SWMMEW) (Ecology 2019). A Vegetation and Weed Management Plan will be developed prior to construction and implemented to revegetate temporarily impacted areas and minimize erosion and sedimentation during and after construction.	Part 4.A.D	Ecology
Building Permits	Seismic design parameters that will be used to design the Facility are included in the 2018 IBC and American Society of Civil Engineers (ASCE) 7-10 and ASCE 7-16. These parameters are consistent with the Washington State Building Codes. The Facility will comply with the current codes at the time of construction, demonstrating compliance with WAC 463-62-020.	Part 4.A.D	Benton County Building Division and Washington State Building Code Council

F.2. Air Quality

Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Implementation of Best Management Practices (BMPs) and Standard Construction Practices	To adhere to Washington Administrative Code sections addressing air quality, the Applicant would implement BMPs and standard construction practices, including the following: • Vehicles and equipment used during construction would be properly maintained to minimize exhaust emissions. • Operational measures such as limiting engine idling time and shutting down equipment when not in use would be implemented. • Watering or other fugitive dust-abatement measures would be used as needed to control fugitive dust generated during construction. When applied, the Applicant will use water or a water-based environmentally safe dust palliative such as lignin for dust control.	Part 4.B.D	N/A

	• Construction materials that could be a source of fugitive dust would be covered when stored. • Traffic speeds on unpaved roads would be limited to 25 miles per hour to minimize generation of fugitive dust. • Truck beds would be covered when transporting dirt or soil. • Carpooling among construction workers would be encouraged to minimize construction-related traffic and associated emissions. • Erosion-control measures would be implemented to limit deposition of silt to roadways, to minimize a vector for fugitive dust. Replanting or graveling disturbed areas would be conducted during and after construction to reduce wind-blown dust.		
F.3. Water Quality – Wetland and Surface Waters			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Avoidance	The Facility will not impact wetlands, wetland buffers, or surface waters and is consistent with WAC 463-62-050.	Part 4.C.D	N/A
F.4. Water Quality – Stormwater Runoff			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Erosion and Sediment Control BMPs – Stormwater	As mentioned in Part 4.E, the Applicant will also prepare an ESCP, Construction and Operations SWPPPs, and Vegetation and Weed Management Plan prior to construction. The ESCP and SWPPPs (for construction and operation) will address stormwater runoff, flooding, and erosion to ensure compliance with state and federal water quality standards. The SWPPPs will include BMPs from the Washington Department of Ecology's SWMMEW (Ecology 2019). A Vegetation and Weed Management Plan will be developed prior to construction and implemented to revegetate temporarily impacted areas and minimize erosion and sedimentation during and after construction.	Part 4.E.D	Ecology
F.5. Plants			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation

Mitigation of Impacts to Shrub-Steppe	Conservation easement, mitigation payment to local conservation entity, or alternative mitigation pathways if available in the future.	Part 4.H.D	WDFW and EFSEC
F.6. Animals			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Avoidance and Minimization Measures	During siting and design, the Applicant took several measures to avoid and minimize impacts to wildlife and habitat. The Applicant coordinated with WDFW prior to conducting surveys, and used the feedback obtained during this coordination to inform surveys and the assessment of impacts. The Facility has been designed to avoid and minimize impacts on shrub-steppe habitat, a priority habitat, which is associated with the special status species that are known to occur in the Facility vicinity. WDFW requires shrub-steppe mitigation, which will be a 2:1 mitigation ratio for permanent impacts and 1:1 for altered and temporary impacts. Additionally, the Facility has been designed to avoid all impacts to the wetlands and wetland buffer identified within the Wetland Delineation Report (Attachment M).	Part 4.I.D, Attachment B	WDFW
Construction and Operations BMPs	Unnecessary lighting will be turned off at night to limit attraction of migratory birds to the area. This includes using lights with timed shutoff or motion-activated lights, downward-directed lighting to minimize horizontal or skyward illumination, and avoidance of steady-burning, high-intensity lights. If construction occurs during the bird nesting season, nest clearance surveys will be conducted prior to site disturbance. Evening and nighttime construction activities will be avoided to the extent practicable, which will limit the impacts of construction noise to wildlife. Prior to construction, construction personnel will be instructed on wildlife resource protection measures, including: 1) applicable federal and state laws (e.g., those that prohibit animal collection or removal); and 2) the importance of these resources and the purpose and necessity of protecting these resources. Construction personnel will be trained in the following areas when appropriate: awareness of biological resources (including Priority Habitats and special status species), potential bird nesting areas, and general wildlife issues. The Applicant will prepare an ESCP that would include BMPs to minimize surface water runoff and soil erosion. Appropriate stormwater management practices will be implemented in accordance with the	Part 4.I.D, Attachment B	WDFW

	SWPPPs. The Applicant will prepare SPCC Plans to be implemented during construction and operation to reduce the likelihood of an accidental release of a hazardous or regulated liquid and, in the event such a release occurs, to expedite the response to and remediation of the release (see Part 4.C for more details). Vehicle speeds will be limited to 25 miles per hour on internal Facility access roads to avoid wildlife collisions. Existing posted speed limits on county and private roads will be followed outside of the Facility Area. If any overhead power lines are required to connect the Facility to the grid, these lines will be designed and constructed to minimize avian electrocution, according to guidelines outlined in Avian Power Line Interaction Committee standards (APLIC 2012). Fire hazards from vehicles and human activities will be reduced via use of spark arrestors on power equipment, avoiding driving vehicles off roads, and allowing smoking only in designated areas per the requirements of WAC 463-60-352. The Applicant will prepare an Emergency Management Plan that contains fire safety measures, which will be developed with input from applicable agencies (see the "Fire" section above for more details). Following decommissioning, reclamation of the Facility Area will begin as quickly as possible to reduce the likelihood of ecological resource impacts in disturbed areas. Part 4.H contains additional measures targeted at successfully restoring vegetation communities. Implementation of these vegetation mitigation measures will have indirect benefits to wildlife species as well.		
Compensatory Mitigation	In order to achieve "no net loss of habitat functions and values" as required by WAC 463-62-040, the Applicant will continue to work with the WDFW and EFSEC to determine appropriate compensatory mitigation. The Applicant has prepared a Draft Habitat Mitigation Plan (Attachment B), which provides a framework for determining the compensatory mitigation required to achieve "no net loss." A Final Wildlife Habitat Mitigation Plan will be prepared prior to construction.	Part 4.I.D, Attachment B	WDFW, EFSEC

F.7. Environmental Health – Hazardous Materials			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Emergency Management Plan	Prior to Facility construction and operations, the Applicant will develop an Emergency Management Plan to address worker health and safety, standards concerning potential release of hazardous materials, and fire prevention and control. This plan will provide safety guidelines and procedures for potential emergency-related incidents during the Facility's construction, operation, and decommissioning phases. This includes coordination with emergency service providers and fire suppression measures associated with the Facility. Specifically, the plan will be developed with input from, and in coordination with, the Benton County Emergency Management, Benton County Sherriff, Benton County Fire Marshall, and DNR Wildland Fire Management Division. Applicable laws/codes include: • WAC 463-60-352 (2 through 4), which addresses fire and explosion, hazardous materials release, and safety standards compliance. • WAC 463-60-352(6), which describes emergency plans to ensure public safety and environmental protection. • 49 CFR §173.185m, which regulates the transportation of lithium-ion batteries. • 49 CFR §173.159, which regulates the transportation of lead-acid batteries. • International Fire Code	Part 4.M.D	Benton County Emergency Management, Benton County Sherriff, Benton County Fire Marshall, and DNR Wildland Fire Management Division
BMPs – Fire Prevention	To minimize risk of fire or explosion, the Facility will implement BMPs to be detailed in the Emergency Management Plan noted above. Typical BMPs will include, but are not limited to, the following: • Equip construction vehicles with fire extinguishers, spark arrestors and heat shields, as appropriate. • Establish roads before accessing the site to minimize vehicle contact with grass. • Use diesel construction vehicles instead of gasoline vehicles, where feasible, to prevent potential ignition by catalytic converters.	Part 4.M.D	Benton County Fire Marshall and DNR Wildland Fire Management Division

	• Prohibit vehicles from idling in grassy areas. • Restrict the use of high temperature equipment in grassy areas. • Install lightning protection measures to protect generators and other equipment. • Install fire protection equipment in accordance with Washington state fire code. Notify the local fire district of construction plans and access to Facility equipment. • Provide mutual assistance in the case of fire in or around the Facility during construction. • Monitor wildfire activity during Facility construction and operations and, if necessary, modify Facility activities, change the schedule, cease construction operations, or remove equipment. • Prevent and control potential fires inside the Facility Area with trained staff who have 24-hour access to the site.		
BESS design	The BESS will be compliant with UL9540 and UL9540a certification requirements. The BESS will contain a fire suppression and detection system in accordance with fire code and NFPA Standards, specifically NFPA 855, "Standard for the Installation of Stationary Energy Storage Systems." The system will include monitoring equipment and alarm systems with remote shut-off capabilities. In addition to this the BESS will comply with industry best practices and safety standards including: • UL 9540: Standard for Safety of Energy Storage Systems and Equipment • UL9540a: Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems Standard • NFPA 855: Standard for the Installation of Stationary Energy Storage Systems • Large-Scale Fire Testing: Testing that induces a significant fire into the BESS device and evaluates if the fire will spread to adjacent BESS units, surrounding equipment, or through an adjacent fire-resistance-rated barrier.	Part 4.M.D	NFPA, UL

	• AHJ Compliance: Early communication with AHJ on BESS permitting and fire safety requirements. • Emergency Response Plan: BESS specific HAZMAT training and response plan for local fire departments.		
CSWGP, Construction Phase SWPPP, and ESCP	The Applicant will obtain a CSWGP from Ecology, which requires a SWPPP and ESCP. These plans will contain measures to minimize the risk of spills and stormwater pollution, as well as to reduce the effects of erosion to ensure compliance with state and federal water quality standards. Applicable laws/codes include the following: • RCW 90.48, which establishes general stormwater permits for Ecology under the Water Pollution Control Act • WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington Clean Water Act (33 United States Code 1251)	Part 4.M.D	Ecology
SPCC Plan	The Applicant will prepare an SPCC Plan, consistent with requirements of 40 CFR Part 112, to prevent spills during construction and to identify measures to expedite the response to a release if one were to occur. Preventative procedures and rapid response measures will address and prevent potential risks to water quality.	Part 4.M.D	Ecology
Use of approved herbicides	In compliance with RCW 17.10.140, the Applicant will only use herbicides that are approved for use in the state of Washington by the EPA.	Part 4.M.D	EPA and the Benton County Noxious Weed Control Board
F.8. Land Use			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Based on the information provided in Part 3.N and Part 4.N and in the Land Use Consistency Review (see Attachment E), the Facility will have no significant adverse effects on land use. Therefore, no land use mitigation or monitoring measures are proposed. Mitigation measures specific to other topics (e.g., wetlands and surface waters, wildlife habitat, or geological hazards) are addressed in their respective resource sections in Part 3 and Part 4 of this ASC and are summarized in Part 2.F.			

F.9. Noise			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Noise BMPs	WAC 173-60-050 exempts temporary construction noise from the state noise limits; however, BMPs will be implemented to reduce off-site construction noise impacts. Since construction equipment operates intermittently, and the types of machines in use at the Facility change with the stage of construction, noise emitted during construction will be mobile and highly variable. The Applicant will implement the BMPs listed below. Facility construction will generally occur during the day, Monday through Friday. Furthermore, reasonable efforts will be made to minimize the impact of noise resulting from construction activities, including implementation of standard noise reduction measures listed below. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction, and the implementation of noise mitigation measures, the temporary increase in noise due to construction is considered to be a less than significant impact. The construction management protocols will include the following noise mitigation measures to minimize noise impacts: • Maintain construction tools and equipment in good operating order according to manufacturers' specifications. • Limit use of major excavating and earth-moving machinery to daytime hours. • To the extent practicable, schedule construction activity during normal working hours on weekdays when higher sound levels are typically present and are found acceptable. Some limited activities, such as concrete pours, will be required to occur continuously until completion. • Equip any internal combustion engine used for any purpose on the job or related to the job with a properly operating muffler that is free from rust, holes, and leaks.	Part 4.P.a.D	EFSEC

	• For construction devices that use internal combustion engines, ensure the engine's housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers' guidelines, if possible. • Limit possible evening shift work to low-noise activities such as welding, wire pulling, and other similar activities, together with appropriate material-handling equipment. Use a complaint resolution procedure to address any noise complaints received from residents.		
F.10. Light, Glare, and Aesthetics			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Management Practices – Light, Glare and Aesthetics	The Facility will implement BMPs including: • Setting the resting angle for the area of arrays predicted to cause glare to 10˚ to prevent glare (see Attachment P). • Downward-directed lighting to minimize horizontal or skyward illumination, and avoidance of steady-burning, high-intensity lights. • Utilizing solar panels with an anti-reflective coating to minimize glare. • Revegetation will occur based on the Revegetation and Weed Management Plan (to be submitted prior to construction). • Installation of screening vegetation (evergreen trees) across the south, southeast, and southwest-facing portions of the Facility.	Part 4.P.b.D	N/A
F.11. Traffic and Transportation			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
WSDOT Oversize and Overweight Permit	A permit will be obtained for heavy or oversized loads in accordance with WSDOT regulations including RCW 46.44 and WAC 468-38.	Part 4.R.D	WSDOT
Traffic Control Plan	A Traffic Control Plan will be prepared in consultation with WSDOT for traffic management during construction. This plan would contain measures to facilitate safe movement of vehicles in the vicinity of the construction zone and would be in accordance with 23 CFR §655 Subpart F that provides	Part 4.R.D	WSDOT, Benton County Public Works Department

	for the Federal Highway Administration to maintain the Manual on Uniform Traffic Control Devices for Streets and Highways, which defines standards for traffic control. The Applicant has consulted with the Benton County Public Works Department and confirmed that access is not under Benton County jurisdiction.		
General Mitigation Measures	General mitigation measures for road access and transportation include: • Development and implementation of an ESCP and SWPPP to minimize impacts from erosion and sedimentation from construction related soil disturbance to include Facility site access locations, on-site dirt access routes, haul routes, etc. • Obtaining applicable building permits and grading and excavation permits as required prior to construction.	Part 4.R.D	N/A
F.12. Archaeological Resources			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Unanticipated Discovery Plan	RCW 27.53.060 - If the Facility will disturb any pre-contact-era archaeological resources or any NRHP-eligible or -listed historic-era archaeological resource, a DAHP excavation permit will be obtained. In the event unrecorded archaeological resources are identified during Facility construction or operation, work within 30 meters (100 feet) of the find shall be halted and directed away from the discovery until it can be assessed in accordance with steps in the Unanticipated Discovery Plan (to be submitted at least 90 days prior to construction).	Part 4.U.D	DAHP, EFSEC, the Confederated Tribes of the Umatilla Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Yakama Nation, and the Wanapum Tribe.
Consultation with Native Americans	Only regulatory agencies can formally consult with tribes. Consultation between EFSEC and the tribes is ongoing.	Part 4.U.D	EFSEC, the Confederated Tribes of the Umatilla Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Yakama

			Nation, and the Wanapum Tribe.
F.13. Cultural Resources			
Measure	Description	Reference (4.D. section or attachment)	Expert Agency Participation
Unanticipated Discovery Plan	In the event unrecorded archaeological resources are identified during Facility construction or operation, work within 30 meters (100 feet) of the find should be halted and directed away from the discovery until it can be assessed in accordance with steps in the Facility's Unanticipated Discovery Plan (to be submitted at least 90 days prior to construction).	Part 4.V.D	DAHP and interested tribes.
Continued Coordination with Native Americans	Only regulatory agencies can formally consult with tribes. Informal and open communications will continue with interested tribes during Facility permitting and design to incorporate tribal input regarding avoidance of potential impacts to cultural resources, including traditional use areas or other areas of significance to tribes. Lines of communication will remain open to better facilitate any response to unanticipated discoveries during construction.	Part 4.V.D	DAHP, the CTUIR, the CTWSRO, the Yakama Nation, and the Wanapum Tribe.

G. Project Plans and Submittal				
Submittal Name	Description	Submittal Timing	Expert Agency Participation	ASC Section References
Preliminary Site Plan	Shows the preliminary Facility design in relation to the Facility Area (Attachment A, Figure A-1).	Completed (Attachment A, Figure A-1)	N/A	N/A
Construction Stormwater General Permit (CSWGP) and Notice of Intent (NOI)	In compliance with Washington Administrative Code (WAC) 173-200 and WAC 463-76, the Applicant will obtain a CSWGP. The CSWGP requires an Erosion and Sediment Control Plan (ESCP) and a Stormwater Pollution Prevention Plan (SWPPP).	Prior to site preparation	Energy Facility Site Evaluation Council (EFSEC) with input from Ecology	Part 4, Section 4.E
ESCP	The ESCP will be prepared to control erosion and sediment discharges during construction and will include best management practices (BMPs) such as the appropriate use of silt fencing to avoid or eliminate runoff of contaminants.	Prior to site preparation	EFSEC with input from Ecology	Part 4, Section 4.A
Construction Phase Spill Prevention, Control, and Countermeasure (SPCC) Plan	The Construction Phase SPCC Plan will be prepared to prevent spills during construction and to identify measures to expedite the response to a release if one were to occur. Preventative procedures and rapid response measures will address/prevent potential water quality issues. The plan will be prepared pursuant to the requirements of Code of Federal Regulations (CFR) Part 112, as well as Sections 311 and 402 of the Clean Water Act, and Section 402(a)(1) of the Federal Water Pollution Control Act.	Prior to site preparation	EFSEC with input from Ecology	Part 4, Section 4.L
Emergency Management Plan	The Emergency Management Plan will address worker health and safety, as well as fire prevention and control measures for construction and operation.	Prior to site preparation	Benton County Emergency Management, Benton County Sherriff, Benton County Fire Marshall, and DNR Wildland Fire Management Division	Part 3, Section 3.S

Traffic Control Plan	A Traffic Control Plan will be prepared in coordination with WSDOT for traffic management during construction and for access to approaches from WSDOT right-of-way. The plan will be developed consistent with WSDOT design standards. The Applicant has consulted with the Benton County Public Works Department and confirmed that access is not under Benton County jurisdiction.	Prior to site preparation	With input from WSDOT and Benton County	Part 3, Section 3.R Part 4, Section 4.R
Construction Schedule	Final construction schedule.	Prior to site preparation	EFSEC	N/A
Construction Plans and Specifications	A set of construction plans, specifications, drawings, and design documents that demonstrate the Facility is in compliance with applicable conditions of the Site Certification Agreement.	Prior to site preparation	EFSEC	N/A
Operations Phase SWPPP	The Operations Phase SWPPP will be based on Ecology's SWPPP template and will address stormwater runoff, flooding, and erosion to ensure compliance with state and federal water quality standards. The SWPPP will include BMPs from Ecology's *Stormwater Management Manual for Eastern Washington*.	Prior to commercial operations	EFSEC with input from Ecology	Part 4, Section 4.E
Operations Phase SPCC Plan	The Operations Phase SPCC Plan will be prepared to prevent HM spills during operations and to identify measures to expedite the response to a release if one were to occur. Preventative procedures and rapid response measures will address/prevent potential water quality issues. The plan will be prepared pursuant to the requirements of CFR Part 112, Sections 311 and 402 of the Clean Water Act, Section 402(a)(1) of the Federal Water Pollution Control Act, and Revised Code of Washington (RCW) 90.48.080.	Prior to commercial operations	EFSEC with input from Ecology	Part 4, Section 4.L
Habitat Mitigation Plan (HMP)	The HMP will specify the avoidance, minimization, and mitigation obligations and implementation plans, including those for Facility construction, operations, and decommissioning. The HMP will address the	The Draft HMP is provided with this ASC (Attachment B). The HMP will be revised in coordination and with	EFSEC with input from WDFW	Part 3, Sections 3.H and 3.J

	applicable requirements of WAC 463-60-332 and applicable guidelines such as WDFW's Mitigation (M-5002) Policy.	input from EFSEC and WDFW and completed prior to site preparation.		Part 4, Sections 4.H and 4.J
Revegetation and Weed Management Plan	The Revegetation and Weed Management Plan will address vegetation management activities related to the Facility's construction and operation and specify methods that will be implemented for effective revegetation of temporarily disturbed areas and noxious weed control.	Prior to site preparation	EFSEC with input from WDFW and the Benton County Noxious Weed Control Board	Part 3, Sections 3.H Part 4, Sections 4.H
Unanticipated Discovery Plan	Plan to address situations when an unanticipated archaeological resource is discovered during construction. In the event unrecorded archaeological resources are identified during Facility construction or operation, work within 30 meters (100 feet) of the find will be halted and directed away from the discovery until it can be assessed per the measures outlined in the plan.	At least 90 days prior to site preparation	EFSEC, DAHP, and Tribes	Part 3, Section 3.U Part 4, Section 4.U
Initial Site Restoration Plan	Consistent with WAC 463-72-040, the Applicant will provide EFSEC with an Initial Site Restoration Plan at least 90 days prior to beginning Facility site preparation. The Initial Site Restoration Plan will generally follow the proposed retirement steps provided in the Applicant's Decommissioning Summary and Estimate (to be submitted prior to construction). The plan will include provisions for dismantling and removing aboveground solar array components and other aboveground associated supporting components described in Part 2, Section A.2.a. In areas where foundations are removed, the surface will be recontoured reasonably similar to the pre-construction condition, and the area will be reseeded with a seed mixture reasonably acceptable to the property owner.	At least 90 days prior to site preparation	EFSEC	N/A

H. Federal, State, and Local Requirements

H.1. Required Permits

Level (Federal, State, County, Local)	Agency	Permit	Application Section
State	Washington Department of Labor and Industries	Electrical Construction Permit WAC 296-46B, Washington Department of Labor and Industries Safety Standards—Installing Electrical Wires and Equipment— Administration Rules.	Part 2, Section H.1
State	Washington Department of Ecology	Water Quality Storm Water Discharge RCW 90.48, Water Pollution Control Act, establishes general stormwater permits for the Washington Department of Ecology National Pollutant Discharge Elimination System (NPDES) Permit Program. Construction Stormwater General Permit for NPDES (through EFSEC jurisdiction, WAC 463-76). WAC 173-201A, Washington Department of Ecology Water Quality Standards for Surface Waters of the State of Washington, which regulates water quality of surface waters. Federal statute(s) and regulations implemented by the above state statute(s) and regulations include Federal Clean Water Act, 33 United States Code (U.S.C.) 1251; 15 CFR 923-930.	Part 3, Sections 3.C and 3.E Part 4, Sections 4.C and 4.E
State	Washington Department of Fish and Wildlife	Shorelines of the State WAC 173-18, Shoreline Management Act, Streams and Rivers Constituting Shorelines of the State. WAC 173-22, Adoption of Designations of Shorelands and Wetlands Associated with Shorelines of the State. JARPA and shoreline conditional use permit (CUP) for fill in wetlands associated with Shorelines of the State.	Part 2, Section B.6 Not anticipated to be required for the Facility.

Local	Benton County	Building Construction Permit Benton County requires approval of building construction permits for new structures (Benton County Code [BCC] Chapter 3.04).	Part 2
Local	Benton County	Special Flood Hazard Development Permit Development within special flood hazard area (BCC Chapter 3.26).	Parts 3-4 wetlands and surface waters Not anticipated to be required for the Facility.
H.2. Relevant Regulation or Requirement			
Level (Federal, State, County, Local)	Agency	Requirement/Regulation	Application Section
Federal	Bonneville Power Administration	National Environmental Policy Act Compliance, Record of Decision National Environmental Policy Act, Section 102 (42 U.S.C. § 4332); 40 CFR § 1500.	Part 2 description of proposal
Federal	U.S. Army Corps of Engineers, Seattle Regulatory District	Waters of the United States Clean Water Act of 1972 (40 CFR 230) Section 404 Permit.	Part 4, Section 4.C Section 404 permit not anticipated to be required for the Facility.
Federal	U.S. Fish & Wildlife Service	Threatened or Endangered Species Endangered Species Act of 1973 (ESA; 16 U.S.C. Section 1531, et seq.) and implementing regulations. Sections 7, 9, and 10 Consultation under the ESA and Bald and Golden Eagle Protection Act (BGEPA).	Part 4.H, Part 4.I
Federal	U.S. Fish & Wildlife Service	Migratory Birds Migratory Bird Treaty Act (16 U.S.C., 703-711).	Part 4.H, Part 4.I
Federal	U.S. Fish & Wildlife Service	Eagles	Part 4.H, Part 4.I

		BGEPA (16 U.S.C. 668-668c). Eagle permit regulations (50 CFR 22).	
Federal	U.S. Environmental Protection Agency	Air Quality Clean Air Act (42 U.S.C. 85, Section 7401, et seq.; 40 CFR 60).	Part 4, Section 4.B
Federal	Federal Aviation Administration	Form 7460-1 Construction or alteration requiring notice (14 CFR 77.9).	Part 4, Section 4.P.b
State	Washington Department of Ecology	Noise Control RCW 70A.20 Noise Control; WAC 173-58, Sound Level Measurement Procedures. WAC 173-60, Maximum Environmental Noise Levels; WAC 463-62-030, Noise Standards.	Part 4, Section 4.P.b
State	Washington Department of Ecology	Air Quality WAC-173-400, General Regulations for Air Pollution Sources. WAC 173-441, Reporting of Emissions of Greenhouse Gases. WAC 173-476, Ambient Air Quality Standards.	Part 4, Section 4.B
State	Washington Department of Ecology	Waters of the State (Water Quality) Section 401 Water Quality Certificate, Joint Aquatic Resource Permit Application (JARPA).	Part 4, Section 4.C Section 401 permit not anticipated to be required for the Facility.
State	Washington Department of Fish and Wildlife	Fish and Wildlife WAC 220-610 defines State species status and protections. RCW 77.55, Hydraulic Code for in-water work; Hydraulic Project Approval (HPA)	Part 4, Sections 4.H and 4.J (for WAC 220- 610) Part 4, Section 4.C (for RCW 77.55 and HPA)

State	Washington Department of Ecology	State Environmental Policy Act (SEPA) RCW 43.21C, Washington Environmental Policy Act. WAC 197-11, Washington Department of Ecology SEPA Rules, which establish uniform requirements for compliance with SEPA.	Parts 3 and 4
State	Washington State Department of Archaeology and Historic Preservation	Archaeology and Historic Preservation RCW 27.53, Archaeological Sites and Resources.	Part 4, Section 4.U
State	Energy Facility Site Evaluation Council	Energy Site Certification RCW 80.50 Energy Facilities – Site Locations.	This ASC addresses the site location review requirements for a Site Certification Agreement.
State	Washington State Department of Transportation	Transportation General Permit, WAC 468-51. Oversize and Overweight Permit, WAC 468-38-075.	Part 4, Section 4.R

PART 2 – CORE INFORMATION

Part 2 – Core Information

A. Project Details

A.1. Project Name

Wallula Gap Solar (Facility)

A.2. Project Description

Provided is a possible outline for this section:

1. Definitions
2. Introduction
3. Project Components
   - 3.1 Solar Array
     - 3.1.a Solar Modules
     - 3.1.b Tracker systems
     - 3.1.c Post
     - 3.1.d Cabling
     - 3.1.e Invertors
     - 3.1.f Transformers
     - 3.1.g Electrical collector lines
   - 3.2 Power collection systems
     - 3.2.a Collector Substation
     - 3.2.b Gen-Tie Lines and Inter-connections
     - 3.2.c Battery Energy Storage System (BESS)
   - 3.3 Operations and Maintenance Building
   - 3.4 Access Roads and Fencing
4. Construction
5. Operations and Maintenance
6. Site Restoration and Decommissioning

Introduction

The Applicant proposes to construct the Facility (a 60-MW AC solar photovoltaic project with an optional BESS) located in unincorporated Benton County, Washington. The Facility will be named Wallula Gap Solar for the nearby National Natural Landmark—a large water gap where the Columbia River cuts through the basalt deposits of the Columbia River basin. The stretch of the Columbia river From Wallula Gap to the Snake was considered an important trading center and a significant location for several native tribes including the Walla Walla, Wanapum, Umatilla, and Yakama. Settlements and fishing sites once lined the shorelines, and the area was considered an important trading center, bringing numerous visitors from the east and west. Historic maps indicate a road connected Hudson Bay Company's first Fort Walla Walla at Wallula Gap with the Walla Walla valley to the east. In this application, the following terms are used to describe the areas associated with the Facility:

- ***Facility Parcels:*** The parcels that are included partially or wholly by the lease agreement with the Landowner on which the Facility will be sited. Approximately 1,220 acres.
- ***Project Area Extent:*** The collective portions of the Facility Parcels that are under active Site Control for the construction and operation of the Facility. The Facility will be microsited within the 437 acres defined as the Project Area Extent.
- ***Facility Area:*** The Facility Area includes the maximum footprint of the Facility, which includes 392 acres of fenced area, approximately 9 acres of access roads within the fenced area, and approximately 635 feet of gen-tie facilities outside of the fenced area.

The Facility will be located approximately 4 miles northwest of the unincorporated community of Plymouth along Washington SR-14, approximately 5 ¼ miles west of its intersection with Interstate 82 (see Appendix A, Figure A-1). The Facility Parcels are situated in Townships 5 and 6 North, Range 27 East (see Attachment A, Figure A-2). The coordinates for the center point of the Facility are 45°57'17.18"N latitude and 119°26'52.47"W longitude. The Applicant has entered into long-term land lease agreement with the landowner for adequate acreage to accommodate the Facility for its operational lifetime. The landowner has provided letters of support for the Facility, which are enclosed as Attachment D.

Siting Characteristics

The Applicant chose this location in Benton County in consideration of many suitability characteristics, including but not limited to the following: the high solar energy resource, the flat underlying topography and land traits, access to electrical infrastructure, compatibility with allowed uses on surrounding lands, unsuitability for crop cultivation, and low impact to wildlife and human populations.

As shown in Figure 2-1, Benton County has some of the highest solar energy resource areas in the State of Washington. This higher resource means that each solar panel can produce more electricity on an annual basis than one sited in a lower resource area. While the solar resource is superior east of the Cascade Mountains, there is limited existing electrical infrastructure with the available interconnection capacity to connect a project of this size. This electrical constraint creates a limiting factor for locations where solar energy projects are economically feasible in eastern Washington. Additionally, the topography of the site is gently south sloping, which is ideal for maximum solar energy capture and electricity generation.

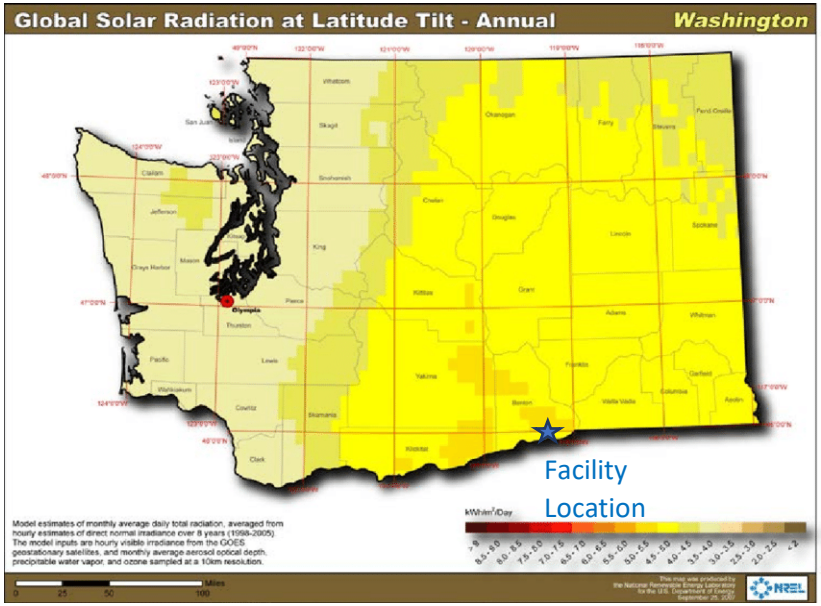

Figure 2-1: Solar Resource Map, National Renewable Energy Lab

Another important siting factor is the nearby access to electrical infrastructure, which is owned and operated by Benton PUD. Benton PUD owns the existing substation and 115-kV transmission line adjacent to the Project Area Extent, to which the Facility would be tied. Interconnection studies have shown that there is sufficient capacity to support the Facility without cost-prohibitive upgrades. The Facility would interconnect to Benton PUD's 115-kV line near the Prior #2 Substation, then connect to the BPA's transmission network at the McNary Substation.

After considering solar resource availability and the existing grid capacity of the general region, this specific project location was chosen after careful consideration of potential impacts on wildlife, habitats, wetland environments, and cultural significance to local and historic inhabitants of the region. In considering continuity of land use, the Facility will be sited on land that has previously been highly disturbed and modified by human activity in recent decades. Land use on the Facility Parcels includes cattle grazing and crop cultivation, and modifications to the natural landscape include several gravel-packed and dirt roads, a gravel-packed airstrip, quarries, buildings including a well-house, potato cellars, and a truck-scale, equipment staging areas, earthen berms and culverts, and wastelands.

The Facility Parcels are zoned GMAAD under the BCC. Until December of 2021, "solar power generating facilities, major" were a conditionally permitted use in the GMAAD zoning district in Benton County; however, the commissioners approved Ordinance Amendment (OA) 2021-004 to remove the CUP option for

"solar power generator facility, major" from the GMAAD district. Due to this change in zoning, the Facility is not in compliance with the current zoning ordinance. Though the Facility is currently not in compliance with the current zoning ordinance concerning solar facilities after the passage of OA 2021-004, the Applicant demonstrates throughout the Land Use Consistency Review (Attachment E) how the Facility is consistent with the applicable policies of the Comprehensive Plan and the CUP standards that existed prior to OA 2021.Based on the primacy of the state when siting energy facilities as provided by RCW 80.50.110(1), and the state's express preemption and occupation of the field pursuant to RCW 80.50.110(2), the Applicant is therefore requesting preemption of the local land use regulations under WAC 463-28-020.

Facility implementation will support the long-term economic sustainability of the participating landowner via direct lease payments, while agricultural activities on lands surrounding the Facility Area will be able to continue unimpeded. The Landowner owns the agricultural land on all sides of the Facility Area boundary and plans to utilize the income from the Facility to support its other agricultural lands and continue farming adjacent parcels during operation of the Facility.

In addition to the benefits to the Landowner, the Facility would have a number of benefits to the local community and to Washington state. Construction of the Facility would support up to 105 jobs during peak construction. The Applicant estimates that up to 50 percent of the construction jobs can be hired locally and would advertise open positions at local job fairs and through other local advertising to enable as much local hiring as possible. The Facility would provide Benton County with approximately $4.9 million in property tax revenue and provide the local landowners with stable revenue to supplement their agricultural operations which are subject to market volatility. Finally, construction of this renewable energy resource would help Washington meet its goal of 100 percent clean electricity supply as set forth in the Clean Energy Transformation Act (CETA), passed by the Washington legislature in 2019.

Facility Components and Layout

As shown in the Preliminary Site Layout (see Attachment A, Figure A-1), the Facility would consist of PV panels, inverters, mounting infrastructure, an electrical collection system, access roads, interior roads, security fencing, a new collector substation, electrical interconnection infrastructure, an optional operations and maintenance building and an optional battery energy storage system. The Preliminary Site Layout is based upon the technical studies completed to-date and is subject to changes within the Project Area Extent, but the Facility size will not exceed 60 MW AC in size.

The Applicant anticipates that the Facility would utilize a single-axis tracking system designed to optimize system output by slowly rotating the solar PV panels to follow the path of the sun. The Applicant proposes an optional battery energy storage system that would support the solar generation. The benefit of a BESS system at Wallula Gap Solar would primarily be to store and smooth the renewable energy generation. Storing excess solar-generated electricity and supplying it back to the grid or to local loads when needed would offer a wide array of benefits, such as reducing renewable curtailments, avoiding negative wholesale power prices coincident with wind and solar over-generation, and limiting price spikes related to evening peak ramping needs. Co-locating batteries with solar allows system owners to more predictably manage the power supplied to the grid. The key driver for whether the BESS system would be included in the Facility final design is contingent upon pending commercial discussions with the Facility's long-term energy off-taker.

The final location of Facility components will depend both upon results from outstanding technical studies and engineering design (e.g., civil design and interconnection studies) as well as ongoing stakeholder consultations, which may require changes to the Facility Area configuration to minimize potential impacts to natural resources and optimize Facility economics. A set of Construction Plans and Specifications would be provided to EFSEC for approval at least 90 days prior to the beginning of construction. The Applicant anticipates limited ground disturbance for the installation of the solar array, battery energy storage pad, and electrical facilities. The Applicant will work with EFSEC, Ecology, and Benton County officials to ensure all grading meets standard code for stormwater and sediment erosion control.

The major Facility components, including the optional BESS system, are described below.

Solar Modules. The photovoltaic solar modules, commonly known as solar panels, are the basic building blocks of the Facility. Each module is an assembly of photovoltaic cells, an electrical device that converts the energy of light directly into electricity by the photovoltaic effect. The Facility is currently designed to use a bifacial PV module, in which both sides of the module collect energy. This increases the output of each module by capturing additional energy from sunlight reflected off the ground to the back of the module.

Tracking System. The panels are mounted together into solar arrays on a steel racking system. The Facility will utilize a single-axis tracking system that allows the panels to change their tilt, rotating slowly from east to west to track the sun throughout the day, which increases electricity production relative to stationary, fixed-tilt panels. At maximum tilt, the panels may be up to 10 feet above the ground.

Posts. The tracking system will be secured to steel posts, also known as piles, which serve as the foundation. The piles are driven or screwed into the ground to a depth of approximately five to twelve feet, depending on soil conditions. Generally, piles are expected to be placed between 10 and 30 feet apart, depending on the final system design. The final layout including the number of posts required would be informed by both the geotechnical conditions on site and the racking manufacturer.

Cabling. Throughout the Facility, electric cables will transmit the electric current produced by the solar arrays to pad-mounted inverters and transformers. Depending on site conditions, the cables may be buried at a depth of at least three feet or strung above-ground along the tracking system in cable trays.

Inverters and Transformers. The electricity produced by solar panels is in DC form and is converted by inverters into AC. Each inverter is coupled with a medium voltage step-up transformer to increase the voltage of the power to a medium voltage of 34.5 kV which minimizes losses for collection of the power to the Facility Substation. The inverters and step-up transformers will be mounted on concrete pads throughout the Facility.

Collector Lines. The transformers will be linked throughout the Facility via 34.5-kV collector lines that transmit the power to the Facility Substation. The collector lines will be strung overhead or buried at a depth of approximately 3 feet, pending final design.

Facility Substation. The Facility Substation is the final stop for the power on its way to the electrical grid. The Facility Substation consists of the main step-up transformer to increase the voltage to 115 kV for interconnection to the grid and the control house which houses protective equipment including communications equipment, circuit breakers, disconnect switches and relays. As currently designed, the Facility Substation, optional O&M building, and a laydown area would be situated within a fenced area totaling approximately 0.4 acres. This area would also reserve adequate space for optional BESS siting.

Operations and Maintenance Building (Optional). The Facility may include an O&M building which may consist of a single-story structure with office space, warehousing space, and breakroom facilities. The water required for the Facility's construction and operations will come from existing water sources with valid water rights, to be verified by the Washington Department of Ecology. Depending on the time of year, water used may come from a point of use on a Facility parcel, or from a facility owned by the same landowner about 4.5 miles away. No water or sewer will be installed on-site. The optional O&M building will utilize portable toilets. Electric service would be provided by the Benton PUD, the local service provider. A graveled parking area with at least three spaces for employees and visitors would be located adjacent to the building. Relevant building permits would be obtained for the optional O&M building. This includes a Benton County Building permit and Washington Labor and Industries Electrical Permit as well as applicable SWPPP (see the Land Use Consistency Review (Attachment E) for additional permitting details).

Access and Service Roads. The Facility will be accessed via a private road off SR-14. The private road heads north from SR-14 at approximately 45°53'58.93" N, 119°26'05.37" W. This access road would lead to the multiple points of entry to the Facility, utilizing existing access roads where possible. From the entrance to the Facility, internal service roads would be built to provide access to the modules, inverters, transformers, and around the perimeter of the Facility.

Access roads within the Facility Area will include new gravel access roads. All roads including the access road would be built to fire code standards as set by the Benton County Planning Department, Benton County Emergency Management and Fire District #6. Roads would be constructed of an all-weather road surface, have a minimum width of 20 feet, and approved turning radii and turnarounds. The final layout would be provided to EFSEC and local building and emergency management officials. The Applicant has completed early-stage consultation with the Benton County Fire District #6 Fire Marshal, providing them with the Preliminary Site Layout and the commitments made in this ASC related to fire planning (see Attachment C).

The Traffic Impact Analysis (Attachment K) found that no improvements are required for the existing approach off SR-14 to accommodate the Facility based on WSDOT standards. The Applicant has previously consulted with WSDOT regarding the preferred approach and the necessary permits required for upgrading it if upgrades become necessary. The Applicant would obtain a General Permit from WSDOT prior to upgrading the approach; however, no upgrades are currently anticipated.

Fences, Gates, and Security Lighting. The Facility will be enclosed by a perimeter chain-link fence or welded wire mesh fence up to approximately 8 feet in height. Access to the Facility would be gated and locked with gates 20 feet in width with accessible hardware per fire department requirements.

Lighting is needed for security and occasional after-hours work; however, the Applicant would limit the amount of lighting and would shield lighting as needed.

Battery Energy Storage System (Optional). The Facility includes an optional BESS. The BESS would not exceed the nominal capacity of the Facility, which is 60 MW AC. BESS systems installed with generation facilities can be designed as an AC-coupled system or a direct current (DC)-coupled system for front-of-the-meter applications such as this Facility. As currently designed, the BESS is DC-coupled, meaning it is located downstream of the solar inverters and the power output of the storage system would be limited by the individual inverters that the batteries are connected to, charging solely off power produced by the solar Facility. This is more cost effective and efficient from both a land use and energy use standpoint, as a BESS allows for the facility to utilize energy capture and discharge more effectively throughout the day.

The Facility may use lithium-ion battery technology. The BESS system would hold power in a series of modular, self-contained containers (typically steel) and would be designed in accordance with industry standard safety systems. The lithium-ion battery system would be composed of individual cells that are hermetically sealed and would not be opened on-site for any installation or maintenance purposes and do not have any wastewater discharges. Lithium-ion batteries do contain flammable liquids that can become heated during operation. Accordingly, each lithium-ion BESS would contain a fire suppression system in accordance with Fire Code and National Fire Protection Association (NFPA) standards; specifically, NFPA 855 – "Standard for the Installation of Stationary Energy Storage Systems." The BESS would include monitoring equipment and alarm systems with remote shut-off capabilities. Installation, maintenance, and decommissioning of BESS components would be done in compliance with 49 CFR §173.185, which regulates the transportation of lithium-ion batteries. The Facility would use thoroughly proven, financeable batteries, inverters, and related equipment, including battery products that are listed or certified by Underwriters Laboratory (UL), the industry's foremost safety and sustainability third-party standard. See Section 4.13 (Environmental Health) for further discussion of emergency safety measures for the Facility.

Interconnection

The Facility will interconnect to the electrical grid through a line tap to Benton PUD's 115-kV line near Prior #2 Substation. A generation tie line (gen-tie line) from the Facility's substation to the transmission line-tap will be constructed, estimated to be approximately 3,300 feet in length. The proposed gen-tie line will originate near the center of the Facility Area at the Facility Substation. Approximately 3,100 feet of the proposed gen-tie may be buried, with the remainder situated on aboveground lines. The gen-tie is shown in the Preliminary Site Layout (Appendix A, Figure A-1). The generation will then be connected to the BPA's facilities at the Plymouth tap (aka Paterson Tap), where Benton PUD and BPA facilities connect at BPA's McNary substation. Benton PUD will upgrade, build, own and operate the structures which constitute the transmission facilities from the project to BPA's system; BPA-Transmission Services (BPA-TS) will install, own, and operate required incremental additions to the McNary substation as well as the metering and the control and communications equipment at the Facility. As identified and confirmed through the BPA and Benton PUD interconnection study processes, the interconnection requires minimal new facilities at this location. The interconnection line-tap would be constructed, owned, and operated by Benton PUD.

Site Preparation and Construction

Facility construction is estimated to take 12 to 18 months. At peak construction, the Facility would employ up to 105 workers at peak. Construction is expected to begin in Q4 of 2025 with a COD planned for Q4 of 2026. It is anticipated that the construction workers will consist of approximately 50 percent of locally hired workers. The Applicant will contract experienced contractors with a focus on hiring local workers. All features would be designed in accordance with Washington State and Benton County regulations, including those for erosion, sediment control and stormwater. Additionally, the Applicant will obtain an Electrical Construction Permit from the Washington Department of Labor and Industries and any required building permits.

During the first 30 to 60 days, work on site would consist primarily of clearing and grubbing activities and limited grading for access roads. Construction personnel would be limited to less than approximately 20 to 40 workers during this period. Once the Facility construction begins, the on-site head count would increase, peaking at approximately 105 workers during periods of high activity. During the final 30-day period, the electrical work would be completed, and the headcount would begin dropping back to approximately 20 to 40 workers. After construction, there would be some additional on-site work for plant startup and testing that would involve utility company personnel.

The Traffic Impact Analysis (Attachment K) found that vehicle traffic for on-site personnel is expected to be at a ratio of 1.2 occupants per vehicle with arrival times being spread across a 2-hour window in the mornings and evenings. The delivery of materials would range from 15 to 75 deliveries per day at peak and would taper off significantly once all the panels and trackers are onsite.

Fugitive dust emissions from the site would typically be generated only from the grading work and vehicular traffic on the access roads during the construction period. The Applicant would minimize fugitive dust emissions as described in Part 4.B (Air Quality).

The Facility would require the typical equipment used in many construction projects. Because solar farms are low to the ground, there is very minimal work performed at great heights. The installation work would be performed utilizing the following equipment: skid steers, light dozers, excavators, pile drivers, reach forklifts, light duty utility vehicles, heavy duty utility vehicles, and delivery trucks.

The Applicant will develop a detailed Construction Management Plan addressing the primary site preparation and construction phases and based generally on mitigation measures as summarized in Section 2.A.5. The plan will be submitted to EFSEC at least 90 days prior to site preparation. The Applicant will also provide EFSEC with an overall construction schedule at least 30 days prior to site preparation. Finally, at least 90 days prior to construction, the Applicant will provide EFSEC with a set of construction plans, specifications, drawings, and design documents that demonstrate the Facility is in compliance with conditions of the Site Certificate Agreement.

Operation/Use

The expected life of the Facility is assumed to be 35 years. However, depending on the commercial market for renewable energy, the Facility could be updated with more efficient components over time that could extend its useful life. Minimal on-site maintenance would be required over the life of the Facility. Routine maintenance checks on the equipment would occur quarterly. Routine mowing and spot treatment for invasive grasses will occur in the spring and the fall and will follow the plan outlined in the Vegetation and Weed Management Plan, which will be developed at least 90 days prior to construction. Additional maintenance would occur as needed, but it is not anticipated that any full-time staff would be employed by the Facility.

Closure/Reclamation

Per WAC 463-72-040, the Applicant will develop an Initial Site Restoration Plan and submit this plan to EFSEC at least 90 days prior to the beginning of site preparation. The plan would identify, evaluate, and reasonably resolve all major environmental and public health and safety issues anticipated. The plan will describe the process used to evaluate the options and select measures that would be taken to restore or preserve the site or otherwise protect all segments of the public against risks or danger resulting from the site. The plan will include a discussion of economic factors regarding the costs and benefits of various restoration options versus the relative public risk and will address provisions for funding or bonding arrangements to meet the restoration or management costs. The objective of the plan will be to restore the site to preconstruction condition or similar, in accordance with EFSEC's requirements, accounting for the intent and the use of the land provided by the landowner. The plan will include provisions for removal of the solar panels and racking system, foundations, cables, and other facilities, and restoration of any disturbed soils to the pre-construction condition.

Due to the limited ground disturbance and anticipated benefits to local soil quality, the Facility Area would be returned to agricultural use following decommissioning of the Facility, at the landowner's discretion.

A.3. Project Schedule, Employees, and Public Access

Phase	Proposed Timing	Duration	Employee numbers on site & frequency	Public Access (yes/no)
Site preparation	2025	30-60 days	40	No
Construction	2026	12-18 months	Average of 56, with a peak workforce of 105	No
Operation/use	2026	35 years	5 (part-time)	No
Decommissioning/restoration	2051	6 months	Similar to, or less than, those required for construction (peak of 105)	No

A.4. Phased and Future Projects

Is this project an addition, continuation, or expansion of a previous proposal or are there other related actions planned? If Yes, describe past or future projects that relate to this proposal, including expected timing. (Include additional sheets as needed).	☒ No	☐ Yes
N/A		

A.5. Site Maps and Plans				
Map #	Map Name	Purpose and Description	Completed?	Included?
Figure A-1	Preliminary Site Plan	Preliminary layout and map showing Facility components	Yes	Yes
Figure A-2	Assessor Parcels	Map displaying parcel numbers on which the Facility Area is located	Yes	Yes
Figure A-3	Zoning	Map displaying Benton County zoning in the Facility vicinity	Yes	Yes
Figure A-4	Soils	Mapped soil types throughout the Facility Area	Yes	Yes
Figure A-5	Geologic Hazards	Map displaying topography and Benton County Geologically Hazardous Areas within and near the Facility Area	Yes	Yes
Figure A-6	Waters and Wetlands	National Hydrographic Database, National Wetlands Inventory mapping within and near the Facility Area	Yes	Yes
Figure A-7	Flood and CARA	FEMA flood hazard mapping and locations of features identified by Benton County as Critical Aquifer Recharge Areas (CARA) in the Facility vicinity	Yes	Yes
Figure A-8	Habitat	Mapped habitat classifications based on site-specific habitat surveys	Yes	Yes
Figure A-9	Wildlife Corridors	Wildlife corridors based on site-specific habitat surveys	Yes	Yes
Figure A-10	Land Ownership	Mapped public and private land ownership	Yes	Yes
Figure A-11	Transportation Routes	Road network providing access to the Facility Area	Yes	Yes

A.6. Other Projects on the Same Site		
Are you aware of any applications pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If Yes, please describe. (Include additional sheets as needed).	☒ No	☐ Yes
N/A		

B. Project and Site Information

B.1. Earth and Ground Disturbance

B.1.a. Soils and Slopes Describe and identify if within disturbance area or within proximity to disturbance area (within 300 feet).

Soil types	Soils in the project area are shown in detail in Figure A-4. Burbank loamy fine sand, 0 to 15% slopes Burbank loamy fine sand, basalt substratum, 0 to 30% slopes Dune land Koehler loamy fine sand, 0 to 8% slopes Quincy loamy sand, 0 to 30% slopes Scooteney silt loam, 0 to 5% slopes Warden very fine sandy loam, 0 to 15% slopes
Steepest slope	30%
Range of Slopes	0-30%
Sensitive Area (talus slopes…)	None of the soils in the Facility Area are identified as sensitive soils.

B.1.b. Demolition, Grade, and Fill

Would any demolition or renovation occur during construction? If yes, list the method and waste use or disposal site.	☐ No	☒ Yes
Method: As currently designed, some historical irrigation infrastructure is located underground within the southern portion of the Facility Area. This infrastructure includes buried water lines, cement pads and an old center pivot. Most of this equipment will remain in place, pending further design, in order to limit removal costs.		
Would any demolition or renovation occur during operation? If yes, list the method and waste use or disposal site.	☒ No	☐ Yes
N/A		
Would any grade, fill, or excavation in upland areas occur during construction? If yes, indicate whether grading, filling, or excavating will occur. Then indicate the cubic yards proposed, the source of fill, and/or the disposal site or use.	☐ No	☒ Yes
Grading: • Cubic yards proposed: 89,593 CY • Source of fill: On-site No excavating (exporting material off site) would occur. All grading fill material will be sourced from the project site. The project is designed to balance, imports will be limited to trench lining, aggregate for roads and structural supports etc.		
Would any grade, fill, or excavation in upland areas occur during operation? If yes, indicate whether grading, filling, or excavating will occur. Then indicate the cubic yards proposed, the source of fill, and/or the disposal site or use.	☒ No	☐ Yes
N/A		

Is fill or excavation proposed within surface waters, wetlands, or frequently flooded areas? If yes, indicate whether grading, filling, or excavating will occur. Then indicate the cubic yards proposed, the source of fill, and/or the disposal site or use.	☒ No	☐ Yes
N/A		
B.1.c. Structure Height		
Identify the tallest height of any proposed structure, not including antennas:	100-foot (Gen-tie Poles) utility poles are to be specified by the interconnecting utility (Benton PUD).	
Describe the principal exterior building material proposed for all structures:	Steel	

B.2. Landcover Types and Acreage Add additional Project Site Areas as appropriate for the site.					
Landcover Types		Acreage within Facility Area			
		Existing Conditions Pre-Project	Proposed Temporary Impacts	Proposed Altered Habitat	Proposed Permanent Impacts
Roads, structures, and other impervious surfaces or developed lands		-	-	-	-
Wetlands	Emergent (Marshes, Meadows, etc.)	0.2	-	0.2[1]	-
	Scrub and Shrub	-	-	-	-
	Forested	-	-	-	-
	Open Water	-	-	-	-
Vegetated Uplands	Agriculture and Croplands	365.6	-	356.1	9.5
	Modified Grasslands and Improved Pasture	-	-	-	-
	Grasslands and Unimproved Pasture	-	-	-	-
	Shrub-steppe and Scrublands	19.1	-	17.6	1.5
	Forested and Woodlands	-	-	-	-
	Mixed Environments	7.5	0.3	6.9	0.3
Unvegetated (rock, earth, talus slopes, etc.)		-	-	-	-
Other (ephemeral streams, intermittent streams, etc.)		-	-	-	-
TOTAL:		**392.4**	**0.3**	**380.8**	**11.3**

[1] The 0.2-acre wetland feature shown within the Facility Area in Attachment B, Figure 2 and Figure 3, will be avoided during construction and operations. The 40-foot buffer required by Benton County around the category IV wetland will also be enforced and BMPs will be utilized to ensure the wetland retains functionality similar to pre-Facility conditions.

B.3. Plants and Habitats		
Are there any plants or habitats present on the site? If yes, complete the following portions. If none, proceed to section B.4.	☐ None	☒ Yes
Are there deciduous trees (i.e. alder, maple, aspen) present on the site? If yes, specify below.	☐ No	☒ Yes
Russian olive (*Elaeagnus angustifolia*) and cottonwood (*Populus* spp.) are present along the north side of SR-14.		
Are there evergreen trees (i.e. fir, cedar, pine) present on the site? If yes, specify below.	☒ No	☐ Yes
N/A		
Are there shrubs, grass, or pasture present on the site? If yes, specify below.	☐ No	☒ Yes
Vegetation primarily consists of non-native grasses and forbs, with minor early successional shrubs such as rubber rabbitbrush (*Ericameria nauseosa*) and patches of woody vegetation including willows (*Salix* spp.). Pasture is the primary habitat type covering 366 acres of the 392-acre Facility Area and is characterized by low herbaceous vegetation, absent substantive shrub cover, or over story consisting primarily of common stork's-bill (*Erodium cicutarium*), spring draba (*Draba verna*), gold-star (*Crocidium multicaule*), and the rosettes of fiddleneck (*Amsinckia* spp.) and other assorted weedy species.		
Are there shrub-steppe plants (i.e. sage brush, native grasses) present on the site? If yes, specify below.	☐ No	☒ Yes
Co-dominated by big sagebrush (*Artemisia tridentata*) and rubber rabbitbrush, with the largest patch (10 acres) north of the landing strip but mostly in patches <2.5 acres, with a total of 19 acres of the 392-acre Facility Area		
Are there wet soil plants (i.e. cattail, buttercup, bulrush, skunk cabbage) present on the site? If yes, specify below.	☒ No	☐ Yes
N/A		
Are there water plants (i.e. water lily, eelgrass, milfoil) present on the site? If yes, specify below.	☒ No	☐ Yes
N/A		
Are there other vegetation types present on the site? If yes, specify below.	☒ No	☐ Yes
N/A		
Are there noxious or invasive plant species present on the site? If yes, specify below.	☐ No	☒ Yes
Noxious weeds include kochia (*Bassia scoparia,* Class B), rush skeletonweed (*Chondrilla juncea,* Class B), cereal rye (*Secale cereale*, Class C), and diffuse knapweed (*Centaurea diffusa*, Class B).		
Are there other habitat types present on the site? If yes, specify below.	☐ No	☒ Yes
Gravel-packed and dirt roads, quarries, buildings equipment staging areas, and wastelands are present for a total of 8.3 acres. The highly disturbed and modified areas along the edge and into the interior of pastures include non-native, ruderal species plant species such as flixweed (*Descurainia sophia*), kochia, Russian thistle (*Salsola tragus*), and tall tumblemustard (*Sisymbrium altissimum*).		
Do you know of any at-risk plant species present on the site? These may include: • Threatened or endangered • Species of local importance • Federal or state listed • Special Status		

<table>
<tr><td colspan="3">• Federal or state priority
For tribal-specific fish, plant, or wildlife resources present on the site where abundance is limited elsewhere, see section B.11.</td></tr>
<tr><td colspan="2">If none are known to be on the site, check no. If yes, specify below.</td><td>☒ No ☐ Yes</td></tr>
<tr><td>Species Name</td><td>Listing Status</td><td>Source for Identification</td></tr>
<tr><td>None identified.</td><td>N/A</td><td>Field work:
• Rare Plant Field Survey conducted 03/2022 following protocols outlined in Fertig (2020) and Whiteaker et al. (1998) (see Attachment F, Section 4.4).

References (see Attachment F, Tier 3 Wildlife, Habitat, and Plant Survey Report):
• Locations of Rare Plant and Rare/High-Value Ecosystems (WDNR 2021a; https://www.dnr.wa.gov/NHPdata)
• Benton County List of Known Occurrences of Rare Plants, Mosses, and Lichens (WDNR 2021b; https://www.dnr.wa.gov/NHPdata)
• Field Guide to the Grasses of Oregon and Washington, hardcopy (Roché et al. 2019)
• Field Guide to Rare Plants of Washington, hardcopy and electronically (Camp and Gamon 2011; https://www.dnr.wa.gov/NHPfieldguide)
• PLANTS Database (NRCS; https://plants.usda.gov/java/)
• Washington Native Plant Society (https://www.wnps.org/)
• The Burke’s Botany Collection (University of Washington Herbarium; http://www.burkemuseum.org/research-and-collections/botany-and-herbarium)
• Web Soil Survey (NRCS; https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm)
• Noxious Weed List (Benton County 2022; http://www.bentonweedboard.com/)</td></tr>
<tr><td colspan="3">B.4. Forest Harvest</td></tr>
<tr><td colspan="2">Is a forest practice or timber harvest proposed on any sites associated with the proposal? If yes, please provide the acres proposed and other pertinent details below.</td><td>☒ No ☐ Yes</td></tr>
<tr><td colspan="3">N/A</td></tr>
</table>

B.5. Fish and Wildlife		
Are there any animals that have been observed or are known to be on or near the site? If yes, complete the following portions. If none, proceed to section B.4.	☐ None	☒ Yes
Have birds (i.e. hawk, heron, eagle, songbirds) been observed or known to be on or near the site, or to use the site as a travel corridor? If yes, please specify and provide details below.	☐ No	☒ Yes
Bird species observed during field surveys included American kestrel (*Falco sparverius*), American robin (*Turdus migratorius*), black-billed magpie (*Pica hudsonia*), California quail (*Callipepla californica*), common raven (*Corvus corax*), European starling (*Sturnus vulgaris*), bald eagle (*Haliaeetus leucocephalus*), great horned owl (*Bubo virginianus*), house finch (*Haemorhous mexicanus*), northern flicker (*Colaptes auratus*), northern harrier (*Circus hudsonius*), red-tailed hawk (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), Savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), and white-crowned sparrow (*Zonotrichia leucophrys*). One nest located on a high-voltage electrical transmission tower in the Project Area Extent was occupied by a red-tailed hawk. While no suitable bald eagle nesting habitat is present in the Facility Area or surrounding 1 mile, four bald eagles were observed during surveys feeding on a coyote (*Canis latrans*) carcass within the Project Area Extent.		
Have mammals (i.e. deer, bear, elk, beaver) been observed or known to be on or near the site, or to use the site as a travel corridor? If yes, please specify and provide details below.	☐ No	☒ Yes
Mammal species observed during field surveys included coyote, northern grasshopper mouse (*Onychomys leucogaster*), northern pocket gopher (*Thomomys talpoides*), and sagebrush vole (*Lemmiscus curtatus*).		
Have fish (i.e. bass, salmon, trout, herring, shellfish) been observed or known to be on or near the site, or to use the site as a travel corridor? If yes, please specify and provide details below.	☒ No	☐ Yes
N/A		
Have noxious or invasive animal species been observed or known to be on or near the site, or to use the site as a travel corridor? If yes, please specify and provide details below.	☒ No	☐ Yes
N/A		
Have other animals been observed or known to be on or near the site, or to use the site as a travel corridor? If yes, please specify and provide details below.	☐ No	☒ Yes
WDFW noted high use of the landscape by waterfowl during winter and potential for the occurrence of burrowing owls (*Athene cunicularia*). Other species of interest with potential to occur on or near the site included Townsend's ground squirrel (*Urocitellus townsendii*), long-billed curlew (*Numenius americanus*), white-tailed jackrabbit (*Lepus townsendii*), and black-tailed jackrabbit (*Lepus californicus*). None of these species were observed during field surveys.		
Do you know of any at-risk animal species present on the site? These may include: • Threatened or endangered • Species of local importance • Federal or state listed • Special Status • Federal or state priority For tribal-specific fish, plant, or wildlife resources present on the site where abundance is limited elsewhere, see section B.11.		

If none are known to be on the site, check no. If yes, specify below.		☐ No	☒ Yes
Species Name	Listing Status	Source for Identification	
bald eagle	Federal legal protection under the BGEPA (16 U.S.C 668–668d).	After consulting with the WDFW, field work was completed during the spring of 2022 using agency-approved methodology. During field surveys, surveyors observed four bald eagles in the Survey Area feeding on a coyote. No suitable bald eagle nesting habitat is present in the Project Area Extent or surrounding 1 mile; however, carrion, cattle carcasses, and calves provide foraging opportunities for all raptors within the Project Area Extent.	

B.6. Property/Site Designations Provide information for the following fields.								
Comprehensive Plan (name, date, pertinent sections):	Benton County Comprehensive Plan, updated April 12, 2022 Pertinent Sections Include: - Chapter 2: Goals and Policies o Chapter 2.2: Land Use Element o Chapter 2.3: Natural Resources Element o Chapter 2.6: Economics Element o Chapter 2.7: Housing Element o Chapter 2.8: Transportation Element o Chapter 2.11: Utilities Element o Appendix A: Folio Maps Appendix L: Agricultural Land Reclassification Memorandum							
Current Zoning:	Growth Management Act Agricultural District (GMAAD)							
Planning Area:	Growth Management Act Agricultural District							
Shoreline Master Plan:	Benton County Shoreline Master Program, updated February 3, 2022				Designation:	N/A		
Closest Surface Water:	Columbia River, Rural				Distance:	1.75 miles		
WRIA #:	31: Rock-Glade Watershed							
Is the site a Natural Resource Land as designated by the county or city? Indicate yes or no for each type listed below.								
Forest land	☒ No	☐ Yes	Agriculture	☐ No	☒ Yes	Mineral	☒ No	☐ Yes
Is the site, or land within 300 feet of the site, in a Critical Area as designated by the county or city? Indicate yes or no for each type listed below.								
Wetland	☐ No	☒ Yes	Frequently flooded	☒ No	☐ Yes	Aquifer recharge	☐ No	☒ Yes
Geologic hazard	☐ No	☒ Yes	Habitat conservation	☒ No	☐ Yes	Other*	☒ No	☐ Yes
*If you indicated yes to Other, above, please provide Critical Area name(s):								
Is the site on a Local, State, or Federal Historic Register?				☒ No	☐ Yes	☐ Listed	☐ Proposed	☐ Eligible
Is the site identified as a non-tribal Local, State, or Federal Cultural Site? For tribal property/site designations, see section B.11.				☒ No	☐ Yes	☐ Listed	☐ Proposed	☐ Eligible
Do any other applicable plans or local/state/federal designations apply to the site? If yes, please specify below.							☒ No	☐ Yes
N/A								

B.7. Land Uses Provide information for the following fields.		
Existing Land Uses	Agricultural and vacant land, period grazing	
Past Known Land Uses	Early 1950–mid 1970s: Vacant, undeveloped land, grazing Mid-1970s–present: Agricultural use, crop cultivation and grazing Mid-1990s: Construction of landing strip	
Existing Adjacent Uses	North:	Developed orchards, well pump house, and maintenance shop
	South:	SR-14, then agricultural land use
	East:	Agricultural land use
	West:	321 PR SE (road), then a maintenance shop, gravel pit, Benton PUD (substation) and agricultural land use

<table>
<tr><td colspan="5">B.8. Utilities</td></tr>
<tr><td colspan="5">B.8.a. Stormwater Management - Construction</td></tr>
<tr><td colspan="3">Would there be stormwater runoff during construction? If yes, fill out the fields below. If no, continue to B.8.b.</td><td>☐ No</td><td>☒ Yes</td></tr>
<tr><td>Source of runoff:</td><td colspan="4">Compacted soils and construction areas. See Part 3.E and Part 4.E for additional information.</td></tr>
<tr><td>Quantity of runoff:</td><td colspan="4">New impervious surfaces will be a small portion of the Facility Area and stormwater will generally infiltrate across the full area of the site similar to current conditions. The Facility will meet Ecology requirements to maintain natural drainage patterns and reduce runoff rates from impervious surfaces. See Part 3.E and Part 4.E for additional information.</td></tr>
<tr><td>Method of collection:</td><td colspan="4">Ground infiltration through undisturbed native vegetation and erosion control measures. Erosion control measures and BMPs will be outlined in the SWPPP and associated ESCP and will be submitted to the EFSEC at least 90 days prior to construction. See Part 4.E for additional information.</td></tr>
<tr><td rowspan="4">Drain/discharge to:</td><td rowspan="2">☒Onsite</td><td>☒Overland flow</td><td colspan="2">Describe the plan for the options indicated.</td></tr>
<tr><td>☐ Engineered infiltration</td><td colspan="2">Because slopes within the Facility Area are generally very flat, the grading required will be minimal and will maintain existing drainage patterns. During construction, supplemental stormwater management measures will be implemented to prevent stormwater from flowing off site.</td></tr>
<tr><td rowspan="2">☐ Offsite</td><td>☐ Utility</td><td colspan="2">Describe the plan for the options indicated. If Utility was indicated, list the Utility name.</td></tr>
<tr><td>☐ Other</td><td colspan="2"></td></tr>
<tr><td colspan="3">Is a new facility, system, or line required? If yes, describe and locate on site map in the space below.</td><td>☒ No</td><td>☐ Yes</td></tr>
<tr><td colspan="5">N/A</td></tr>
<tr><td colspan="5">B.8.b. Stormwater Management - Operation</td></tr>
<tr><td colspan="3">Would there be stormwater runoff during operation? If yes, fill out the fields below. If no, continue to B.8.c.</td><td>☐ No</td><td>☒ Yes</td></tr>
<tr><td>Source of runoff:</td><td colspan="4">New impervious surfaces will be developed as part of this proposal (e.g., gravel roads, solar array posts, foundations, optional O&M building, substation components, etc.). However, these impervious surfaces are a small percentage of the total Project Area Extent and stormwater will generally infiltrate across the site through existing vegetation.</td></tr>
<tr><td>Quantity of runoff:</td><td colspan="4">New impervious surfaces will be a small portion of the Project Area Extent and stormwater will generally infiltrate across the full area of the site similar to current conditions. The Facility will meet Ecology requirements to maintain natural drainage patterns and reduce runoff rates from impervious surfaces.</td></tr>
<tr><td>Method of collection:</td><td colspan="4">Ground infiltration through undisturbed native vegetation and erosion control measures. Erosion control measures and BMPs will be outlined in the SWPPP and associated ESCP and will be submitted to the EFSEC within 90 days prior to construction. See Part 4.E for additional information.</td></tr>
<tr><td>Drain/discharge to:</td><td>☒ Onsite</td><td>☒ Overland flow</td><td colspan="2">Describe the plan for the options indicated.</td></tr>
</table>

		☐ Engineered infiltration	Because slopes within the Facility Area are generally very flat, the grading required will be minimal and will maintain existing drainage patterns. During construction, supplemental stormwater management measures will be implemented to prevent stormwater from flowing off site.
	☐ Offsite	☐ Utility	Describe the plan for the options indicated. If Utility was indicated, list the Utility name.
		☐ Other	

Is a new facility, system, or line required? If yes, describe and locate on site map in the space below.	☒ No	☐ Yes
N/A		

B.8.c. Energy								
Would there be energy consumption? If yes, fill out the fields below. If no, continue to the following section on production.							☐ No	☒ Yes
☒ Electricity	Utility name:	Benton PUD	☐ Natural gas	Utility name:		☐ Fuel	Type:	
Is a new facility, generator, line, or connection required? If yes, describe and locate on site map in the space below.							☐ No	☒ Yes
A new connection would be required for station service. The new service would power controls systems and lighting as needed when the Facility is not generating its own power and would be located near the existing potato storage buildings in the southeast corner of the site.								
Would there be energy production? If yes, fill out the fields below. If no, continue to B.8.d.							☐ No	☒ Yes
☒ Electricity	Receiving Utility name:	Benton Public Utility District						
Is a new facility, generator, line, or connection required? If yes, describe and locate on site map in the space below, including length of new line, height of poles, and other pertinent details.							☐ No	☒ Yes
The Facility will be a 60-MW PV solar facility with an optional BESS. The gen-tie line will run approximately 3,329 feet from the Facility substation near the center of the Facility Area to the POI along the east side of the Facility Area. Approximately 3,100 feet of the length of the gen-tie may be buried, with the remaining 200 feet above ground on approximately five to seven 100-foot-tall poles. Approximately 635 feet of gen-tie line will be located outside the fence line of the Facility.								

B.8.d. Water Use - Construction					
Would there be water use during construction? If yes, fill out the fields below. If no, continue to B.8.e.				☐ No	☒ Yes
Gallons per day (or per use and use frequency) and use proposed:	30,000-50,000 gallons per day				
Water source:	☐ Utility	Name:			
	☒ Surface water	Name:	The Applicant will obtain a construction temporary water use permit from Ecology for all water used during construction.		
	☐ Private well				
	☐ Private water system	Name:			
Is a new well, diversion, line, or connection required? If yes, describe and locate on site map in the space below.				☒ No	☐ Yes
N/A					

B.8.e. Water Use - Operation					
Would there be water use during operation? If yes, fill out the fields below. If no, continue to B.8.f.				☐ No	☒ Yes
Gallons per day (or per use and use frequency) and use proposed:	During operation the Facility would use minimal water due to portable toilets and wash stations on-site. The Facility may require panel washing during its operational life, if panel washing were to take place it would take approximately 30,000 gallons of water per wash, typically conducted on an as needed basis and based on weather patterns.				
Water source:	☐ Utility	Name:	N/A		
	☒ Surface water	Name:	Landowner's legal point of use on site and at a facility approximately 4.5 miles away.		
	☐ Private well				
	☐ Private water system	Name:	N/A		
Is a new well, diversion, line, or connection required? If yes, describe and locate on site map in the space below.				☒ No	☐ Yes
N/A					

B.8.f. Sanitary Waste Management					
Would there be a need for sanitary waste management? If yes, fill out the fields below. If no, continue to B.9.				☐ No	☒ Yes
Gallons per day:	N/A				
Discharge to:	☐ Utility	Name:	N/A		
	☐ Septic system				
	☒ Other	Describe:	Portable toilets, to be cleaned by a licensed service provider		
Is a new system, line, or connection required? If yes, describe and locate on site map in the space below.				☒ No	☐ Yes
N/A					

B.9. Emergency Service Providers Provide information for the following fields.	
Police Services:	Benton County Sheriff
Fire Services:	Benton County Fire Department, District 6
Other Emergency Services:	N/A

B.10. Transportation					
Will transportation methods other than roads/motorized vehicles be used to access the site (i.e. air, water, rail, pedestrians, bicycles, etc.)? If yes, describe in the space below.				☒ No	☐ Yes
N/A					
What are the arterial roads serving the area of the project site?	SR-14				
What type of vehicular traffic will be generated by the project? Provide information for the following fields.					
Construction	Round trips per day of vehicles:	176	Peak hour trips/day:	326	
	Round trips per day of heavy equipment:	15-75	Timing of peak hours:	7-9 AM, 4-6 PM	
Operation	Round trips per day of vehicles:	1-2 monthly	Peak hour trips/day:	1	
	Round trips per day of heavy equipment:	0	Timing of peak hours:	7-9 AM, 4-6 PM	
Are new public roads proposed? If yes, provide locations and describe in the space below.				☒ No	☐ Yes
N/A					
Are any public road improvements proposed? If yes, provide locations and describe in the space below.				☒ No	☐ Yes
Per the Traffic Impact Analysis (Attachment K), no public improvements are proposed. The spacing of the access road intersection with SR-14 and sight distance at the site meet the standards set by WSDOT and a left-turn lane was not warranted under a peak construction activity scenario.					
How much space currently exists for the parking of vehicles and/or heavy machinery?	0 spaces				
Will a new or expanded parking area be created during the project? If yes, describe and locate on site map in the space below.				☐ No	☒ Yes
Yes; the Facility will create three new private parking spaces.					

B.11. Select Tribal Considerations				
Are there any tribes that may have or claim particular rights to all or part of the project area? If yes, specify below.			☐ None Known	☒ Yes
Tribe	Contact	Date and Means of Contact	Outcome of Contact, Including Rights Asserted (If Any)	
Confederated Tribes of the Umatilla Indian Reservation	Teara Farrow Ferman, Ashley Morton, Bambi Rodriguez	2/25/2022, initial contact via email	Correspondence and formal engagement is ongoing between EFSEC and the Confederated Tribes of the Umatilla Indian Reservation.	
Confederated Tribes and Bands of the Yakama Nation	Jessica Lally	2/25/2022, initial contact via email	Correspondence and formal engagement is ongoing between EFSEC and the Confederated Tribes and Bands of the Yakama Nation.	
Confederated Tribes of the Warm Springs Reservation	Christian Nauer, Robert Brunoe	2/25/2022, initial contact via email	Correspondence and formal engagement is ongoing between EFSEC and the Confederated Tribes of the Warm Springs Reservation.	
Wanapum	Alyssa Buck, Clayton Buck, Angela Neller	2/25/2022, initial contact via email	The Applicant received concurrence (10/9/2023).	

If applicable, note other tribal representatives, members, or specialists consulted regarding the project not listed in Part 1.E. or above.			
Contact (Name, Program)	Address/Contact Information	Areas of Discussion	Status of Engagement
N/A	N/A	N/A	N/A

Do you know of any tribal-specific plant resources present on the site where abundance is limited elsewhere? If none are known to be on the site, check no. If yes, specify below.		☒ No	☐ Yes
Species Name	Listing Status	Source for Identification	
N/A	N/A	N/A	

Do you know of any tribal-specific fish or wildlife resources present on the site where abundance is limited elsewhere? If none are known to be on the site, check no. If yes, specify below.		☒ No	☐ Yes
Species Name	Listing Status	Source for Identification	
N/A	N/A	N/A	

PART 3 – SCREENING QUESTIONS

Part 3 – Screening Questions

A. Earth

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

A.1. Screening Question – Earth

Will the project occur in an area that contains…

- steep slopes, unstable soils, surface indications or history of unstable soils?
- other geologic hazard with the potential of landslide, mass wasting erosion, faulting, subsidence, or liquefaction?
- land identified in local ordinance as a designated geologic hazard critical area?

☒ No	Explain below why you believe “No” is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a “Yes” response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive “Yes” or “No” prior to the final submission of your application.

Explanation:

The Facility Area is predominantly flat to gently south-sloping. Elevation change across the Facility Area is about 200 feet (OneEnergy 2022). The Facility Area features no slopes identified as steep slopes with risk of instability by Benton County (Benton County 2023). It is anticipated that the Facility will have minimal grading and limited ground disturbance during the installation of the solar array, optional battery energy storage pad, and electrical facilities.

Approximately 5 percent of the Facility Area consists of Scooteney silt loam, 0 to 5 percent slopes, which has been identified as having high compaction potential. This implies that, after initial compaction, this soil is still able to support standard equipment, but will continue to compact with each subsequent pass. This soil is moisture sensitive, exhibiting large changes in density with changing moisture content. The compaction potential of the rest of the major soils across the Facility Area is low (NRCS 2023).

About 58 percent of the Facility Area features soils with low fugitive dust resistance ratings. A low fugitive dust resistance rating indicates that the soils are favorable to the formation of dust. The major soils within the Facility Area that have a low fugitive dust resistance rating are Burbank loamy fine sand, basalt substratum, 0 to 30 percent slopes comprising 11 percent of the Facility Area, Dune land comprising 4 percent of the Facility Area, Quincy loamy sand, and 0 to 30 percent comprising 43 percent of the Facility Area. Approximately 91 percent of the soils in the Facility Area are categorized as highly susceptible to degradation upon disturbance. Scooteney silt loam, 0 to 5 percent slopes has a K factor of 0.55 on a scale of 0.02 to 0.69, implying it has high susceptibility to sheet and rill erosion. Dune land has a wind erodibility index rating of 250 tons per acre per year indicating a particularly high susceptibility to wind erosion (NRCS 2023).

None of the soils in the Facility Area are identified as hydric soils. None of the soils in the Facility Area are identified as sensitive soils (NRCS 2023).

The susceptibility to hazards such as slope instability, flooding, and ground subsidence across the Facility Area is low as determined by Benton County and DNR. The Facility Area faces low risk to seismic and related hazards with very low to low liquefaction susceptibility, stiff soil profile (predominantly National Earthquake Hazards Reduction Program seismic site class D), and no mapped significant seismogenic features in the vicinity. The Facility has therefore not been identified in any local ordinance by Benton County as a designated geologic hazard critical area (DNR 2023). Portions of the Facility are mapped by Benton County as geologically hazardous areas, including areas of alluvial soil.

The Part 4 analysis describes the geological and soil conditions within the Facility Area, including any geologically hazardous area designated by Benton County as critical areas, impacts to the Facility associated with potential geological hazards, and mitigation strategies that will be implemented to minimize the risks associated with these areas. Prior to construction, an updated geotechnical engineering report will be developed based on near-final design to incorporate techniques, specifications, and mitigation measures necessary to alleviate geological hazard risks.

References

Benton County. 2023. Benton County GIS. Available Online at: https://benton-county-gis-bentonco.hub.arcgis.com/. Accessed October 2023.

DNR (Washington Department of Natural Resources). 2023. Washington Geologic Information Portal. Available online at: https://geologyportal.dnr.wa.gov. Accessed October 2023.NRCS (Natural Resource Conservation Service). 2023. Web Soil Survey. Available online at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed October 2023.

OneEnergy (OneEnergy Development, LLC). 2022. Phase I Environmental Site Assessment of Site: Wallula Gap Solar Project.

As you complete the Detailed Analysis in Part 4.A. Earth, make sure you consider and address:

How the project could/would:

- Disturb the area(s)
- Be at risk from the area(s) in their current condition
- Be at risk from the area(s) if it degrades further
- Increase water flow over or through the area(s)

Other relevant factors addressed in:

- WAC 463-60-265: describe the means to be employed for protection of the facility from earthquakes, volcanic eruption, flood, tsunami, storms, avalanche or landslides, and other major natural descriptive occurrences.
- WAC 463-60-302, (1) and (2)
- WAC 463-62-020 regarding seismicity standards

B. Air Quality

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

B.1. Screening Question – Air Quality

Will the project have…

- indoor or outdoor air pollution emissions, including dust, other than those related to vehicle emissions during operation?
- the potential to produce an odor nuisance?
- emissions, including dust, during construction?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

During Facility construction, heavy construction equipment and vehicles will be operated, resulting in emissions from vehicle engines and dust from vehicle activity. Dust may be deposited along roads within and adjacent to the Facility Area. The Applicant intends to mitigate dust deposition using standard practices including (but not limited to) gravel application, binding agents, or water spraying.

The Part 4 analysis for air quality addresses the air pollution emissions expected to be generated during construction and operations. It also includes a description of air pollution avoidance or minimization measures the Applicant will implement. The Part 4 analysis addresses each topic identified by WAC 463-60-312, which includes air quality, odor, climate, climate change, and dust. Pursuant to WAC 463-60-225(1), any emissions subject to regulation by local, state, or federal agencies are quantified.

As you complete the Detailed Analysis in Part 4.B. Air Quality, make sure you consider and address:

- Health hazards
- That all project equipment and vehicles are assessed collectively for air emissions
- The area's existing/potential air quality issues (failure to meet standards, haze, aesthetics, etc.)
- Proximity to populated areas, recreational areas, or other areas of sensitivity

Other relevant factors addressed in:

- WAC 463-62-020 regarding air quality laws and regulations
- WAC 463-60-225 (1) through (3)
- Guidance regarding information required by WAC 463-60-312.

C. Water Quality – Wetlands and Surface Waters (Buffers, Fill, Dredging, & Sedimentation)

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

C.1. Screening Question – Water Quality – Wetlands and Surface Waters

Will the proposal involve any activities…

- on a steep slope, or area of unstable soils?
- within a surface water body, wetland, or within 300 feet of those areas?
- within a floodplain, or an area known to flood?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Facility Area is predominantly flat to gently south-sloping. Elevation change across the Facility Area is about 200 feet (see Attachment G). The Facility Area features no slopes identified as steep slopes with risk of instability by Benton County (Benton County 2023).

Scooteney silt loam, 0 to 5 percent slopes, which comprises of approximately 8 percent of the Facility Area, has been identified as having high compaction potential. This implies that, after initial compaction, this soil is still able to support standard equipment, but will continue to compact with each subsequent pass. This soil is moisture sensitive, exhibiting large changes in density with changing moisture content. The compaction resistance of the major soils across the Facility Area is moderate to high.

While the National Hydrography Dataset (NHD; USGS 2023) and the National Wetland Inventory (NWI; USFWS 2023) identify a flowpath running through the Facility Area, no streams or visible flowpaths were observed within the Facility Area during field surveys. The NWI also identifies two Freshwater Ponds categorized as Palustrine Unconsolidated Bottom Semipermanently Flooded Excavated (PUBFx). Only one waterbody was observed within the Facility Area, which is an excavated pool utilized by cattle for watering and wallowing. The Wetland Delineation Report by GG Environmental (2022) identifies the likely source of hydrology for the pool as upgradient irrigation, including a leaking irrigation wellhead in the nearby vicinity.

The NWI identifies two wetlands within the Project Area Extent – one Freshwater Forested/Shrub Wetland categorized as Plaustrine Scrub-Shrub Broad-leaved Deciduous Seasonally Flooded Excavated (PSS1Cx) and one Freshwater Emergent Wetland categorized as Palustrine Emergent Persistent Seasonally Flooded Excavated (PEM1Cx). According to the Wetland Delineation Report by GG Environmental (2022), two Category IV wetlands were observed within the Project Area Extent, both supported during the growing season by an irrigation-induced groundwater table. Among these wetlands, one is categorized as a Palustrine Emergent (PEM) wetland and the other wetland is categorized as PEM and Palustrine Scrub-Shrub (PSS).

The Facility Area is outside of any FEMA mapped floodplains (FEMA 2023).

All wetlands and surface waters will be avoided and protected from any impacts during construction and operation of the Facility. The analysis in Part 4 describes the full extent of wetlands and ephemeral streams and ponds within the Facility Area along with the proposed mitigation strategies that would be implemented to best avoid and protect wetlands and surface waters associated with the Facility.

References

Benton County. 2023. Benton County GIS. Available Online at: https://benton-county-gis-bentonco.hub.arcgis.com/. Accessed October 2023.
FEMA (Federal Emergency Management Agency). 2023. Flood Map Service Center. Available online at: https://msc.fema.gov/portal/home. Accessed October 2023.
GG Environmental. 2022 Wetland Delineation Report – Wallula Gap Solar. Wallula Gap Area of Interest. Prepared for OneEnergy Development, LLC. May 25, 2022.
USFWS (United States Fish and Wildlife Service). 2023. National Wetland Inventory. Available online at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed October 2023.
USGS (U.S. Geological Survey). 2023. National Hydrography Dataset. Available online at: https://apps.nationalmap.gov/downloader/#/. Accessed October 2023.

As you complete the Detailed Analysis in Part 4.C. Water Quality – Wetlands and Surface Waters, make sure you consider and address:

- Erosion/erosion control
- Existing/potential water quality issues (temperature, turbidity, sedimentation, etc.)
- Loss of wetland/surface water functions and values (flood control, groundwater recharge, water quality, fish and wildlife habitat, aesthetics, recreation, etc.)
- Existing/potential flood risks

Other relevant factors addressed in:

- WAC 463-62-050 starts for wetland impact mitigation
- WAC 460-62-060-060 regarding water quality standards
- WAC 463-60-255, 463-60-322 (1-5), and 463-60-333

D. Water Quality – Wastewater Discharges

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

D.1. Screening Question – Water Quality – Wastewater Discharges

Will the proposal discharge wastewater (septic systems, process waters, dairy waste, etc.) to onsite or offsite surface waters, wetlands, or the ground?

- Do not include discharges to utilities or county-approved septic systems.

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Portable restrooms will be used during construction. The Facility may include an O&M building that may consist of a single-story structure with office space, warehousing space, and breakroom facilities. No water or sewer will be installed on-site. The O&M building will utilize portable toilets, which would be emptied by a licensed contractor.

Water use during construction will primarily be associated with dust control and is estimated at approximately 30,000 to 50,000 gallons per day over the approximately 12- to 18-month construction period. Panel washing, if required once the Facility is operational, would not be expected to generate runoff from the site or cause erosion. Most water used for washing would evaporate from the panels before reaching the ground. Even if no evaporation occurs and all panel washing water reached the ground at one time, the depth of water on the ground would be minimal. This amount of water would easily infiltrate into the vegetated ground around the panels and is not expected to run off to surface water bodies nor impact aquifers. Furthermore, washing of solar panels, if required, would be done with water only—no surfactants or other chemicals would be added. Because the panel wash water would not contain added chemicals and the water is expected to evaporate with only minimal amounts potentially penetrating into the ground, no adverse impacts to water quality would occur, and therefore no mitigation would be required.

Therefore, a detailed Part 4 analysis is not required for wastewater discharges.

As you complete the Detailed Analysis in Part 4.D. Water Quality – Wastewater Discharges, make sure you consider and address:

- Existing/potential water quality issues (nutrients, bacteria, metals, turbidity, temperature, etc.)
- Loss of wetland/surface water functions and values
- Discharge type (wash water), volume, potential contaminants, location, and method of discharge.
- Sole source aquifers

Other relevant factors addressed in:

- WAC 460-62-060 regarding water quality standards
- WAC 463-60-322 and 463-60-333.

E. Water Quality – Stormwater Runoff

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

E.1. Screening Question – Water Quality – Stormwater Runoff

Does the proposal involve any potential sources of stormwater contamination from…

- drainage from impervious surfaces?
- erosion from disturbed soils, lost vegetation, etc.?
- animal wastes, fertilizers, or decomposing organic material?
- pesticides or other chemical usage?
- other sources?

☐ No	Explain below why you believe “No” is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a “Yes” response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive “Yes” or “No” prior to the final submission of your application.

The Facility may result in some stormwater drainage as a result of new impervious surfaces developed (e.g., gravel roads, solar array posts, foundations for power conversion system [PCS], O&M building, substation components, etc.). Based on the Facility’s footprint within each of the three parcels included in the Facility (only two of which have impervious impacts), the impervious impact will range from approximately 3 percent or approximately 12 acres of the Facility Area. Because solar panels are spaced apart from each other and the full area including the surface under the rotating panels would be revegetated, allowing natural infiltration of rainwater, the panels themselves are not considered impervious surfaces and are not included in the impervious surface calculation. The total new impervious surface area is a small portion of the Facility Area and stormwater will generally infiltrate across the full area of the site.

In general, there will be minimal grading across the site, and existing drainage patterns and natural infiltration will be retained. Although classified as impervious surfaces, stormwater will generally infiltrate through the gravel roads, but at a reduced rate compared to most soils in the area. The vegetated area between panel rows is greater in area than the width of the rows of panels. The panels themselves would rotate, meaning the area underneath the panels would directly receive rainwater depending on the rotational status of the tracker system at the time of rainfall; any runoff from panels would flow onto and across vegetation, so infiltration is maintained.

An Erosion and Sediment Control Plan (ESCP), Stormwater Pollution Prevention Plan (SWPPP), and Vegetation and Weed Management Plan will be provided as pre-construction submittals to address stormwater runoff and associated concerns in greater detail. The Part 4 analysis provides detailed information regarding the type and extent of impervious surfaces that will be created, the infiltration rates of the soils within the affected areas, and the best management practices that will be implemented to minimize the effects of stormwater runoff.

As you complete the Detailed Analysis in Part 4.E. Water Quality – Stormwater Runoff, make sure you consider and address:

- Existing/potential water quality issues (oil and grease, turbidity, sedimentation, nutrients, metals, and other pollutants)
- Loss of wetland/surface water functions and values

Other relevant factors addressed in:

- WAC 460-62-060 regarding water quality standards
- WAC 463-60-215 and 463-60-322

F. Water Quantity – Water Use

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

F.1. Screening Question – Water Quality – Water Use

Will the proposal involve a new withdrawal, diversion, retention, or use for water not received from a utility?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Water use during construction will primarily be associated with dust control and is estimated at approximately 30,000 to 50,000 gallons per day over the approximately 12- to 18-month construction period. Concrete used for the Facility will be brought to the site by ready-mix trucks, and water is not anticipated to be used on-site for the mixing of concrete. Water trucks will be used to provide moisture for compaction as well as dust control during construction as required. The water trucks on-site for dust control would also be available for fire suppression if needed. The Facility will obtain water for construction and operation from existing sources with a verified water right. Because the Facility will obtain water from sources with a verified water right, none of the Facility's water requirements will impair the ability of nearby agricultural uses to meet their operational needs and the Facility will not conflict with any water rights in the vicinity of the Facility Area.

During operations, the Facility is expected to use less than the groundwater permit-exempt well threshold of 5,000 gallons per day, and actual water use is estimated to be approximately 30,000 to 50,000 gallons per panel wash, typically done only once per year if required. All other water use during operations would be limited to water needed for portable toilets and wash stations.

The water required for the Facility's construction and operations will come from existing water sources with valid water rights. The applicant will request a temporary construction water use permit from Ecology. Depending on the time of year, water used may come from an existing point of use on a Facility parcel, or from a facility owned by the same landowner about 4.5 miles away. The existing water use permits across the Facility Parcels are currently fully utilized for irrigation or are protected through an in-stream water trust. See Part 4.N (Land Use) and Attachment E for more details on existing water rights within the Project Area Extent. The construction and operation of the Facility will not have any adverse impact on these water rights, which the landowner will maintain available for future irrigation use.

The Applicant anticipates no potentially significant effects on either ground or surface waters from the Facility, nor is the Facility anticipated to affect any local or regional water purveyor's resources or capacity to supply water. No effects on the landowner's existing water rights, public services, or utilities are expected. Therefore, a detailed analysis of water use under Part 4 is not required for water use.
As you complete the Detailed Analysis in Part 4.F. Water Quality – Water Use, make sure you consider and address: • Changes in flow or volume • Existing/potential water quantity/ availability issues (water right controversy, endangered aquatic species, high ground water table, etc.) Other relevant factors addressed in: • WAC 463-60-165 (1) and (3), 463-60-322 and 463-60-333

G. Water Quantity – Runoff, Stormwater & Point Discharges

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

G.1. Screening Question – Water Quality – Runoff, Stormwater & Point Discharges

Is the project likely to result in changes in flow or volume in any water body or aquifer?

- Consider changes in vegetation, blocking of recharge by new impervious surfaces, grading, filling, discharges, water use, etc.

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

No changes to the flow or volume of any water body or aquifer are anticipated as a result of the Facility's construction. Because slopes within the Facility Area are generally very flat, the grading required will be minimal and will maintain existing drainage patterns. During construction, supplemental stormwater management measures will be implemented to prevent stormwater from flowing off site. BMPs for stormwater management will be addressed in the Facility's ESCP and Construction General Stormwater Permit. Following construction, disturbed areas will be revegetated in accordance with a Vegetation and Weed Management Plan. Impervious surfaces will be a small percentage of the overall area and will not significantly alter stormwater infiltration patterns (see response to Part 3.E Water Quality – Stormwater Runoff). In addition, the minimal water discharge to the ground from periodic solar panel washing is not expected to infiltrate an aquifer (see response to Part 3.D Water Quality – Wastewater Discharges), and all water used for the Facility would be obtained from existing or otherwise permitted sources in compliance with all applicable regulations (see response to Part 3.F Water Quality – Water Use).

Because construction and operations of the Facility would not change the flow or volume in any waterbody or aquifer, a detailed analysis of water quantity under Part 4 is not warranted. Mitigation actions and best management practices will be implemented during construction, such as revegetating disturbed soils to minimize erosion/runoff, and implementing an ESCP, SWPPP, and Vegetation and Weed Management Plan. No impacts to jurisdictional waters are anticipated. However, if such impacts became necessary, permits would be obtained for any impacts to jurisdictional waters, including Section 404 nationwide permitting through the U.S. Army Corps of Engineers (USACE), Section 401 water quality review through Ecology, and if necessary, Hydraulic Project Approval review through WDFW.

As you complete the Detailed Analysis in Part 4.G. Water Quality – Runoff, Stormwater & Point Discharges, make sure you consider and address:

- Potential loss of groundwater recharge
- Change in seasonal stream flow
- Existing/potential flood risks
- Existing/potential water quantity/ availability issues

Other relevant factors addressed in:

- WAC 463-60-215, 463-60-322 and 463-60-333

H. Plants

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

H.1. Screening Question – Plants

Will the project occur in or near an area with special status plants, (e.g. DNR natural heritage program or WDFW Priority Habitats and Species (PHS))?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Habitat and threatened, endangered, and sensitive species (TESS) surveys for plants were conducted in 2022 and for the land addition as part of the Addendum surveys were conducted in 2023 (see Attachment F). The Facility's Tier 3 Wildlife, Habitat, and Plant Survey Report as well as the Addendum are provided as Attachment F to this ASC. The wildlife, habitat, and plant surveys and report were designed to comply with Tier 3 studies described in the U.S. Fish and Wildlife Service's (USFWS) *Land-based Wind Energy Guidelines* (2012) and the WDFW's *Wind Power Guidelines* (2009). The Wildlife, Habitat, and Plant Report includes details on and distribution of habitat types observed within the Survey Area, including the Project Area Extent, and the Facility Area. The rare plant assessment and inventory includes federally listed and candidate vascular plant species, as well as vascular plant species that are listed in Washington state as endangered, threatened, or sensitive by WDFW, and those vascular plant species that are listed in Washington state as endangered, threatened, or sensitive by the Washington Natural Heritage Program. Details regarding the habitat and rare plant surveys are provided in the Tier 3 Wildlife, Habitat, and Plant Survey Report and Addendum (Attachment F). Following the Tier 3 Wildlife, Habitat, and Plant Survey Report in February of 2023, a land addition of 9 acres was made. On June 22, 2023, WDFW indicated that an addendum to the Tier 3 Wildlife, Habitat, and Plant Survey Report was adequate for concurrence from WDFW. The Applicant then completed a field visit to record habitat type, priority habitat species, and rare plants in the land addition and describe the habitat types and rare plants observed in the land addition in the addendum. Limited areas of the Facility Area extended outside the original Project Area surveyed for habitat and rare plants in 2022 and the land addition area surveyed in 2023. Habitats for these limited areas (14 acres) were assessed using a desktop analysis as well as photo analysis based on photos taken during wildlife

surveys in 2022. An updated addendum was developed and submitted to WDFW on November 15, 2023 (Attachment F). The Applicant received concurrence on the updated addendum on February 5, 2024.

Rare Plants

DNR did not report any current or historical records of rare plants within the Survey Area. The nearest record included grand redstem (*Ammannia robusta*), located approximately 3.3 miles east of the Project Area Extent, along a backwater shoreline of the Columbia River.

Although not listed in the USFWS Information for Planning and Consultation (IPaC) report, one federally threatened plant species, which is also state listed as endangered, the Umtanum desert buckwheat (*Eriogonum codium*), is known to occur within Benton County (DNR 2023). The distribution of this species is highly restricted, with the entire known population occurring along a 4.8-acre narrow, discontinuous band on the eastern end of Umtanum Ridge within the Hanford Reach National Monument, approximately 47 miles north of the Project Area Extent (USFWS 2022). Species likelihood to occur within the Survey Area is classified as None based on the small, isolated population, habitat type, and distance from the Project Area Extent.

DNR lists an additional 28 rare plant species documented in Benton County (DNR 2023), 8 of which were classified as possible to occur within the Project Area Extent based on similar habitat types and elevation. The 8 species included 3 state listed threatened and 5 state sensitive species. No rare plant species were classified as "Likely" to occur based on the marginal, degraded land cover and habitat within the Project Area Extent.

No rare plants were documented in the Survey Area during surveys conducted March–May 2022 (Attachment F).

Habitat

Vegetation in the Project Area Extent consisted primarily of non-native grasses and forbs; however, early successional shrubs (rubber rabbitbrush [*Ericameria nauseosa*]) and patches of woody vegetation (willow [*Salix* spp.] and Russian olive [*Elaeagnus angustifolia*]) were scattered throughout pastures, particularly in the southern portion of the Project Area Extent. Russian olives and cottonwood trees (*Populus* spp.) are observed along the southern boundary near State Route 14. Vegetation within much of the Project Area Extent has been modified by livestock grazing, rock and soil quarries, and roads used to access the surrounding agricultural fields.

Pasture dominates the Facility Area (Attachment A, Figure A-8), covering 366 acres (93 percent) of the 392-acre Facility Area. The rest of the Facility Area comprised shrub-steppe (5 percent), a WDFW Priority Habitat, and developed/disturbed (2 percent). Pasture is characterized by low herbaceous vegetation, absent substantive shrub cover, or over story. Early season ground cover in pastures consisted primarily of common stork's-bill (*Erodium cicutarium*), spring draba (*Draba verna*), gold-star (*Crocidium multicaule*), and the rosettes of fiddleneck (*Amsinckia* spp.) and other assorted weedy species.

Small shrub-steppe patches occurred throughout the Project Area Extent with the largest, most contiguous patch (10 acres) located in the northeast to the north of the landing strip, between a fence and cropland where cattle were excluded. Shrub species in shrub-steppe included big sagebrush (*Artemisia tridentata*) and rubber rabbitbrush. Two locations, north of the landing strip (10 acres) and patches in the southeast corner (2 acres), were the few examples where sagebrush was the dominant shrub within a shrub-steppe patch.

The highly disturbed and modified areas encouraged the establishment of ruderal plant species along the edge and into the interior of pastures. Common non-native, ruderal species included flixweed (*Descurainia sophia*), kochia (*Bassia scoparia*), Russian thistle (*Salsola tragus*), and tall tumblemustard (*Sisymbrium altissimum*).

Noxious Weeds

Noxious weeds observed in the Project Area Extent include kochia (*Bassia scoparia,* Class B), rush skeletonweed (*Chondrilla juncea,* Class B), cereal rye (*Secale cereale*, Class C), and diffuse knapweed (*Centaurea diffusa*, Class B) (Attachment F). Noxious weeds were classified according to the 2022 Noxious Weed List (Benton County 2022). These four weeds are also listed as noxious weeds on the 2023 Washington State Noxious Weeds List (Washington State NWCB 2023).

The Applicant met and began coordination with WDFW on December 10, 2021. The Applicant provided a project description and information to WDFW who then conducted an internal data review and site visit to the Project Area Extent along public roads. On December 23, 2021, WDFW noted high use of the landscape by waterfowl during winter and potential for the occurrence of burrowing owls (*Athene cunicularia*; Ritter 2021). On January 26, 2022, WDFW and the Applicant conducted a site visit across the Project Area Extent. WDFW reviewed the proposed survey timing and approach and provided recommendations via email on January 31, 2022 regarding wildlife and habitat survey methods. The Applicant proceeded with a desktop assessment and field surveys of sensitive species and habitats. Surveys were conducted in the spring of 2022 followed by surveys for the additional 9-acres in the summer of 2023.

The input provided from WDFW during coordination, from late 2021 to as recently as September of 2023, was used to inform the Part 4 analysis and Draft Habitat Mitigation Plan (Attachment B).

The Part 4 analysis is based on the information obtained during the rare plant and wildlife habitat surveys as well as site-specific feedback from WDFW. The Part 4 analysis also outlines applicable mitigation measures based on the survey results.

References

BCNWCB (Benton County Noxious Weed Control Board). 2022. 2022 Benton County Noxious Weed List. Available online at: http://www.bentonweedboard.com/.

DNR (Washington Department of Natural Resources). 2021. List of Known Occurrences of Rare Plants, Mosses and Lichens by County. Olympia, Washington. Compiled July 20, 2021. Available online at: https://www.dnr.wa.gov/NHPdata

DNR. 2023. List of Known Occurrences of Rare Plants, Mosses and Lichens in Washington by County. Washington Natural Heritage Information System. Compiled on March 2, 2023. Washington State Department of Natural Resources. Available online at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.dnr.wa.gov%2Fpublications%2Famp_nh_county_plants.xls&wdOrigin=BROWSELINK.

Ritter, M. 2021. Solar Projects. Email correspondence between Washington Department of Fish and Wildlife and One Energy Renewables. December 23, 2021.

USFWS (U.S. Fish and Wildlife Service). 2012. Land-Based Wind Energy Guidelines. March 23, 2012. 82 pp. Available online: https://www.fws.gov/sites/default/files/documents/WEG_final.pdf

USFWS. 2022. Recovery Plan for Umtanum Desert Buckwheat (*Eriogonum Codium*). Portland, Oregon: U.S. Fish and Wildlife Service.

Washington State NWCB (Noxious Weed Control Board). 2023. Washington State Noxious Weed List. Olympia, WA.

WDFW (Washington Department of Fish and Wildlife). 2009. Wind Power Guidelines. WDFW, Olympia, Washington. April 2009. 30 pp. Available online: https://wdfw.wa.gov/sites/default/files/ publications/00294/wdfw00294.pdf

WDFW. 2023. Priority Habitats and Species List. Originally Published 2008. Updated June 2023. Washington Department of Fish and Wildlife. https://wdfw.wa.gov/sites/default/files/publications/00165/wdfw00165.pdf. (Accessed August 2023).

As you complete the Detailed Analysis in Part 4.H. Plants, make sure you consider and address:

- Alteration/loss of fish/wildlife habitat
- Endangered, threatened, or other at-risk plant species
- Changes to critical areas are reflected in Part 4-8.C.1.

Other relevant factors addressed in:

- WAC 463-60-332

I. Animals

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

I.1. Screening Question – Animals

Will the project occur in or near an area with migration areas, special status wildlife or habitats (e.g. WDFW Priority Habitats and Species (PHS))?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Applicant met and began coordination with WDFW on December 10, 2021. The Applicant provided a project description and information to WDFW who then conducted an internal data review and site visit to the Project Area Extent along public roads. On December 23, 2021, WDFW noted high use of the landscape by waterfowl during winter and potential for the occurrence of burrowing owls (*Athene cunicularia*; Ritter 2021). On January 26, 2022, WDFW and the Applicant conducted a site visit across the Project Area Extent. WDFW reviewed the proposed survey timing and approach and provided recommendations via email on January 31, 2022, regarding wildlife and habitat survey methods. The Applicant proceeded with a desktop assessment and field surveys of sensitive species and habitats. Surveys were conducted in the spring of 2022 followed by surveys for the additional 9-acre parcel in the summer of 2023.

As part of the desktop analysis, the USFWS IPaC system and WDFW Priority Habitats and Species (PHS) were queried to develop a list of wildlife and plants listed as threatened, endangered, or as sensitive species (USFWS 2022). The PHS data provided by WDFW did not identify records of TESS in the Project Area Extent. The PHS data, however, did identify some Priority Habitats (e.g., shrub-steppe and eastside steppe) as occurring within the Project Area Extent, but those results were not entirely consistent with field survey results (see Attachment F).

The Applicant conducted TESS surveys and habitat mapping within the Project Area Extent as well as ground-based raptor nest surveys within the Project Area Extent plus a one-mile buffer, which collectively is called the Raptor Nest Survey Area, in 2022.

The TESS surveys were conducted between early morning and mid-afternoon on March 20–21, April 6 and 11, and May 29–30, 2022. TESS surveys were designed mainly for wildlife species identified by WDFW as species of interest at the Facility, including Townsend's ground squirrel (*Urocitellus townsendii*), burrowing owl (*Athene cunicularia*), long-billed curlew (*Numenius americanus*), white-tailed jackrabbit (*Lepus townsendii*), and black-tailed jackrabbit (*Lepus californicus*; WDFW 2022). Species-specific survey protocols for Townsend's ground squirrels and burrowing owls were conducted as part of the overall TESS survey. Surveys included noting observations of burrows, tracks, or pellets. Surveyors observed four bald eagles (*Haliaeetus leucocephalus*) in the Raptor Nest Survey Area feeding on a coyote (*Canis latrans*) carcass along the slopes of Bing Canyon (see Figure 2.3; Appendix A of Attachment F). No suitable bald eagle nesting habitat is present in the Project Area Extent or Raptor Nest Survey Area; however, carrion, cattle carcasses, calves, and after birth provide supplemental foraging opportunities for all raptors (Appendix A of Attachment F). No other TESS species were identified during surveys. A full list of wildlife species observed at the Project Area Extent is found in Appendix B of Attachment F.

The Applicant conducted three ground-based raptor nest surveys in conjunction with TESS surveys with the first survey in early March prior to tree leaf out to increase nest detection and determine territory occupancy and then follow-up surveys in April and May. The surveys identified 12 raptor nests within 1 mile of the Project Area Extent (Figure 4.1 and Table 4.1 of Attachment F). Two nests (16 percent) were located in the Project Area Extent; one nest was occupied by a red-tailed hawk (*Buteo jamaicensis*) and the other nest was unoccupied. The remaining 10 nests were located outside of the Project Area Extent but within the Raptor Nest Survey Area (Figure 4.1 of Attachment F). Of these 10 nests, one nest, located in a cottonwood tree adjacent to the substation and main access road, was occupied by a great horned owl (*Bubo virginianus*) and one nest, located on a high-voltage electrical transmission tower, was occupied by a red-tailed hawk (Figure 4.1 of Attachment F). The remaining 8 nests outside of the Project Area Extent but within the Raptor Nest Survey Area were unoccupied.

The objectives of vegetation surveys/habitat mapping were to characterize and map general habitat types within the Project Area Extent to inform mitigation requirements for temporary and permanent impacts to habitat resulting from development per WDFW (2009). The habitat types were mapped using aerial imagery, remotely sensed data (Yang et al. 2018; NLCD 2019) and the USFWS (2022) NWI, which were then field-verified. Following field verification, GIS was used to delineate the extent of the habitat, calculate acreages, and create a habitat map of the Facility. Details regarding the habitat and wildlife surveys are provided in the Tier 3 Wildlife, Habitat, and Plant Survey Report and Addendum (Attachment F), for which the Applicant has received WDFW concurrence. The Applicant received WDFW concurrence on survey results of an additional 14 acres added to the Project Area Extent in late 2023.

The Benton County's designated critical areas relevant to wildlife are wetlands defined under BCC 15.04.010 and fish and wildlife conservation areas defined under BCC 15.14.010(a). Based on the desktop analysis and WDFW PHS mapping of habitat and special status species, fish and wildlife conservation areas that occur in the Project Area Extent Area include priority shrub-steppe and eastside (interior) grassland habitat and potential jurisdictional waters (Attachment F). However, field surveys observed conditions that were not consistent with desktop mapping. While shrub-steppe was observed during field surveys, eastside (interior) grassland was not. Two aquatic features were delineated

within the Project Area Extent, both rated as Category IV wetlands. Category IV wetlands have the lowest levels of function and are often heavily disturbed (Hruby 2014). According to FEMA (1982), no floodplain is mapped within or near the Project Area Extent.

The Applicant's analysis of potential impacts to County-defined fish and wildlife conservation areas is informed by Attachment F and provided in the Part 4 analysis. The Part 4 analysis is based on the information obtained during surveys as well as site-specific feedback from the WDFW. The Part 4 analysis also outlines applicable mitigation measures based on the survey results.

References

FEMA. 1982. FIRM Flood Insurance Rate Map. Benton County, Washington and Incorporated Areas. Effective Date July 19, 1982. Map Numbers FM5302370935B and FM5302370950B. Federal Emergency Management Agency. Available online at: https://msc.fema.gov/portal.

Hruby, T. 2014. Washington State Wetland Rating System for Eastern Washington: 2014 Update. Publication #14-06-030. Olympia, WA: Washington Department of Ecology. Available online at: https://apps.ecology.wa.gov/publications/documents/1406030.pdf.

OneEnergy (OneEnergy Development, LLC). 2021. Request for Review; Site Review for Solar Development. Information Packet for the Wallula Gap Solar Project, Benton County. Email to M. Ritter, Washington Department of Fish and Wildlife from B. Bjonson, OneEnergy. December 10, 2021.

Ritter, M. 2021. Solar Projects. Email correspondence between Washington Department of Fish and Wildlife and One Energy Renewables. December 23, 2021.

USFWS (U.S. Fish and Wildlife Service). 2022. Initial Project Scoping: IPaC - Information for Planning and Consultation. IPaC, Environmental Conservation Online System (ECOS), USFWS. Accessed October 2022. Available online at: https://ipac.ecosphere.fws.gov/

As you complete the Detailed Analysis in Part 4.I. Animals, make sure you consider and address:

- Alteration/loss of fish/wildlife habitat
- Endangered or other at-risk animal species
- Obstructions/barriers to the movement of fish and wildlife, especially known wildlife corridors
- Noise, light, or glare effects on wildlife
- Changes to critical areas are reflected in Part 4-9.C.1.

Other relevant factors addressed in:

- WAC 463-62-040 regarding fish and wildlife mitigation
- WAC 463-60-332

J. Energy and Other Natural Resources

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

J.1. Screening Question – Energy and Other Natural Resources

Will the project, because of type, size, or design, require the consumption or removal of considerable quantities of natural resources including energy (electricity, petroleum, etc.), rock minerals, trees/wood, peat, etc. during either construction or operation?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

As a solar generation facility coupled with optional BESS, the Facility will provide a new source of clean, renewable electricity. The Facility is designed to take advantage of the region's renewable solar energy resources and adjacent transmission interconnection with the existing BPUD and BPA transmission system. The Facility design minimizes impacts to adjacent properties and will not limit or otherwise affect the potential use of solar energy by adjacent properties.

The Facility will not require consumption or removal of substantial quantities of natural resources during construction or operations; however, some natural resources will be consumed in the form of non-renewable construction materials (see Part 2). Non-renewable fossil fuels will also be required to fuel construction vehicles, equipment, and operational vehicles. Fossil fuel quantities consumed will be typical of commercial construction facilities of a similar size. Electricity for the Facility's optional O&M building will be provided by the local utility, Benton PUD. Local service providers will be able to accommodate the materials, electricity, and fuel needs of the Facility.

No detailed Part 4 analysis is warranted because the Facility will not require the consumption or removal of substantial quantities of energy or natural resources during construction or operations. Furthermore, no mitigation is anticipated to be required for this resource.

As you complete the Detailed Analysis in Part 4.J. Energy and Other Natural Resources, make sure you consider and address:

- Existing/potential of resource supply not meeting demand
- Conservation methods
- Use of renewable vs. non-renewable resources

Other relevant factors addressed in:

- WAC 463-60-342 (1)-(4)

K. Waste Management

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

K.1. Screening Question – Waste Management

Will the project generate large quantities of waste, during either construction or operation, other than those listed as a discharge under B. Air Quality or D. Water Quality – Wastewater Discharges?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Facility will not generate large quantities of waste during construction or operations.

During Facility construction, quantities of solid waste generated will be similar to commercial construction projects of a similar size. Wastes generated during construction will typically include discarded building materials such as metal, concrete, wood, and wiring scraps, and waste plastic packaging. Construction waste materials will be recycled to the extent practicable. Portable restrooms will be used during construction.

During operations, low volumes of solid waste could be generated at the optional O&M building, including paper, cardboard, plastic, and food waste. Wastewater will be managed using portable toilets (see response to Part 3.D Water Quality – Wastewater Discharges). Maintenance and replacement of Facility components such as solar modules, batteries, and other electrical components and devices will also produce low volumes of solid waste during operations.

The small quantities of solid waste generated as a result of construction and operation of the Facility will be processed by a licensed contractor in accordance with all applicable regulations (see also Part 3.T Utilities).

The BESS options described in Part 2 may generate incidental solid waste from repair or from the replacement of batteries made necessary by the normal degradation of those batteries over time. Required environmental, health, and safety protocols will be followed for disposal of battery components. Used batteries and components will be recycled or disposed of at an approved facility by a licensed vendor. In response

to the growing demand for BESS technology, recycling companies are increasing processing capacity and developing new technologies to facilitate environmentally sound waste management.

Modern solar modules have a typical working life of over 30 years and will be replaced infrequently, as needed. RCW 70A.510.010 (Photovoltaic Module Stewardship and Takeback Program) requires solar module manufacturers to finance a takeback and recycling program for all solar modules sold in Washington after July 1, 2017. As a result, recycling of the solar modules will be done in compliance with RCW 70A.510.010 and other applicable laws.

The Facility will not generate large quantities of waste during either construction or operation; therefore, a detailed Part 4 analysis or mitigation is not warranted for this resource.

As you complete the Detailed Analysis in Part 4.K. Waste Management, make sure you consider and address:

- Landfill capacity
- Loss of resources
- Opportunities to reduce, reuse, or recycle waste
- The utility of a comprehensive solid waste management plan

L. Environmental Health – Existing Site Contamination

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

L.1. Screening Question – Environmental Health – Existing Site Contamination

Is there any evidence that the project site(s) contain(s) potentially hazardous materials including toxic chemicals, volatile gases or other poisonous or hazardous substances?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

No direct studies have been conducted to date regarding existing environmental contamination within the Facility Area. A site-specific Phase I Environmental Site Assessment (ESA) has been conducted (Attachment G). The Phase 1 ESA revealed no evidence of recognized environmental conditions in connection with the property.

A review of Ecology's cleanup site database (Ecology 2023) and historical aerial photographs (Google Earth 2023) found no evidence that the Project Area Extent contains potentially hazardous materials, including toxic chemicals, volatile gases, or other poisonous or hazardous substances.

The Facility Parcels contain a mix of dryland and irrigated agricultural use, rangeland, transmission and electrical infrastructure, and undeveloped areas. Historical information indicates the Facility Parcels were undeveloped/vacant grazing areas and from at least the 1950s to the 1970s and agricultural land uses from the 1970s to present. Aerial photographs depicted some areas of the Facility Parcels as cultivated fields from the mid-1970s to the present. As a result, past applications of persistent organic pesticides (POPs), organochlorine pesticides and/or herbicides (OCPs), organophosphate pesticides (OPPs), or metal-based pesticides cannot be ruled out (Attachment G). However, given the historical uses, any applications of fertilizers, pesticides, or herbicides would reasonably be assumed to be relatively uniform and generally consistent with manufacturer guidance, in a manner typical of agricultural practices. The concentrations of fertilizers and pesticides are likely to be similar to other dryland and irrigated agricultural operations. Risks to human health and the environment associated with soil disturbance during Facility development are assumed to be low and similar to those associated with agricultural operations such as tilling.

Therefore, potential past applications of fertilizers, pesticides, or herbicides pose little to no concern of adverse environmental impact with respect to Facility development.

Because potentially hazardous materials are unlikely to occur within the Facility Area, a Part 4 analysis is not warranted. Further, a site-specific Phase I ESA has been conducted and found no evidence of recognized environmental conditions in connection with the property.

References:

Ecology (Washington State Department of Ecology). 2023. Cleanup and Tank Search. Available online at: https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites. Accessed November 8, 2023.

Google Earth. 2023. Aerial Imagery for the Wallula Gap Solar Project Area. Image date April 2021. Accessed November 8, 2023.

As you complete the Detailed Analysis in Part 4.L. Environmental Health – Existing Site Contamination, make sure you consider and address:

- Public health and safety
- Environmental health (air, soils, ground water, surface waters, plants, and animals)
- Conflict /compatibility with planned land uses
- Include description of hazardous materials and the manner and extent of the contamination.

M. Environmental Health – Hazardous Materials

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

M.1. Screening Question – Environmental Health – Hazardous Materials

Will the project involve the removal, use, or disposal of hazardous materials that involve toxic chemicals, asbestos, risk of fire or explosion, and/or spill or danger to public health and the environment?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Most materials used in construction of the Facility will not be hazardous or dangerous, and the risk of fire, spills, or other dangers to public health and the environment will be low. However, the Facility may include a BESS (refer to Part 2, Section A.2). The BESS, if included, would be designed to incorporate multiple layers of protection to avoid failures and risks of fire or spills and will comply with the applicable requirements of the National Electric Code, National Fire Protection Association Standards, and Institute of Electrical and Electronics Engineers Standards.

If improperly handled or stored, the batteries in the BESS could be considered hazardous materials. Improperly stored or disposed of batteries can leak hazardous substances such as mercury, lead, cadmium, and sulfuric acid (Ecology 2023). Damaged batteries (or those that have reached the end of their service lives) may also be considered dangerous wastes; however, when properly recycled, batteries can be managed as universal waste (Ecology 2023). All required environmental, health, and safety protocols will be followed for disposal of battery components, and BESS components will be managed under the Universal Waste Rule (WAC 173-303-573). Used batteries and components will be recycled or disposed of at an approved facility by a licensed vendor and in accordance with all applicable laws to minimize risks to the public.

The Part 4 analysis contains more detailed information regarding potential BESS technologies and their respective risks, as well as the associated control measures that will be implemented to protect public health and the environment. The Part 4 analysis also discusses the

Facility's compliance with fire and electrical safety measures, spill control measures, and regulations, including those specific to solar energy generation facilities and BESS. Mitigation measures are also discussed in the Part 4 analysis.

Reference

Ecology (Washington Department of Ecology). 2023. Batteries Dangerous Waste Guidance. Available online at: https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Dangerous-waste-guidance/Common-dangerous-waste/Batteries. Accessed November 8, 2023.

As you complete the Detailed Analysis in Part 4.M. Environmental Health – Hazardous Materials, make sure you consider and address:

- Public Safety
- Environmental health (air, soils, ground water, surface waters, plants and animals)
- Hazardous material sources, storage, identification, classification

Other relevant factors addressed in:

- WAC 463-60-352 (2) – (4), (6)

N. Land Use, Natural Resource Lands, & Shoreline Compatibility

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

N.1. Screening Question – Land Use, Natural Resource Lands, & Shoreline Compatibility

Will the proposal involve or result in any of the following:

- Change in land use
- Change in intensity of land use
- Provide new or improved service to an area (e.g. transportation, utilities, entertainment, etc.)

Include likely future proposals that will occur as a result of this action, such as increased development from newly created lots or extension of services, etc.

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Applicant selected the Facility Area for its favorable site suitability characteristics, including high solar energy resource, flat topography, proximity to electrical infrastructure, compatibility with allowed uses on surrounding lands, unsuitability for crop cultivation, and low resource conflicts. Land use in the Facility Area is mostly livestock grazing, rock and soil quarries, and roads used to access the surrounding agricultural fields. The Facility Area is primarily surrounded by irrigated agricultural land uses, along with pockets of rangeland, undeveloped areas, local roads, electrical infrastructure (e.g., transmission and distribution lines, substations), and scattered unoccupied structures (e.g., agricultural storage). The underlying landowner of the Facility Area, a Utah nonprofit corporation Farmland Reserve, Inc., owns the agricultural land on all sides of the Facility Area boundary and plans to continue farming adjacent parcels during operation of the Facility.

The proposed solar power generating facility will result in a change in the type and intensity of the existing land use in the Facility Area. The Facility is located entirely on parcels in unincorporated Benton County within the Growth Management Act Agricultural District (GMAAD) zone, defined by the BCC. The Facility is consistent with Benton County's definition of a "solar power generator facility, major" under BCC 11.03.010(167). Prior to December 21, 2021, the Facility would have required a conditional use permit (CUP) in the GMAAD per BCC 11.17.07(cc). On December 21, 2021, Benton County passed Ordinance Amendment 2021-004, which, among other changes, removed "solar

power generation facility, major" from the list of uses requiring a CUP in the GMAAD zone and effectively prohibits this type of use in the GMAAD zone. Therefore, the Applicant requests that EFSEC preempt this element of Benton County's zoning ordinance for the reasons presented in Part 4.N and Attachment E to this ASC.

The Land Use Consistency Review (Attachment E) provides a complete review of the Facility's compliance with the Benton County Comprehensive Plan and County Code. The Part 4 analysis addresses the Facility's potential effects to existing and nearby land uses, as well as the Facility's compliance with relevant local land use regulations. Outside of complying with landowner lease agreements and EFSEC conditions, no land use mitigation requirements are anticipated for the Facility.

As you complete the Detailed Analysis in Part 4.N. Land Use, Natural Resource Lands, & Shoreline Compatibility, make sure you consider and address:

- Loss of designated natural resource lands (agriculture, forest, mineral) under RCW 36.70A.030; or other existing land uses.
- Viability of existing or planned adjacent or nearby land or water uses.
- Compatibility or conflict with intended land or shoreline uses.
- Increased transportation, utility, or service demands.
- Effects to surrounding working farm or forest land normal business operations such as oversize equipment access, the application of pesticides, tilling, and harvesting.

O. Housing

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

O.1. Screening Question – Housing

Will the project be likely to displace or otherwise affect existing or future housing, particularly housing for low and moderate-income households?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Facility is located in a sparsely populated rural area of Benton County outside of designed urban growth boundaries. It is expected that construction would begin in Q4 2025, with construction expected to require approximately 12 to 18 months to complete. It is anticipated that the construction of the Facility will provide jobs for an estimated peak of 105 workers during peak construction, with an estimated monthly average of 59 construction workers that would be employed on-site over the construction period. The Applicant anticipates that approximately half of the on-site construction workforce would be hired locally to the extent workers are available, with an estimated 50 percent of the workforce expected to already reside within a one-hour commute of the Facility Area. Based on this estimate, the Applicant anticipates that the local workforce employed on-site would peak with an estimated 53 local workers employed on-site at one time. These 53 local workers will commute daily between the Facility and their place of residence.

In compliance with WAC 463-60-535, a Socioeconomic Assessment has been completed for the Facility and provides information regarding population, labor force, and housing impacts (see Attachment H). The Socioeconomic Assessment indicates that existing temporary housing resources in the study area that are normally vacant and available for rent exceed estimated Facility construction-related demand. Viewed as a share of the supply of housing units available for rent (2,650 units) and the normally available supply of hotel and motel rooms (1,550 rooms), peak demand (53 workers) would be equivalent to about 1 percent of the normally available supply. Note that this likely overestimates the number of units that would be required (up to 53 during peak construction) because it assumes that the estimated demand would be single occupancy. However, workers may consider sharing rental accommodations and hotel/motel rooms to reduce costs. In addition, temporary accommodation in the study area includes 25 recreational vehicle (RV) parks and campgrounds, with a combined total of

more than 3,000 RV places. There are also a number of homes for seasonal, recreational, or occasional use in the Facility vicinity and workers may seek alternative living situations including Airbnb units and spare bedrooms in homes that residents would be willing to rent to construction workers. Therefore, temporary housing needs during construction can be accommodated by existing available temporary housing options.

Operation and maintenance of the Facility is anticipated to employ up to five workers on a part-time basis. These workers and their families are likely to reside within daily commuting distance and will either already reside in the area or permanently relocate. Up to five workers and their family members could potentially relocate. Workers employed on-site are expected to include two part time electricians and three part time vegetation contractors. No full-time operation positions are anticipated. The average U.S. family household consisted of 3.13 people per family in 2022 (U.S. Census Bureau 2022). Assuming that five workers would relocate to the area and applying this average family household size results in about 16 people permanently relocating to the Facility vicinity during Facility operation.

The Facility is not anticipated to displace or otherwise affect existing or future housing during construction or operations; therefore, a Part 4 detailed analysis of housing impacts is not anticipated. Furthermore, no mitigation is anticipated to be required for this resource.

As you complete the Detailed Analysis in Part 4.O. Housing, make sure you consider and address:

- Decreased availability of housing for low to moderate income households
- Impediments to meeting fair housing and/or population growth goals

P. Noise, Light, Glare, and Aesthetics

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

P.1. Screening Question – Noise, Light, Glare, and Aesthetics

Will the project transmit light, glare, or noise onto adjacent areas or alter or obstruct any views in the immediate area?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

During construction of the Facility, noise will be generated by construction equipment at levels typical for commercial projects of a similar size (including other solar facilities of a similar size).

During operations, light and glare may be generated by the Facility, and noise will be generated by transformers as well as potentially heating, ventilation, and air conditioning equipment associated with battery storage. Views of the Facility Area will be altered due to the change in land use from primarily open rangeland and agricultural fields to a commercial solar facility. However, the Applicant intends to plant vegetation for screening along the fence line facing SR-14 and southernmost portions of the east- and west-facing fence lines of the Facility Area. As currently designed, the vegetation is expected to be evergreen trees to provide for year-round screening.

The Applicant has completed a Visual Impact Assessment (Attachment I) and an Acoustic Assessment (Attachment J) and incorporated these analyses into the Part 4 detailed discussion. For the Part 4 analysis, maximum Facility noise levels were modeled to evaluate compliance with state noise regulations protecting sensitive noise receptors (WAC 173-60). Potential effects of the Facility are disclosed in the Part 4 analysis, along with proposed mitigation measures, where necessary, based on the analysis.

As you complete the Detailed Analysis in Part 4.P. Noise, Light, Glare, and Aesthetics, make sure you consider and address:

- Proximity to residential areas, or other areas with sensitivity
- Scenic views that could be blocked, altered, or impaired for existing or planned uses in adjacent areas
- Glare affecting FAA flight paths

Other relevant factors addressed in:

- WAC 463-62-030 regarding noise standards
- WAC 463-60-352 (1), 463-60-362 (2) and (3)

Q. Recreation

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

Q.1. Screening Question – Recreation

Will the project occur in an area or location that…

- includes existing designated and informal recreation opportunities in the immediate vicinity?
- displaces or otherwise affects any existing recreational uses during construction or operation?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Facility Area is located entirely on privately owned lands that do not include any designated recreation areas or opportunities known to be open to the public.

For the purposes of this screening assessment, the Applicant evaluated known designated recreation areas or opportunities within one mile of the Facility Area. The Plymouth South Private Lands Hunting area is located immediately south of the Facility Area across SR-14. The hunting area is designated as a "Register to Hunt" area and comprises 7,335 acres where waterfowl, upland birds, small game, and big game may be hunted using shotguns or bows. The hunting area is administered by WDFW through a management agreement with the landowner(s). The Applicant does not anticipate any interruption, impedance, or removal of recreation opportunities at the hunting area during construction or operations. However, it is possible that the Facility may be visible from some northern sections of the Plymouth South Private Lands Hunting area during construction and operations. The Applicant intends to install south-facing screening vegetation to reduce any visual impacts of the Facility on the hunting area.

Given the limited designated or informal recreation opportunities within or near the Facility Area, the Facility would not adversely affect existing recreational uses. Therefore, a detailed analysis of potential impacts to recreation opportunities under Part 4 is not warranted. Furthermore, no mitigation is anticipated to be required for this resource.

As you complete the Detailed Analysis in Part 4.Q. Recreation, make sure you consider and address:

- Existing recreation uses (e.g. hunting, fishing, etc.) that could be removed or impeded
- Visual effects on recreation areas and hiking trails

R. Traffic and Transportation

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

R.1. Screening Question – Traffic and Transportation

Will the project be likely to cause any of the following, in relationship to the local and regional transportation system, during construction or operation?

- Reduce the level of service (LOS) in an area
- Restrict vehicular use
- Potential to create or increase local safety hazards
- Conflict with local, state or federal requirements related to traffic and transportation

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Facility construction will involve temporary increased traffic to the site for delivery of materials and worker transportation over the 12- to 18-month construction period. Peak construction activities are projected to generate an additional 326 daily trips temporarily; however, this will not increase the number of vehicles on roads in the vicinity above historical levels. The Applicant has completed a Traffic Impact Analysis (TIA) (Attachment K) that provides additional information on traffic and transportation impacts associated with construction and operation of the Facility. Additionally, the Applicant has shared the TIA with WSDOT and received a letter of concurrence (Attachment Q).

No improvements to public roads or access points are proposed, and access to and from the Facility is proposed via an existing road extending north from SR-14. During Facility operations, traffic will be limited to up to two monthly maintenance visits of up to five workers.

The Facility will not reduce the level of service on roads in the vicinity, except potentially for brief periods during construction. The Facility will not restrict vehicular use or create local safety hazards and would not conflict with local, state, or federal requirements related to traffic and transportation. However, due to potential truck traffic and potential transportation of oversize or overweight loads during construction, a Part

4 analysis was completed. The Part 4 analysis discloses the potential impacts to the existing level of service on transportation routes that will be used during construction and operations and identifies proposed mitigation measures for traffic impacts.
As you complete the Detailed Analysis in Part 4.R. Traffic and Transportation, make sure you consider and address: • Existing/potential safety hazards • Traffic delays or road closures during construction • Trip generation and affected intersections Other relevant factors addressed in: • WAC 463-60-372

S. Public Services and Facilities

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

S.1. Screening Question – Public Services and Facilities

Will the project be likely to directly or indirectly increase use of public services and facilities such as fire protection, law enforcement, schools, parks and recreation, public open space, social services or general government?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

Because the Facility will be mostly self-sufficient in terms of power generation, it is unlikely to increase direct or indirect use of public services and infrastructure during construction or operation. Furthermore, the Facility is located in rural Benton County, where many public services and facilities are unavailable. Potential impacts to public services and facilities will be minor and will mostly occur during the construction period, which is expected to last 12 to 18 months. During construction, a peak of up to 105 workers may be employed, with an average of 59 workers. As described in Part 3.O, the non-local share of the construction workforce is anticipated to be approximately 50 percent of the work force at a given time. Operation and maintenance of the Facility is anticipated to employ up to five workers on a part-time basis. These workers and their families are likely to reside within daily commuting distance and will either already reside in the area or permanently relocate. Up to five workers and their family members could potentially relocate, resulting in an increase of approximately 16 people. This compares to an estimated population in Benton County of 209,400 in 2021. Taking this information into account, as well as the implementation of the measures described below, the Facility will not have a major negative impact on the use of public services and facilities during construction or operation.

Fire Protection. The Facility will develop and maintain an Emergency Management Plan (which will be developed and finalized prior to construction) and implement BMPs for fire prevention. The Applicant will coordinate with the Benton County Sheriff's Office, Benton County Emergency Management, Benton County Fire Marshall, Benton County Fire District #6, and DNR Wildland Fire Management Division to collaboratively develop safety measures that will be incorporated into the Facility's design and construction. The Applicant will also coordinate with these entities regarding necessary equipment or training, if any are identified, that may be required to provide fire protection services to

the Facility. To further mitigate the need for fire protection services, the site facilities will include and incorporate multiple layers of protection to avoid failures and risks of fire or spills will be designed to applicable requirements of the National Electric Code, National Fire Protection Association Standards, and Institute of Electrical and Electronics Engineers Standards. Furthermore, the Facility's design will incorporate graveled areas around the optional O&M building and substation, as well as graveled access roads and fire breaks, where applicable. The Applicant has engaged in early stage consultations with Benton County Fire District #6 and has incorporated a 16-foot fire break around the entire Facility (see Attachment C).

Additionally, if the optional BESS is installed at the Facility, the BESS will comply with industry best practices and safety standards including:

- UL 9540: Standard for Safety of Energy Storage Systems and Equipment
- UL9540a: Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems Standard
- NFPA 855: Standard for the Installation of Stationary Energy Storage Systems
- Large-Scale Fire Testing: Testing that induces a significant fire into the BESS device and evaluates if the fire will spread to adjacent BESS units, surrounding equipment, or through an adjacent fire-resistance-rated barrier.
- Authority Having Jurisdiction (AHJ) Compliance: Early communication with AHJ on BESS permitting and fire safety requirements.
- Emergency Response Plan: BESS-specific hazardous materials training and response plan for local fire departments.

Law Enforcement. The Benton Country Capital Improvement Plan for 2021-2026 does not identify significant needs for increased equipment, personnel, and facilities for the Benton County Sherriff's Office to provide services to the community (Benton County 2020), and these services have been funded at sustained levels over the past 5 years (Benton County 2022). A temporary peak increase of up to 105 workers, and an average increase of approximately 59 workers, during the Facility's construction is a fraction of one percent of the Benton County population and will not effectively reduce the level of service that the Benton County Sheriff's Office and local law enforcement can provide the community. To mitigate the need for additional law enforcement services, site access will be restricted, and Facility components will be secured by a perimeter fence. The Facility will not require special services from the Benton County Sheriff's Office. As a result, no adverse impacts to law enforcement services are anticipated as a result of the Facility.

Schools, Parks, and Recreational Facilities. No significant adverse impacts to schools, parks, or recreational facilities are anticipated as a result of the Facility. Construction of the Facility will take between 12 and 18 months, during which period a peak of up to 105 workers will be employed. Because the construction period is temporary, little to no adverse impact on housing or schools is anticipated. Temporary school and housing needs would be supported within the purview of Benton County's current growth trajectory, which plans for population growth in the Tri-Cities area and associated rural transition areas and urban growth areas (Benton County 2018). Temporary, occasional use of parks and recreational facilities associated with the temporary construction population influx is not likely to significantly adversely affect these facilities. During operations, the Facility will employ up to five personnel, which will not create an adverse impact for schools, parks, or recreational facilities.

Public Open Space, Social Services, and General Government. The Facility is not located on public land and its construction and operation will not have any impact on public open space. Increased jobs for community members as described in Attachment H, and increased property tax revenue from the Facility will provide support for social services and general government operations.

Because public services and facilities will not be adversely affected, a detailed analysis of potential impacts to public services and facilities under Part 4 is not warranted. Furthermore, no mitigation, beyond what is described above, is anticipated to be required.

References

Benton County. 2018. Benton County Comprehensive Plan Update. Prepared by Anchor QEA LLC and Oneza & Associates. February.

Benton County. 2020. Benton County Capital Improvement Plan 2021-2026. Available online at: https://www.co.benton.wa.us/files/documents/2021-2026CapitalImprovementPlan1361012300103020PM.pdf

Benton County. 2022. Benton County 2023-2024 Final Budget. Available online at: https://bentoncountywa.municipalone.com//files/documents/2023-2024FinalBudget1335122024040523PM.pdf

As you complete the Detailed Analysis in Part 4.S. Public Services and Facilities, make sure you consider and address:

- Existing/potential inadequacy of service providers to meet need.
- Consumption of disproportionate share of existing or future service capacities.
- Options to reduce service demand (onsite security, etc.).

T. Utilities

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☐ Yes	☐ Maybe	☒ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

T.1. Screening Question – Utilities

Will the project be likely to increase demand for public or privately owned water, sewer, storm water, solid waste, communication, or energy utilities?

☒ No	Explain below why you believe "No" is the appropriate answer.
☐ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The Facility will not result in a significant increase in demand for electricity, communications, stormwater management, waste disposal, or water from the public or private utilities. The Facility is a solar power generating plant that will generate the majority of its own electricity. When not generating power, the Facility would require a small amount of station service power for running control systems and lighting as needed. The Facility would connect to Benton PUD's system for this nominal amount of power, and no adverse impact to regional energy providers is anticipated. The Facility is situated in a remote area of Benton County with already limited access to public utility services, such as stormwater or public sewer systems.

During construction, water will be provided from on-site and/or off-site water sources with a valid water right. The Facility will not use public water services. BMPs will be employed to manage stormwater within the Facility Area (see Part 3.D and 3.E, for more information). No water or sewer will be installed on-site. The optional O&M building will use portable toilets. A licensed waste hauler will be used to transport and dispose of construction waste per applicable laws. Recycling will be implemented to the extent practicable. Electricity for the Facility will be provided by Benton PUD and communications will be provided by a local utility.

The Facility will not use public water services during construction or operations. Domestic waste produced during construction and operation of the Facility will be handled by a licensed waste contractor. After the Facility is decommissioned, spent panels will be recycled by the manufacturer as required by RCW 70A.510.010 (Photovoltaic Module Stewardship and Takeback Program). The Facility will be designed to capture stormwater and reduce runoff as described in Part 3.E and Part 4.E. No municipal stormwater facilities will be used. The Facility will

generate electricity during operations, which will be supplemented with a small amount of power for controls and lighting as needed from Benton PUD.

No significant adverse impacts to water, stormwater, sewer, or solid waste facilities are anticipated as a result of the Facility. The Facility is outside any developed area where public water, stormwater, sewer, and solid waste facilities are available; therefore, construction and operation of the Facility is not anticipated to impact these services and facilities. Several licensed wastewater treatment facilities are available in Benton County and nearby Yakima County. During operations, portable toilets will be used.

Routine solid waste will be produced during construction and operation of the Facility, including packaging materials and domestic refuse. These materials would be handled by a licensed contractor in accordance with applicable regulations (see Part 3.K). At the end of the Facility's useful operational life, spent solar panels will be recycled by the manufacturer after decommissioning in accordance with RCW 70A.510.010. Solid waste landfills and waste transfer stations in Benton County and nearby Yakima County are available with sufficient capacity to accommodate wastes generated by the Facility, including the Yakima County Lower Valley Transfer Station, Cheyne Landfill, Terrace Heights Landfill, City of Richland Horns Rapids Landfill, and the Waste Management Kennewick Transfer Station. Therefore, the Facility will not adversely impact public solid waste disposal facilities.

The Facility design will aim to conserve the present topography so stormwater would continue to flow and infiltrate into the ground as under existing conditions. No use of municipal stormwater facilities will be necessary.

Because the Facility will not significantly increase demand for public and private utilities, a detailed analysis of potential impacts to utilities under Part 4 is not warranted. No mitigation is proposed or anticipated to be required.

As you complete the Detailed Analysis in Part 4.T. Utilities, make sure you consider and address:

- Existing/potential inadequacy of utilities to meet need.
- Consumption of disproportionate share of existing or future utility capacities.
- Potential to reduce service demand (conservation, etc.).
- Identify where utilities have confirmed service availability.

U. Archaeological and Historical Resources

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

U.1. Screening Question – Archaeological and Historical Resources

Will the project occur in an area or location that includes the following? Note that to answer these questions with a definite "yes" or "no" requires a Desktop Survey, which must be conducted by a consultant.

- Archaeological Site or Built Environment Property over 50 years in agricultural resource site
- Any known landmarks or evidence of historic, archaeological, scientific, or cultural importance
- Is listed or is eligible to be listed on a local, state, or federal historic register

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

The methods and results of a records search and field survey were included in a Cultural Resources Survey Report dated October 24, 2022 (revised July 31, 2023) and provided as an attachment to the ASC (confidential Attachment L), as well as in the Part 4 analysis.

No significant (e.g., National Register of Historic Places [NRHP]-eligible) archaeological sites were identified during the cultural resources survey. An Unanticipated Discovery Plan will be developed and submitted at least 90 days prior to construction, and will set procedures in the event an unidentified archeological or historical resource is encountered during construction or operations of the Facility. The Confederated Tribes and Bands of the Yakama Nation identified the need for a Traditional Cultural Properties study. Both the Confederated Tribes and Bands of the Yakama Nation and the Confederated Tribes of the Umatilla Indian Reservation have requested additional identification efforts be conducted in the form of shovel probes. Additional identification efforts will be completed prior to SEPA determination.

The detailed analysis is provided in Part 4.

As you complete the Detailed Analysis in Part 4.U. Archaeological and Historical Resources, make sure you consider and address:

- Effects on access to the site or to the resource.
- Methods to protect/preserve cultural and historic resources.
- Enhancement measures (improved public or tribal access, matching the character of the site, etc.).
- Include description of the cultural/historic resource and how it was identified.

Other relevant factors addressed in:

- WAC 463-60-362

V. Cultural Resources

Summary Indicate yes or no in the fields beside each of the following questions. Grayed fields are for the use of EFSEC staff only.

Question	Applicant Response				EFSEC Staff Response			
1. Does screening trigger a Part 4 analysis?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
2. Is it clear what analysis or study is called for?	☐ No	☒ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
3. Is the analysis sufficiently complete for SEPA determination?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
4. Is the analysis fully complete for application review?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A
5. Are the proposed commitments (if any) adequate?	☒ No	☐ Yes	☐ Maybe	☐ N/A	☐ No	☐ Yes	☐ Maybe	☐ N/A

V.1. Screening Question – Cultural Resources

Will the project occur in an area or location that includes…

- existing tribal hunting or fishing rights?
- existing tribal plant gathering?
- tribal cultural sites?
- usual and accustomed areas?
- material culture artifacts?
- activities on the site that could impede views of traditional cultural sites?

☐ No	Explain below why you believe "No" is the appropriate answer.
☒ Yes	Explain below what aspect of the question triggered a "Yes" response; **and** complete Part 4 - Detailed Analysis
☐ Maybe	Explain below how you will obtain the information needed for a definitive "Yes" or "No" prior to the final submission of your application.

As described above, the methods and results of a records search and field survey were included in a Cultural Resources Survey Report dated October 24, 2022 (revised July 31, 2023) and provided as an attachment to the ASC (confidential Attachment L), as well as in the Part 4 analysis.

While no prehistoric cultural resources have been identified in the Facility Area, the presence of tribal sacred sites, Traditional Cultural Properties, and/or Historic Properties of Religious or Cultural Significance to Indian Tribes is unknown. Tribal activities in the Facility Area are undetermined. The Confederated Tribes and Bands of the Yakama Nation identified the need for a Traditional Cultural Properties study that has not yet been completed. Both the Confederated Tribes and Bands of the Yakama Nation and the Confederated Tribes of the Umatilla Indian Reservation have requested additional identification efforts be conducted in the form of shovel probes. Additional identification efforts will be completed prior to SEPA determination, in coordination with DAHP, EFSEC, and tribal parties.

A detailed analysis is provided in Part 4.
As you complete the Detailed Analysis in Part 4.V. Cultural Resources, make sure you consider and address: • Whether you have contacted or talked to any tribal representatives. • Whether you have checked any tribal websites. • Visual effects on known Traditional Cultural Properties.

PART 4 – DETAILED ANALYSIS

Part 4 – Detailed Analysis

Environment Element Number and Name	4.A – Earth

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Phase 1 Environmental Site Assessment (Attachment G)	Complete (February 2022)	Prepared by EarthTouch, Inc., environmental consultant for the Applicant	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
General description of site	General: The Facility Area is located in the Columbia River Basin, and northwest of the town of Plymouth, Washington in Benton County. The Facility Area is positioned on predominantly flat to gently south-sloping, heavily modified land that was formerly used for livestock grazing, rock and soil quarries, and roads for accessing the surrounding agricultural fields. Elevation change across the Facility Area appears to be about 200 feet. Geology: The Facility is mapped within the Columbia Basin geologic province and positioned within the Yakima fold and thrust belt. The geologic unit across the site

	is Quaternary age loess and are primarily loamy sands and silts. The primarily lithologic constituents are clay, caliche, tephra, and paleosols; locally includes outburst flood deposits (DNR 2023). The majority of the Facility Area is mapped as silty SAND (SM) comprising approximately 90 percent of the Facility Area and SILT (ML) comprising approximately 10 percent of the Facility Area. Soils: Loamy sands are the predominant soil type within the Facility Area with slopes ranging from 0 to 30 percent. Below are the major soil types within the Facility Area and their major characteristics (NRCS 2023): • *Burbank loamy fine sand, 0 to 15 percent slopes*: These are very deep, excessively drained soils formed in basaltic glacial outwash or alluvium. The soil is a loamy sand. Burbank loamy fine sand occurs in terrace and terrace escarpment landscapes and features a slight hazard for erosion, rapid permeability, and very slow to medium runoff. • *Burbank loamy fine sand, basalt substratum, 0 to 30 percent slopes*: Like the Burbank loamy fine sand, these are very deep, excessively drained soils formed in basaltic glacial outwash or alluvium. The soil is a loamy sand. Burbank loamy fine sand occurs in terrace and terrace escarpment landscapes and features a slight hazard for erosion, rapid permeability, and very slow to medium runoff. • *Dune land*: These soils are formed in eolian sand. The soil is a fine sand. Dune land soils occur in dune landscapes and are greater than 7 feet thick. The hazard for erosion, permeability, and runoff for this soil is not rated. • *Koehler loamy fine sand, 0 to 8 percent slopes*: These are moderately deep, somewhat excessively drained soils formed in eolian sand over duripan. The soil is a loamy sand. Koehler loamy fine sand occurs in terrace landscapes and features a slight hazard for erosion, rapid permeability, and very slow to medium runoff. • *Quincy loamy sand, 0 to 30 percent*: These are very deep, excessively drained soils formed in sand dunes and terraces. The soil is a loamy sand. Quincy sand loam occurs in terrace landscapes and features a slight hazard for erosion, rapid to very rapid permeability, and very slow to medium runoff.

	• *Scooteney silt loam, 0 to 5 percent slopes*: These are very deep, well-drained soils formed in alluvium. The soil is a silt loam. Scooteney silt loam occurs on alluvial fan and terrace landscapes and feature a slight hazard for erosion, moderate permeability, and slow to medium runoff. • *Warden very fine sandy loam, 0 to 15 percent slopes*: These are very deep, well-drained soils formed in lacustrine or glaciolacustrine deposits with a thin mantle of loess. The soil is a sandy loam. Warden very fine sandy loam is in terrace and terrace escarpment landscapes and features a slight hazard for erosion, unrated permeability, and runoff. Steep Slopes: The range of slopes within the Facility Area is between 0 and 21 percent. The Facility Area features no slopes identified as steep slopes with risk of instability by Benton County (Benton County 2023). Topography: Topography within the Facility Area is predominantly flat to gently south-sloping in the direction of the Columbia River with an elevation change of 200 feet. Land Use: The Facility Area is located in a heavily modified landscape, primarily for agriculture. Portions of the Facility Area once used for irrigated cropland (e.g., half pivot north of the landing strip and full pivot in the southern area) have been converted to pasture lands where cattle (*Bos taurus*) grazing occurs. The Phase 1 Environmental Site Assessment (Attachment G) has determined that there are minimal impacts from past land use to the Facility Area.
Compaction	Scooteney silt loam, 0 to 5 percent slopes, which comprises approximately 5 percent of the Facility Area, has been identified as having high compaction potential. This implies that, after initial compaction, this soil is still able to support standard equipment, but will continue to compact with each subsequent pass. This soil is moisture sensitive and is anticipated to exhibit large changes in density with changing moisture content. The compaction potential of the rest of the major soils across the Facility Area is low (NRCS 2023). While the Phase 1 Environmental Site Assessment (Attachment G) has determined that there are minimal impacts from past land use to the Facility Area, there exists a small likelihood that past agricultural activity could have resulted in existing

	compaction in certain areas, especially those areas with high susceptibility to compaction.
Geologic Hazards	Geological hazards are defined as Critical Areas in Chapter 15.12.020 of Benton County's Critical Area Ordinance (CAO) as either being erosion hazards, landslide hazards, or seismic hazards. The following are defined as seismic hazard areas under BCC 15.12.020(c): *Seismic hazard areas shall include areas subject to a severe risk of earthquake damage as a result of seismically induced ground shaking, differential settlement, slope failure, settlement, lateral spreading, mass wasting, surface faulting, or soil liquefaction. They include areas identified by the State of Washington Department of Natural Resources as having liquefaction susceptibility of moderate, moderate to high, and/or high.* Seismic Hazards: The U.S. Geological Survey (USGS) Quaternary Fault and Fold Database (USGS 2023) identifies one undifferentiated Quaternary age fold belonging to the Columbia Hills structures passing through the Facility Area, traces of some undifferentiated Quaternary age faults belonging to the Columbia Hills structures in the vicinity of the Facility Area, and some undifferentiated Quaternary age faults belonging to the Horse Heaven Hills structures over approximately 30 kilometers (km) away from the Facility Area. The faults are considered class A faults and their existence is demonstrated through offsets of Quaternary age geologic units, geomorphic expression, and other deformational features. While it should be assumed that the identified faults can produce local seismicity and ground shaking could impact the site, these faults have a low slip rate with no definitive evidence of Quaternary displacement described specifically along the Columbia Hills structures. Fault rupture is unlikely on the site due to lack of fault traces. The Facility Area faces very low to low liquefaction susceptibility and features a stiff soil profile (predominantly National Earthquake Hazards Reduction Program seismic site class D).

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes

Compaction	Avoidance of soil areas with high compaction potential is the best way to prevent compaction but this is not always feasible. Therefore, wherever possible, heavy equipment and machinery should not be stored, transported, or operated over these areas with high compaction potential. Designated passageways may be used for any actions that must be carried out in these areas such that heavy equipment remains outside the area of high compaction potential, especially during wet conditions.
Geologic hazards (seismic hazards)	The potential for impacts within the Facility Area from seismic activity is determined to be minimal due to the distance from major seismogenic features as well as the lack of any major seismic activity originating from the minor seismogenic features in the proximity of the Facility. Seismic design parameters laid out in the 2018 International Building Code (IBC) shall be implemented in the design and construction of the Facility Area as it applies to it.
Topography	Grading will be held to the minimum extent practicable. The intent of the grading design will be to allow for installation of solar trackers while maintaining existing drainage patterns throughout the Facility. The Applicant will work with EFSEC, Ecology, and Benton County officials to ensure all grading results in minimal fugitive dust generation and meets standard code for stormwater and sediment erosion control.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Erosion and Sediment Control BMPs - Erosion	The Applicant will prepare an ESCP, Construction SWPPP, Operations SWPPP, and Vegetation and Weed Management Plan prior to construction. The ESCP and SWPPPs (for construction and operation) will address stormwater runoff, flooding, and erosion to ensure compliance with state and federal water quality	Ecology

	standards. The SWPPPs will include BMPs from Ecology's Stormwater Management Manual for Eastern Washington (SWMMEW) (Ecology 2019). A Vegetation and Weed Management Plan will be developed prior to construction and implemented to revegetate temporarily impacted areas and minimize erosion and sedimentation during and after construction.	
Building Permits	Seismic design parameters that will be used to design the Facility are included in the 2018 IBC and American Society of Civil Engineers (ASCE) 7-10 and ASCE 7-16. These parameters are consistent with the Washington State Building Codes. The Facility will comply with the current codes at the time of construction, demonstrating compliance with WAC 463-62-020.	Benton County Building Division and Washington State Building Code Council

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References

Benton County. 2023. Benton County GIS. Available online at: https://benton-county-gis-bentonco.hub.arcgis.com/. Accessed November 2023.

DNR (Washington Department of Natural Resources). 2023. Washington Geologic Information Portal. Available online at: https://geologyportal.dnr.wa.gov. Accessed November 2023.

Ecology (Washington Department of Ecology). 2019. Stormwater Management Manual for Eastern Washington (SWMMEW). Available online at: https://apps.ecology.wa.gov/publications/SummaryPages/1810044.html. Accessed November 2023.

NRCS (Natural Resource Conservation Service). 2023. Web Soil Survey. Available online at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed November 2023.

USGS (U.S. Geological Survey). 2023. USGS Quaternary Fault and Fold Database. Available online at: https://earthquake.usgs.gov/cfusion/qfault/query_main_AB.cfm. Accessed November 2023.

Part 4 – Detailed Analysis

Environment Element Number and Name	4.B – Air Quality

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
No studies related to air quality have been conducted for the Facility nor are any studies planned.			☒ No	☐ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Regulatory	The Clean Air Act (CAA) is the primary federal statute governing air quality. The EPA has promulgated primary and secondary National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), two size categories of particulate matter (particulate matter less than 10 and less than 2.5 microns in diameter [PM_{10} and $PM_{2.5}$]), ozone, sulfur dioxide (SO_2), and lead. The primary standards are concentration levels of pollutants in ambient air, averaged over a specific time interval, designed to protect public health with an adequate margin of safety. The secondary standards are concentration levels judged necessary to protect public welfare and other resources from known or anticipated adverse effects of air pollution. Although states may promulgate more stringent ambient standards, the State of

	Washington has adopted standards identical to the federal levels (see WAC 173-476, Ambient Air Quality Standards). Local air quality is measured against these national and state standards, and areas that do not meet the standards are designated as "non-attainment" areas. A new emissions source must demonstrate compliance with all applicable federal and state air quality requirements, including emissions standards and ambient air quality standards. The State of Washington has established rules through Ecology for permitting new sources in both attainment and non-attainment areas of the state, and additional requirements may be imposed by local air authorities. WAC 463-62-070 requires that energy facilities meet all federal and state air quality laws and regulations mentioned above, and WAC 463-78 establishes adoption of these requirements by EFSEC. EFSEC issues authorizations for air emissions for sources under its jurisdiction. In general, if potential emissions from stationary sources exceed certain thresholds, approval from the applicable permitting authority is required before beginning construction. In an effort to bring the area back into compliance with air quality standards, new sources of air emissions in non-attainment areas must undergo more rigorous permitting than equivalently sized sources in attainment areas. However, the Facility is not located within a non-attainment area for any criteria pollutants (EPA 2023). Under the CAA, new industrial sources of air pollution must receive an air quality permit prior to operation. The two most common permits associated with industrial activity emitting regulated air pollutants are Notice of Construction/New Source Review approvals and Prevention of Significant Deterioration (PSD) permits. WAC 463-39 and 173-400 establish the requirements for review and issuance of notice of construction approvals for new sources of air emissions. A Notice of Construction is not required for the Facility because there would be no permanent source of regulated air emissions. PSD regulations apply to proposed new or modified sources located in an attainment area that have the potential to emit criteria pollutants in excess of predetermined *de minimis* values (40 CFR Part 51). For new generation facilities, these values are 100 tons per year of criteria pollutants for 28 specific source categories, or 250 tons per year for sources not included in the 28 categories. A PSD permit would not be required for the Facility

	because the generation of electricity by solar arrays does not produce air emissions. A concrete batch plant will not be required during construction or operation of the Facility, and as such, no associated permit will be required. During operations, the Facility substation and optional O&M building will be connected to the local utility (Benton Public Utility District). No back-up power generators are proposed and therefore no associated permits will be required. **Construction Emissions:** Although construction emissions are not included in the permitting of stationary sources, mobile sources (such as construction equipment and maintenance pickups) are regulated separately under the CAA. Washington State regulates what are known as "fugitive" air emissions, which consist of pollutants that are not emitted through a chimney, smokestack, or similar facility. Blowing dust from construction sites, unpaved roads, and tilled agricultural fields are common sources of fugitive air emissions. Solar energy plants are not included among the facilities for which review and permitting of fugitive emissions are required (WAC 173-400-040). Nevertheless, WAC 173-400-040(9)(a) requires owners and operators of fugitive dust sources to take reasonable measures to prevent dust from becoming airborne and to minimize emissions. Other Washington State regulations that apply to nuisance emissions, including fugitive dust, and various equipment used during construction include the following: • WAC 173-400-040(3) Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. • WAC 173-400-040(4-4a) Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition, or other operation, which is a source of fugitive emissions, if located in an attainment area and not impacting any non-attainment area, shall take

	reasonable precautions to prevent the release of air contaminants from the operation. • WAC 173-400-040(5) Odors. Any person who shall cause or allow the generation of any odor from any source that may unreasonably interfere with any other property owner's use and enjoyment of his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum. • WAC 173-400-040(9) Fugitive dust. The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions. **Greenhouse Gases:** Greenhouse gases (GHG) play a critical role in determining the earth's surface temperature. A GHG is any gas in the atmosphere that absorbs infrared radiation. The infrared radiation is selectively absorbed or "trapped" by GHGs as heat and then reradiated back toward the earth's surface, warming the lower atmosphere and the earth's surface. As the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere gradually increases, thereby increasing the potential for indirect effects such as a decrease in precipitation as snow, a rise in sea level, and changes to plant and animal species and habitat. Climate impacts are not attributable to any single action but are exacerbated by diverse individual sources of emissions that each make relatively small additions to GHG concentrations. GHGs are emitted by both natural processes and human activities. Human activities known to emit GHGs include industrial manufacturing, utilities, transportation, residential, and agricultural activities. The GHGs that enter the atmosphere because of human activities are CO_2, methane, nitrous oxide, and fluorinated carbons (i.e., hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride). In Washington state, GHGs are regulated by RCW Chapter 70A.45, which establishes goals for statewide reduction of GHG emissions. The statute aims to reduce overall GHG emissions to 45 percent below 1990 levels by 2030. By 2050,

	the state intends to reduce overall emissions to 95 percent below 1990 level. Goals also included fostering a clean energy economy by increasing the number of jobs in the clean energy sector to 25,000 by 2020, from just over 8,000 jobs in 2004 (RCW 43.330.310). WAC 173-441 established an inventory of GHG emissions through a mandatory GHG reporting rule for certain operations. Because solar power would not emit GHGs during operations, these regulations would not apply to the Facility. In addition, the Facility could assist the State in achieving these goals by providing clean renewable energy to the State.
Climate	The Facility will be located approximately 4 miles northwest of the unincorporated community of Plymouth on parcels located north of SR 14, approximately 5 miles west of its intersection with Interstate 82. It is located in a sparsely populated rural area of Benton County and is mostly flat to gently south-sloping land. In this region of Washington, the summers are hot and mostly clear, winters are very cold and partly cloudy, and it is typically dry year-round (e.g., on average, there are over 200 days of sunshine). Average annual precipitation at Umatilla, Oregon (nearest monitor, approximately 5 miles southeast of the Facility) is 8.01 inches. The average seasonal snowfall at Umatilla is 8.2 inches. In winter, the temperature averages a high of 43.2 degrees Fahrenheit (°F) and low of 27.5°F. In summer, the temperature averages a high of 89.0°F and a low of 56.9°F (Western Regional Climate Center 2023) Wind conditions near the Facility can be characterized by Automated Surface Observing Systems (ASOS), which serves as the nation's primary surface weather observing network. The closest ASOS station the Facility is located at Pasco/Tri-Cities Airport in Pasco, Washington (K1S5). Based on data collected over the 5-year period 2018 through 2023, the prevailing winds most frequently blew from the southwest (approximately 5 percent of the time), from the northwest (approximately 4.2 percent of the time), and from the north and east (each approximately 2.5 percent of the time), with calm conditions (less than 2.0 miles per hour) occurring approximately 25.5 percent of the time. The average wind speed for the period was approximately 5.5 miles per hour (IEM 2023).
Regional Air Quality	While the air quality in Benton County is healthy most of the year, the county's sunny climate, pollution-trapping mountains, and growing population contribute

	to occasional air quality issues. Fugitive dust and smoke are two of the most prevalent existing sources of air pollution in the area. Agricultural and outdoor burns, as well as wildfires, are the main $PM_{2.5}$ sources. Tilling operations, windblown dust, and resuspended road dust sometimes give rise to elevated levels of PM_{10}. The area surrounding the Facility is sparsely populated and largely undeveloped, with the nearest schools and parks located 10 miles southeast in the city of Umatilla, Oregon across the Columbia River. The nearest air quality monitors to the Facility that can be used to determine compliance with the NAAQS are summarized in Table 4.B-1. Ambient monitoring data reported in this table are for years 2020 through 2022, as summarized in the 2023 Ambient Air Monitoring Network Plan. Year 2023 ambient air quality statistics are expected to be finalized in May of 2024. The nearest monitor is located in Sunnyside, Washington (approximately 36 miles northwest), which measures $PM_{2.5}$. The nearest PM_{10} monitor is located in Yakima, Washington (approximately 66 miles northwest). The nearest ozone monitor is in Kennewick, Washington (approximately 23 miles to the northeast). The nearest SO_2 and CO monitors are located in Seattle, Washington (approximately 176 miles to the northwest). The nearest NO_2 monitor is located in Tacoma, Washington (approximately 176 miles to the northwest). In recent years, Washington experienced extended smoke events from regional wildfires in the Pacific Northwest. These smoke events caused repeated exceedances of the PM standards. Due to the regional and exceptional nature of these events, EPA issued waivers for the unmet monitoring requirement. Under normal conditions, pollutant concentrations fall well below NAAQS (Ecology 2023).

Table 4.B-1. Ambient Air Quality Monitors Nearest the Facility with Comparison to NAAQS

Pollutant/ Averaging	Site	2020	2021	2022	3-year Design value	NAAQS	Units
CO 1-hr	Seattle Beacon Hill (ID530330080)	1.7	0.7	1.5	1.7	35	ppm
CO 8-hr		1.7	0.6	1.3	1.7	9	ppm
NO_2 1-hr	Tacoma – S 36th St. (ID530530024)	39.8	37.7	39	39	100	ppb
NO_2 Annual		12.47	12.63	14.21	14	53	ppb
PM_{10}	Yakima 4th Ave. (ID 530770009)	326	123	80	326	150	ug/m^3
$PM_{2.5}$ 24-hr	Sunnyside – S 16th St. (ID 530770005)	118.1	42.3	34.4	65	35	ug/m^3
$PM_{2.5}$ Annual		15.21	10.93	11.18	12	12	ug/m^3
SO_2 1-hr	Seattle Beacon Hill (ID530330080)	4.1	2.5	3.4	3	75	ppb
SO_2 3-hr		1.9	1.1	1.6	1.9	500	ppb
Ozone 8-hr	Kennewick – S Clodfelter Rd. (ID 530050003)	0.061	0.068	0.064	0.068	0.07	ppm

CO – carbon monoxide; µg/m^3 – microgram per cubic meter; NO2 – nitrogen dioxide; PM10 – particular matter less than 10 microns in diameter; PM2.5 – particulate matter 2.5 microns in diameter; ppb – part per billion; ppm – part per million

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Construction	The primary sources of air pollution generated by construction of the Facility would be vehicle exhaust emissions, as well as fugitive dust particles from disturbed soils that become airborne. A concrete batch plant will not be required during construction. Sources of vehicle exhaust emissions would include heavy construction equipment operating on the site, trucks

	delivering construction materials and Facility components to the site, and vehicles used by construction workers to access the site. Pollutant emissions from these sources would be relatively small, given the size of the construction workforce and equipment fleet, and similar to emissions from other equipment commonly used for agriculture, transportation, and general construction in Benton County. The emissions would generally be dispersed among multiple locations in and near the Facility Area at any given time rather than concentrated in a specific location, and they likely would not reach significant concentrations at off-site locations. Construction activities that could create fugitive dust include transportation of materials; clearing and grading for roads, crane pads, solar array pads, and other Facility infrastructure; and trenching or plowing for underground utility cables. Construction activities for the Facility are scheduled to take approximately 12 to 18 months (see Part 1 of the ASC). Construction emissions have been estimated using EPA's Motor Vehicle Emissions Simulator (MOVES3) and NONROAD emission factor models. These emissions are associated with exhaust from heavy equipment, worker vehicle commutes, delivery and haul trucks, as well as fugitive dust from earth-moving and material handling activities. Construction scheduling and equipment have not been finalized, and therefore, reasonable and conservative assumptions have been made for the purpose of estimating construction emissions. A summary of total estimated emissions from construction of the Facility is shown in Table 4.B-2. When compared to the most recent published emissions inventory (2020) for Benton County, Facility emissions would represent a very minor fraction of total emissions for the county (Ecology 2020). Given the relatively low magnitude, localized extent, and temporary duration of construction-related emissions, air quality impacts associated with Facility construction would not be substantial. The following assumptions were used to develop the calculations presented in Table 4.B-2: • Construction equipment emissions were based on estimated construction activity schedule, types of vehicles/equipment, number of vehicles/equipment, fuel type, equipment load factors, and equipment size (horsepower). Equipment operating times for the equipment were based on a 5-day work week and an 8-hour workday. • Fugitive dust sources were estimated using South Coast Air Quality Management District's (SCAQMD) recommended methodology. An uncontrolled PM_{10} emission factor of 20 pounds per acre per day was used, consistent with California Air Resource Board's URBEMIS2007 model. The Facility would implement Best

Management Practices to minimize fugitive dust during construction, including but not limited to graveling, watering, and limiting traffic speeds on unpaved roads. For the purposes of estimating fugitive dust emissions, it was assumed that disturbed areas would be watered at least twice a day, reducing fugitive dust by at least 50 percent. Based on the equipment mix, an estimated average disturbed area of 3 acres per day was used in the calculations. $PM_{2.5}$ emissions were assumed to be 21 percent of PM_{10} emissions, using the fraction recommended by SCAQMD (SCAQMD 1993).

Table 4.B-2. Summary of Total Estimated Construction Emissions (tons per year)

Source	VOC	NOx	CO	PM_{10}	$PM_{2.5}$	SO_2
Off-road Construction Equipment	3.19	21.55	10.44	2.05	1.98	0.02
Worker Commuting	3.23	1.46	28.76	0.02	0.08	0.07
Material Delivery and Hauling	1.10	4.57	2.98	0.01	0.08	0.08
Fugitive Dust from Construction	--	--	--	4.25	0.89	--
Facility Construction Annual (Max.) Total	**7.50**	**27.6**	**42.2**	**6.30**	**3.00**	**0.170**
Benton County 2020 Total Emissions[1/]	**8,226**	**4,196**	**19,678**	**12,705**	**2,281**	**39**
Facility Total as a Percent of Benton County Total Emissions	***< 0.1%***	***0.7%***	***0.2%***	***< 0.1%***	***0.2%***	***0.5%***

1/ Ecology (2020)

Operation and Maintenance	O&M impacts on air quality from the Facility will be minimal. Combustion emissions and fugitive dust generated by vehicles traveling on Facility access roads to perform operations and maintenance functions will be the primary emissions expected during this timeframe. The volume of O&M vehicle traffic will be very low; therefore, quantities of potential emissions generated by these vehicles will be very low, intermittent, and localized. Areas disturbed during construction and not occupied by permanent Facility infrastructure will be revegetated to prevent the generation of dust. A local utility connection to Benton Public Utility District will be provided at the Facility substation and optional O&M building and therefore no generator engine emissions will occur during operations. Operation of the

	Facility will not produce visible plumes, fogging, misting, icing, impairment of visibility, changes in ambient levels of pollutants, or impacts on climate. The Facility is not expected to induce regional growth that would result in substantial changes to off-site air quality. Other pollutants, including GHGs, will be emitted from outside the immediate vicinity, as a result of the total fuel cycle of the Facility. These emissions will be generated from manufacturing and transporting Facility parts and equipment. However, the Facility itself will not directly emit GHGs beyond the use of vehicles and transportation (as mentioned earlier). Furthermore, the Facility will support the state's goal of increasing use of renewable energy resources, which has been declared in part to protect Washington's clean air and water. Implementation of any weed control measures at the Facility (e.g., herbicide spraying) will be conducted in compliance with federal, state, and local regulations to ensure that adverse impacts to air quality do not occur (see Part 4.H).
Odors	During Facility-related construction activities, exhaust from diesel-powered vehicles and equipment as well as painting of the optional O&M building and other structures could create minor odors. These odors are not likely to be noticeable beyond the immediate vicinity and will be temporary and short-lived. Long-term odors are associated typically with industrial projects involving use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills; however, the Facility involves no elements related to these types of uses. Therefore, no long-term odor impacts related to odors will occur with operation of the Facility.

C.2. Changes to the Proposal from the Existing Condition		
Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	Existing conditions at the site have been analyzed and incorporated as described above.

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Implementation of Best Management Practices (BMPs) and Standard Construction Practices	Washington Administrative Code sections addressing air quality include: • WAC 173-400-040(3) Fallout • WAC 173-400-040(4-4a) Fugitive emissions • WAC 173-400-040(5) Odors • WAC 173-400-040(9)(a) Fugitive Dust To adhere to these codes, the Applicant would implement BMPs and standard construction practices, including the following: • Vehicles and equipment used during construction would be properly maintained to minimize exhaust emissions. • Operational measures such as limiting engine idling time and shutting down equipment when not in use would be implemented. • Watering or other fugitive dust-abatement measures would be used as needed to control fugitive dust generated during construction. When applied, the Applicant will use water or a water-based environmentally safe dust palliative such as lignin for dust control. • Construction materials that could be a source of fugitive dust would be covered when stored. • Traffic speeds on unpaved roads would be limited to 25 miles per hour to minimize generation of fugitive dust. • Truck beds would be covered when transporting dirt or soil. • Carpooling among construction workers would be encouraged to minimize construction-related traffic and associated emissions.	N/A

	• Erosion-control measures would be implemented to limit deposition of silt to roadways, to minimize a vector for fugitive dust. • Replanting or graveling disturbed areas would be conducted during and after construction to reduce wind-blown dust.	

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References:

Ecology (Washington State Department of Ecology). 2020. 2020 Washington Comprehensive Emissions Inventory Technical Support Document, data, and methods. https://apps.ecology.wa.gov/publications/documents/2002012.pdf (accessed December 7, 2023).

Ecology. 2023. 2023 Ambient Air Monitoring Plan (Publication 23-02-043). https://apps.ecology.wa.gov/publications/documents/2302043.pdf. Accessed December 7, 2023.

EPA (U.S. Environmental Protection Agency). 2023. Green Book, Washington Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. https://www3.epa.gov/airquality/greenbook/anayo_wa.html (accessed December 7, 2023).

IEM (Iowa Environmental Mesonet, Iowa State University). 2023. Pasco/Tri-Cities Airport (K1S5) ASOS Station Windrose Plot. https://mesonet.agron.iastate.edu/sites/dyn_windrose.phtml?network=WA_ASOS&station=PSC (accessed December 7, 2023).

SCAQMD (South Coast Air Quality Management District). 1993. CEQA Air Quality Handbook. http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook (accessed December 7, 2023).

Western Regional Climate Center. 2023. Priest Rapids Dam, Washington Climate Summaries. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?or8734 (accessed December 7, 2023).

Part 4 – Detailed Analysis

Environment Element Number and Name	4.C – Water Quality: Wetlands and Surface Waters (Buffers, Fill, Dredging, & Sedimentation)

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Wetland Delineation Report (Attachment M)	Complete (May 2022), revised Q2 2023	Prepared by GG Environmental, environmental consultant for the Applicant.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Wetland Delineation	The National Wetlands Inventory (NWI) identifies two wetlands within the Facility Area: one Freshwater Forested/Shrub Wetland categorized as Palustrine Scrub-Shrub Broad-leaved Deciduous Seasonally Flooded Excavated (PSS1Cx) and one Freshwater Emergent Wetland categorized as Palustrine Emergent Persistent Seasonally Flooded Excavated (PEM1Cx). According to the Wetland Delineation Report by GG Environmental (2022), two Category IV wetlands were observed within the Project Area Extent, both supported during the growing season by an irrigation-induced groundwater table. Among these wetlands, one is categorized as a Palustrine Emergent (PEM) wetland

	and the other wetland is categorized as PEM and Palustrine Scrub-Shrub (PSS). The Wetland Delineation Report details the location and extent of the wetlands along with description of soils, hydrology and vegetation. The Facility has applied 40-foot wetland buffer widths consistent with BCC 15.04.040. The Facility has been designed to avoid wetlands, and no wetland or wetland buffer impacts (temporary or permanent) will occur. Any changes that would propose impacts to jurisdictional wetlands and/or buffers will require review by U.S. Army Corps of Engineers (USACE), Ecology, and/or Benton County.
Surface Water	While the National Hydrography Dataset (NHD) (USGS 2023) and the NWI (USFWS 2023) identify a stream running through the Facility Area, no streams were observed within the Facility Area. The NWI also identifies two Freshwater Ponds categorized as Palustrine Unconsolidated Bottom Semipermanently Flooded Excavated (PUBFx). Only one waterbody was observed within the Facility Area, which is an excavated pool utilized by cattle for watering and wallowing. The Wetland Delineation Report by GG Environmental (2022) identifies the likely source of hydrology for the pool as upgradient irrigation, including a leaking irrigation wellhead in the nearby vicinity. The Wetland Delineation Report details the location and extent of the surface waters along with description of soils, hydrology and vegetation. It is not anticipated that any "Waters of the United States" as defined under the Clean Water Act would fall under regulatory jurisdiction within the Facility Area. The Applicant understands that the WDFW will make a determination on whether a Hydraulic Project Approval (HPA) is required on the basis of a review of this application and determine if mitigation is required. Therefore, the Facility complies with BCC 15.04.040.
Flood Risks	The Facility Area does not intersect with any FEMA-listed floodplains (FEMA 2023).

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Wetland and wetland buffer impacts	The Facility has been designed to avoid wetlands, and no wetland or wetland buffer impacts (temporary or permanent) will occur.
Surface Waters	The Facility has been designed to avoid surface waters, and no impacts (temporary or permanent) will occur.
Existing/potential flood risks	No temporary structures or permanent impacts are proposed as the Facility Area is outside of any FEMA-listed floodplains.
Erosion and surface water quality	Risks of erosion during construction will be addressed through construction best management practices as described in detail in Parts 4.A and 4.E. The Applicant will prepare an ESCP, Construction SWPPP, Operations SWPPP, and Vegetation and Weed Management Plan prior to construction. The Facility will be designed and constructed to comply with Benton County and Ecology requirements in retaining stormwater on-site and maintaining natural drainage patterns, and the Facility's ESCP, Construction and Operation SWPPPs, and Vegetation and Weed Management Plan will provide specific measures to minimize erosion and sedimentation during and after construction.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Avoidance	The Facility will not impact wetlands, wetland buffers, or surface waters and is consistent with WAC 463-62-050.	N/A

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed		
Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes
Environmental Element	Additional changes or effects	
N/A	N/A	

References

FEMA (Federal Emergency Management Agency). 2023. Flood Map Service Center. Available online at: https://msc.fema.gov/portal/home. Accessed October 2023.

GG Environmental. 2022 Wetland Delineation Report – Wallula Gap Solar. Wallula Gap Area of Interest. Prepared for OneEnergy Development, LLC. May 25, 2022.

USFWS (United States Fish and Wildlife Service). 2023. National Wetland Inventory. Available online at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed October 2023.

USGS (U.S. Geological Survey). 2023. National Hydrography Dataset. Available online at: https://apps.nationalmap.gov/downloader/#/. Accessed October 2023.

Part 4 – Detailed Analysis

Environment Element Number and Name	4.E – Water Quality: Stormwater Runoff

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Wetland Delineation Report (Attachment M)	Complete (May 2022), revised Q2 2023	Prepared by GG Environmental, environmental consultant for the Applicant	☐ No	☒ Yes
Phase 1 Environmental Site Assessment (Attachment G)	Complete (February 2022)	Prepared by EarthTouch, Inc., environmental consultant for the Applicant	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
General	The Facility Area is located in the Columbia River Basin, and northwest of the town of Plymouth, Washington in Benton County. The Facility Area is positioned on predominantly flat to gently south-sloping heavily modified land that was formerly used for livestock grazing, rock and soil quarries, and roads for accessing the surrounding agricultural fields. Elevation change across the Facility Area appears to be about 200 feet.

	The Facility Area is predominantly flat to gently south-sloping terrain. No active streams have been observed within the Facility Area. The Facility area is outside of any FEMA-mapped floodplains.
Land Use	Based on the National Land Cover Database (USGS 2021), land cover types within the Facility Area are a mixture of shrub/scrub and cultivated cropland. The Facility Area is located in a heavily modified landscape, primarily for agriculture. Land use in the Facility Area is mostly livestock grazing, rock and soil quarries, and roads used to access the surrounding agricultural fields. A gravel-packed airplane landing strip bisects the northern portion of the Facility Area. Portions of the Facility Area once used for irrigated cropland have been converted to pasture lands where cattle grazing occurs. Per the Phase 1 Environmental Site Assessment (Attachment G), there is minimal concern of adverse environmental impacts from any potentially hazardous substances and pollutants from historic land use within the Facility Area as well as in the vicinity of the Facility Area. Additionally, the Facility does not pose any potential impacts to adjacent agricultural activities. The Facility Area will not limit or impact current or future farm activities through runoff on the surrounding land due to the implementation of BMPs, detailed further in this section, and will not diminish the opportunity for neighboring parcels to expand, purchase, or lease any vacant land available for farming.
Wetlands and Surface Waters	Refer to Part 4.C (Water Quality – Wetlands and Surface Waters (Buffers, Fill, Dredging, & Sedimentation) for details on wetlands and surface waters observed within the Facility Area and the proposed mitigation strategies that would be implemented to best avoid and protect wetlands and surface waters associated with the Facility.[1]
Soils	The soils in the Facility Area have low moisture content, and the clay content is estimated to be between 0.5 and 11 percent. Surface soils in the Facility Area are rated as “well drained” to “excessively drained” (see Part 4.A [Earth]).

[1] Existing conditions related to water quality and wetlands are addressed in Part 4.C.

	Soils within the Facility Area include approximately 90 percent Hydrologic Soil Group A and approximately 10 percent Hydrologic Soil Group B. Group A soils have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well-drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission. Group B soils have a moderate infiltration rate (moderately low runoff potential) when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well-drained, or well-drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.
Impervious Surfaces	The Facility Area will occupy approximately 392 acres, or 0.06 percent of Growth Management Act (GMA) Agricultural Lands in the county. The impervious disturbance footprint (including paved and/or compacted surfaces including driveways, access roads, inverters, operations and management building, substation) will occupy approximately 12 acres, which is 3 percent of the Facility Area, or 0.002 percent of GMA Agricultural Lands in the county. In general, there will be minimal grading across the site, and existing drainage patterns and natural infiltration will be retained. Although classified as impervious surfaces, stormwater will generally infiltrate through the gravel roads, but at a reduced rate compared to most soils in the area. Because solar panels are spaced apart from each other and the full area including the surface under the rotating panels would be revegetated such that vegetated area between panel rows is greater in area than the width of the rows of panels allowing natural infiltration of rainwater, the panels themselves are not considered impervious surfaces. Any runoff from panels would flow onto and across vegetation, so infiltration is maintained.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Surface water runoff	It is anticipated that only minor changes to the existing stormwater drainage would occur as a result of new impervious surfaces developed as part of this proposal. Impervious surfaces

	within the Facility Area include paved and/or compacted surfaces including driveways, access roads, inverters, O&M building, and substation. The Facility Area under the solar modules will be converted to grassland conditions within the fenced boundary around the proposed impervious surfaces. Since the area between and beneath the panels is vegetated, panels are not considered an impervious surface. Only a small minority of the Facility Area will be covered with impervious surfaces (see Part 2, Section 2.B.2) and infiltration of precipitation will not differ significantly from current conditions; any additional runoff will be minimized and avoided within existing drainages through Facility design and BMPs such as detention basins. A Stormwater Management Report will be developed as part of the Facility design and will include all erosion control measures required to address construction and operations stormwater runoff. The Applicant will also prepare an ESCP, Construction SWPPP, Operations SWPPP, and Vegetation and Weed Management Plan prior to construction that will include measures to minimize soil erosion and stormwater runoff. Additionally, the Facility will be designed and constructed to comply with Benton County and Ecology requirements in retaining stormwater on-site and maintaining natural drainage patterns. If required, stormwater management practices such as detention basins will be proposed on site to meet the requirements of the state, as determined in the Stormwater Management Report that will be developed.
Loss of wetland/surface water functions and values	The Facility has been designed to avoid all wetlands and surface waters within the Facility Area. No wetland or wetland buffer impacts (temporary or permanent) will occur.
Critical Aquifer Recharge Area	BCC Section 15.06.030 requires a Critical Areas Report to be prepared for certain activities when proposed in a Critical Aquifer Recharge Area; however, the Facility does not meet the criteria provided in BCC 15.06.030. As such, a Critical Areas Report is not required.

C.2. Changes to the Proposal from the Existing Condition		
Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☐ No	☒ Yes

Topical area/issue	Changes
Site Design and Layout	The proposed Facility will be designed to meet the requirements of the State of Washington for stormwater management. Appropriate erosion and sediment control and drainage plans will be implemented based on existing conditions and planned impervious surfaces (e.g., roads and other graveled areas). The Facility will be designed to have the least impact to stormwater drainage patterns and erosion risk as feasible.

	The amount of water used for annual panel washing will easily infiltrate into the vegetated ground around the panels and is not expected to run off into surface water bodies or impact aquifers. Furthermore, washing of solar panels, if required, will be done with water only, and no surfactants or other chemicals will be added. Because the panel wash water will not contain added chemicals and the water is expected to evaporate with only minimal amounts potentially reaching the ground, no mitigation will be required and there will be no impact on the receiving environment from panel washing.

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Erosion and Sediment Control BMPs – Stormwater	As mentioned before, the Applicant will also prepare an ESCP, Construction and Operations SWPPPs, and Vegetation and Weed Management Plan prior to construction. The ESCP and SWPPPs (for construction and operation) will address stormwater runoff, flooding, and erosion to ensure compliance with state and federal water quality standards. The SWPPPs will include BMPs from the Washington Department of Ecology's SWMMEW (Ecology 2019). A Vegetation and Weed Management Plan will be developed prior to construction and implemented to revegetate temporarily impacted areas and minimize erosion and sedimentation during and after construction.	Ecology

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References

GG Environmental. 2022. Wetland Delineation Report – Wallula Gap Solar. Wallula Gap Area of Interest. Prepared for OneEnergy Development, LLC. May 25, 2022.

USGS (U.S. Geological Survey). 2021. National Land Cover Database. Available online at: https://www.usgs.gov/centers/eros/science/national-land-cover-database. Accessed November 2023.

Part 4.H Plants – Detailed Analysis

Environment Element Number and Name	4.H – Plants

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Tier 3 Wildlife, Habitat, and Plant Survey Report and Addendum (Attachment F)	Completed (February 2023). Addendum was completed November 2023.	Prepared by Western EcoSystems Technology (WEST), environmental consultant for the Applicant. WDFW provided feedback on protocols and special status species in the Facility vicinity.	☐ No	☒ Yes
Wetland Delineation Report (Attachment M)	Completed (May 2022), revised Q2 2023	Prepared by GG Environmental, environmental consultant for the Applicant.	☐ No	☒ Yes
Draft Habitat Mitigation Plan (Attachment B)	Draft plan completed January 2024. Draft plan will be updated prior to construction, and final plan will be completed post-construction.	Prepared by Tetra Tech, environmental consultant for the Applicant. Agency involvement includes WDFW and Benton County. The Plan will be prepared in compliance with Benton County's Critical Areas Ordinance, WAC 463-60-332(3), and WDFW Policy M-5002.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues	
Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.	
Topical area/issue	Existing Condition and Problems
U.S. Fish and Wildlife Service (USFWS) Federally Listed Plant Species	Although not listed in the USFWS Information for Planning and Consultation (IPaC) report, one federally threatened plant species, which is also state listed as endangered, the Umtanum desert buckwheat (*Eriogonum codium*) is known to occur within Benton County (DNR 2023a). However, this species has a highly restricted distribution, and the entire known population occurs in a 4.8-acre area on the eastern end of Umtanum Ridge within the Hanford Reach National Monument, approximately 47 miles north of the Project Area Extent (USFWS 2022). Additionally, the approximately 344 acres of designated critical habitat for Umtanum Desert buckwheat in Benton County is 47 miles north of the Project Area Extent (USFWS 2013).
Washington Natural Heritage Program (WNHP) Special Status Vascular Plants	In addition to the Umtanum desert buckwheat, the Washington Department of Natural Resources (DNR) listed 27 other rare vascular plant species documented in Benton County (DNR 2023a), eight of which were classified as possible to occur within the Project Area Extent based on similar habitat types and elevation (see Attachment F). The eight species with potential to occur within the Project Area Extent included three state listed threatened and five state sensitive species. However, no rare plant species were classified as "Likely" to occur based on the marginal, degraded land cover and habitat within the Project Area Extent. The eight rare plant species with possible likelihood to occur at the Facility are: • cespitose evening-primrose (*Oenothera caespitosa* ssp. *caespitosa*), • Columbian milkvetch (*Astragalus columbianus*), • gray cryptantha (*Cryptantha leucophaea*), • Great Basin gilia (*Aliciella leptomeria*), • rosy pussypaws (*Calyptridium roseum*), • small-flower evening-primrose (*Eremothera minor*), • Thompson's sandwort (*Eremogone franklinii var. thompsonii*), and • yellow wildrye (*Leymus flavescens*).

	None of the eight species listed as potentially occurring within the Project Area Extent have been documented within 5 miles of the Facility (DNR 2023a). There is one current element occurrence within 5 miles of the Project Area Extent for the grand redstem (*Ammannia robusta*) (WNHP 2023). The habitat for the grand redstem includes the shoreline along the Columbia River, riparian mudflats dominated by annual species, and inundated sites with fine, muddy, sandy, or silty soils (WNHP 2021a). However, this species is unlikely to occur based on lack of suitable habitat within the Project Area Extent (see Attachment F). There are no historical element occurrences within 5 miles of the Project Area Extent (WNHP 2022).
WNHP Special Status Nonvascular Species	Per DNR (2023a), one special status nonvascular lichen, woven-spore lichen (*Texosporium sancti-jacobi*), is listed as known or potentially occurring in Benton County. This species is listed as state threatened by the WNHP. The woven-spore lichen grows in arid to semiarid shrub-steppe, grassland, scabland, or savannah vegetation communities up to 3,280 feet in elevation (WNHP 2021b). Most sites where this species is found are relatively undisturbed and dominated by native plants including sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), Idaho fescue (*Festuca idahoensis*), and bluebunch wheatgrass (*Pseudoroegneria spicata*), and fire generally eliminates the species (WNHP 2021b). In Washington, this species is currently known from four small, scattered occurrences in Benton, Klickitat, and Yakima Counties (WNHP 2021b). The closest element occurrence is approximately 20 miles from the Project Area Extent (DNR 2023a).
Vegetation Types / WDFW Priority Habitats	The Applicant conducted field surveys to map and characterize habitat within the Project Area Extent in 2022, which encompasses the Facility Area. However, limited areas of the Facility Area extend outside the Project Area Extent which was initially surveyed for habitat and rare plants in 2022 and the additional area surveyed in 2023. Therefore, habitats for approximately 14 acres within the Facility Area were assessed using a desktop analysis as well as photo analysis based on photos taken during wildlife surveys in 2022 (see Attachment F). The habitat surveys and desktop assessment identified four habitat types within the Project Area Extent (Attachment F, Figure 4.2). The four habitat types are: • Shrub-steppe, • Pasture,

	• Developed/disturbed, and • Wetlands. In general, habitat types were adapted from habitat descriptions in the WDFW Wind Power Guidelines (WDFW 2009). WDFW received an updated version of the Tier 3 Wildlife, Habitat, and Plant Survey Report as well as the Addendum (Attachment F) on November 15, 2023. The Applicant has received WDFW concurrence on the additions to the report. Vegetation in the Project Area Extent consisted primarily of non-native grasses and forbs; however, early successional shrubs (rubber rabbitbrush [*Ericameria nauseosa*]) and patches of woody vegetation (willow [*Salix* spp.] and Russian olive [*Elaeagnus angustifolia*]) were scattered throughout pastures, particularly in the southern portion of the Project Area Extent. Russian olives and cottonwood trees (*Populus* spp.) are along the southern boundary near SR 14. Vegetation within much of the Project Area Extent has been modified by livestock grazing, rock and soil quarries, and roads used to access the surrounding agricultural fields. Pasture dominates the Project Area Extent. Pasture is characterized by low herbaceous vegetation, absent substantive shrub cover, or over story. Early season ground cover in pastures consisted primarily of common stork's-bill (*Erodium cicutarium*), spring draba (*Draba verna*), gold-star (*Crocidium multicaule*), and the rosettes of fiddleneck (*Amsinckia* spp.) and other assorted weedy species. Descriptions of habitat types mapped within the Project Area Extent are provided in the Tier 3 Wildlife, Habitat, and Plant Survey Report as well as the Addendum (both included in Attachment F). Table 4.H-1 lists the acres of each habitat type mapped within the Facility Area. One of the habitat types that occur within the Facility Area, shrub-steppe, is listed as a Priority Habitat by the WDFW (WDFW 2008). As shown in Table 4.H-1, approximately 19 acres of shrub-steppe habitat occurs within the Facility Area. The areas of shrub-steppe are shown in Figure 4.2 of the Tier 3 Wildlife, Habitat, and Plant Survey Report and Figure 2 of the Addendum to the Tier 3 Wildlife, Habitat, and Plant Survey Report (see Attachment F). Shrub-steppe patches exist throughout the Project Area Extent with the largest, most contiguous patch (10 acres) located in the northeast north of the landing strip, between a fence and cropland where cattle were excluded. Shrub species in shrub-steppe were co-dominated by big sagebrush

<table>
<tr>
<td></td>
<td>and rubber rabbitbrush. Two locations, north of the landing strip (10 acres) and patches in the southeast corner (2 acres), were the few examples where sagebrush was the dominant shrub within a shrub-steppe patch.

Table 4.H-1. Habitat Types Within the Facility Area
<table>
<tr><th>Habitat Type</th><th>Area (acres)1/</th><th>Percent Composition</th></tr>
<tr><td>Shrub-steppe</td><td>19.1</td><td>5</td></tr>
<tr><td>Pasture</td><td>365.6</td><td>93</td></tr>
<tr><td>Developed/disturbed</td><td>7.0</td><td>2</td></tr>
<tr><td>Wetlands</td><td>0.2</td><td><1</td></tr>
<tr><td>Total</td><td>391.9</td><td>100</td></tr>
</table>
1/ Totals may not sum exactly due to rounding.
2/ The 0.2-acre wetland feature shown within the Facility Area in Attachment B, Figure 2 and Figure 3 will be avoided during construction and operations. The 40-foot buffer required by Benton County around the category IV wetland will also be enforced and BMPs will be utilized to ensure the wetland retains functionality similar to pre-Facility conditions.

See the Tier 3 Wildlife, Habitat, and Plant Survey Report and the Addendum to the Tier 3 Wildlife, Habitat, and Plant Survey Report in Attachment F of this ASC for additional details on habitat types observed.</td>
</tr>
<tr>
<td>Invasive Plant Species</td>
<td>Four state and county listed noxious weeds were observed in the Project Area Extent during habitat and rare plant surveys in 2022 and 2023. Noxious weeds observed in the Project Area Extent include kochia (Bassia scoparia, Class B), rush skeletonweed (Chondrilla juncea, Class B), cereal rye (Secale cereale, Class C), and diffuse knapweed (Centaurea diffusa, Class B) (Jansen and Lawes 2023; Fields and Jansen 2023). Noxious weeds were classified according to the 2022 Noxious Weed List (BCNWCB 2022).These four weeds are also listed as noxious weeds on the 2023 Washington State Noxious Weeds List (Washington State NWCB 2023).

Appendix D of the Tier 3 Wildlife, Habitat, and Plant Survey Report and the Addendum (Attachment F) provides a list of all vascular plant species observed within the Project Area Extent and notes each species' noxious status.</td>
</tr>
<tr>
<td>Fire</td>
<td>Fire has played an important role in shaping the environmental conditions and habitat types of an area. However, no fires have occurred within the Project Area</td>
</tr>
</table>

	Extent between 1973 and 2022 (DNR 2023b). The nearest fire, the Train fire from 1986, was 1.5 miles southwest of the Project Area Extent (DNR 2023b). Part 4.L (Environmental Health – Hazardous Materials) describes the existing conditions related to historic fires in the area.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
USFWS Federally Listed Plant Species	As noted in Section 4.H.B, federally listed plant species are not anticipated to occur in the Project Area Extent, and none were observed during botanical surveys conducted for the Facility (Attachment F). Therefore, federally listed plant species are not likely to be affected by the Facility.
WNHP Special Status Vascular Plants	Of the eight special status vascular plants classified as possible to occur within the Project Area Extent, none are likely and none have been documented within 5 miles of the Project (WNDR 2023). There is one current element occurrence within 5 miles of the Project for the grand redstem. However, this species is also unlikely to occur in the Project Area Extent based on lack of suitable habitat within the Project Area Extent (Jansen and Lawes 2023). Therefore, special status vascular plant species are not likely to be affected by the Facility.
WNHP Special Status Nonvascular Species	Species-specific surveys have not been conducted for special status nonvascular species within the Project Area Extent. However, suitable habitat for woven-spore lichen (i.e., relatively undisturbed shrub-steppe, grassland, scabland, or savannah vegetation communities) was not observed during botanical surveys conducted for the Facility. Native shrub-steppe habitat observed within the Project Area Extent was highly disturbed due to extensive cattle grazing. The largest, most contiguous patch of shrub-steppe (10 acres) was located north of the landing strip, between a fence and cropland where cattle were excluded. Because woven-spore lichen is typically found in relatively undisturbed native vegetation communities, it is highly unlikely that this species occurs within the Project Area Extent. Therefore, impacts to woven-spore lichen are not anticipated. In addition, impacts to native shrub-steppe

	communities were minimized during Facility design, and less than 20 acres of this habitat type would be impacted during Facility construction and operation.
Vegetation Types / WDFW Priority Habitats	Construction and operation of the Facility will result in permanent and temporary impacts on vegetation, as well as alterations to vegetation within the solar array's perimeter fence lines during the life of the Facility. Permanent impact areas include locations where Facility components will occur (e.g., solar array panel posts, permanent Facility service roads, BESS, O&M building, collector substation area, poles for transmission line, inverter and transformer pads) and constitute a habitat loss during the life of the Facility. Temporary impact areas include areas that will be disturbed during construction and revegetated following construction (e.g., collection lines, temporary access roads, and temporary work areas outside the perimeter fence lines and temporary laydown and pulling areas for the generation-tie line). Temporarily disturbed areas will be revegetated in accordance with a Vegetation and Weed Management Plan that will be developed and submitted to EFSEC prior to construction. Altered habitat impacts include lands within the perimeter fence lines minus any areas occupied by permanent Facility structures. These areas will be revegetated either passively and allow species to colonize naturally or actively and seeded with low-growing vegetation consisting of native species and/or a mix of native and desirable non-native, non-invasive species (i.e., species that would provide more rapid soil stabilization and vegetative cover than slower growing native species), identified in coordination with WDFW, which will result in permanently altered vegetation (see Attachment B for additional details). A Vegetation and Weed Management Plan will be prepared in coordination with WDFW and Benton County Noxious Weed Control Board, and the plan will describe the revegetation methods for the Facility. Table 4.H-2 lists the estimated acres of temporary, altered, and permanent impacts to priority habitats such as shrub-steppe from construction and operation of the Facility. The vast majority of impacts would occur to pasture habitat. As shown in this table, 17.6 acres would be permanently altered during operation, and less than 1.5 acres would be permanently impacted by operation of the Facility. The estimated acres of impact on each priority habitat type provided in Table 4.H-2 are based on the current Facility design (Attachment A, Figure A-1). Only impacted subtypes that result in the need for mitigation are shown. Pasture and developed/disturbed

<table>
<tr><td></td><td>habitat types are not included as they do not require mitigation according to the WDFW Wind Power Guidelines (WDFW 2009).

Table 4.H-2. Anticipated Impacts to Shrub-Steppe from the Facility
<table>
<tr><th>Habitat Type</th><th>Temporary Impacts (acres)</th><th>Altered Habitat Impacts (acres)</th><th>Permanent Impacts (acres)</th><th>Total Impacts (acres)</th></tr>
<tr><td>Shrub-steppe</td><td>0.0</td><td>17.6</td><td>1.5</td><td>19.1</td></tr>
</table>
However, as discussed in Part 2, the final location of Facility components will depend both upon results from outstanding technical studies and engineering design (e.g., civil design and interconnection studies) as well as ongoing stakeholder consultations, which may require changes to the Facility Area configuration to minimize potential impacts to natural resources and optimize Facility economics. Any relocations made to the Facility layout will be designed to avoid or minimize impacts to special status species, Priority Habitats, and waterways to the extent practical, and to comply with any conditions imposed in the Site Certification Agreement.</td></tr>
<tr><td>Invasive Plant Species</td><td>Soil disturbance and the subsequent removal of vegetation during construction will increase the potential for the introduction and spread of noxious weeds and invasive species. The movement of construction and operation equipment and personnel also increases the potential for introduction and spread of noxious weed and invasive plant species.

However, with the implementation of BMPs such as flagging the limits of construction to minimize vegetation removal and ground disturbance, and implementing measures described in the Vegetation and Weed Management Plan that will be prepared for the Facility (see Part 4.H.C), the Facility is not expected to result in a significant increase in the introduction and spread of noxious weeds and invasive species.</td></tr>
<tr><td>Fire</td><td>Fires (both those potentially generated by the Facility as well as those generated by other factors offsite) have the potential to directly affect botanical resources</td></tr>
</table>

	through alteration of habitats as well as destruction of plant species including special status plant species. Fire can also indirectly affect botanical resources by creating conditions for colonization or expansion of non-native, invasive plant species, such as cheatgrass. As described in Part 3.M (Environmental Health – Hazardous Materials), Part 3.S (Public Services and Facilities), and Part 4.M (Environmental Health – Hazardous Materials), the Facility will implement measures to address fire risk. Prior to construction, the Applicant will develop an Emergency Management Plan and implement BMPs for fire prevention. The Applicant will coordinate with the Benton County Sheriff's Office, Benton County Fire Marshall and Benton County Fire District 6, Benton County Emergency Management, and DNR Wildland Fire Management Division to collaboratively develop safety measures that will be incorporated into the Facility's design and construction. The Applicant will also coordinate with these entities regarding necessary equipment or training, if any are identified as needed, that may be required to provide fire protection services to the Facility. To further mitigate the need for fire protection services, the Facility's structures and components will incorporate multiple layers of protection to avoid failures and risks of fire or spills and will be designed to applicable requirements of the National Electric Code, NFPA, and Institute of Electrical and Electronics Engineers standards. Access roads will be developed and maintained with a minimum 20-foot width with approved turning radii and turnarounds to provide 1) sufficient access for fire fighters to the area and 2) additional fire breaks, including a 16-foot gravel fire break surrounding the Facility. Each lithium-ion BESS would contain a fire suppression system in accordance with the Fire Code and NFPA standards, specifically NFPA 855 – "Standard for the Installation of Stationary Energy Storage Systems." The BESS will include monitoring equipment and alarm systems with remote shut-off capabilities. Routine mowing and spot treatment for invasive grasses will occur in the spring and the fall and will follow the plan outlined in the Vegetation and Weed Management Plan (to be submitted prior to construction). Vegetation management will also establish and maintain fire breaks around each solar array, structures, the Facility substation, and along the Facility's fence line. Implementation of these measures will minimize the risk of wildfires occurring in the Facility Area.

	The implementation of these measures will minimize the risk of wildfires occurring and adversely affecting botanical resources.		
C.2. Changes to the Proposal from the Existing Condition			
Would the existing condition for this topic have the potential to affect the proposal now or in the future?		☒ No	☐ Yes
Topical area/issue	Changes		
Vegetation Types / WDFW Priority Habitats	As noted in Section 4.H.C, the Applicant will minimize impacts to shrub-steppe habitat, where possible. In addition, the measures discussed in Section 4.H.D below will provide additional habitat mitigation.		
D. Proposed Commitments and Monitoring			
Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?		☐ No	☒ Yes
Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation	
Mitigation of Impacts to Shrub-Steppe	Conservation easement, mitigation payment to local conservation entity, or alternative mitigation pathways if available in the future.	WDFW and EFSEC	
Have all final proposed commitments been identified?		☒ No	☐ Yes
E. Effects on Other Environmental Elements Not Yet Discussed			
Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?		☒ No	☐ Yes
Environmental Element	Additional changes or effects		
N/A	N/A		

References:

BCNWCB (Benton County Noxious Weed Control Board). 2022. 2022 Benton County Noxious Weed List. Available online at: http://www.bentonweedboard.com/.

DNR (Washington Department of Natural Resources). 2023a. List of Known Occurrences of Rare Plants, Mosses and Lichens in Washington by County. Washington Natural Heritage Information System. Compiled on March 2, 2023. Washington State Department of Natural Resources. Available online at:

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WNHP. 2023. Element Occurrences – Current. Published on February 22, 2018; Updated on September 28, 2023. Washington Natural Heritage Program of Washington State Department of Natural Resources. Available online at: https://data-wadnr.opendata.arcgis.com/datasets/wadnr::washington-natural-heritage-program-element-occurrences-current/about

Part 4.I Animals – Detailed Analysis

Environment Element Number and Name	4.I – Animals

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Tier 3 Wildlife, Habitat, and Plant Survey Report and Addendum (Attachment F)	Completed (February 2023). Addendum was completed November 2023.	Prepared by Western EcoSystems Technology (WEST), environmental consultant for the Applicant. WDFW provided feedback on protocols and special status species in the Facility vicinity.	☐ No	☒ Yes
Wetland Delineation Report (Attachment M)	Completed (May 2022), revised Q2 2023	Prepared by GG Environmental, environmental consultant for the Applicant.	☐ No	☒ Yes
Habitat Mitigation Plan (Attachment B)	Draft plan completed (January 2024) and will be updated prior to construction. Final plan will be completed post-construction.	Prepared by Tetra Tech, environmental consultant for the Applicant. Agency involvement includes WDFW and Benton County. The Plan will be prepared in compliance with Benton County's Critical Areas Ordinance, WAC 463-60-332(3), and WDFW Policy M-5002.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues	
Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.	
Topical area/issue	Existing Condition and Problems
Habitat Types	In consultation with WDFW and in compliance with WAC 463-60-332(1), the Applicant contracted with WEST to complete a wildlife and habitat survey in 2022 followed by an additional area survey in 2023 (see Part 4.I.A above). The Applicant conducted field surveys and desktop analysis to map and characterize habitat within the Project Area Extent in 2022 and 2023, which encompasses the Facility Area. The habitat surveys identified four habitat types within the Project Area Extent (Attachment F, Figure 4.2). The four habitat types are: • Shrub-steppe, • Pasture, • Developed/disturbed, and • Wetlands. In general, habitat types were adapted from habitat descriptions in the WDFW Wind Power Guidelines (WDFW 2009). Descriptions of habitat types mapped within the Project Area Extent are provided in the Tier 3 Wildlife, Habitat, and Plant Survey Report and the Addendum (Attachment F). The above habitat types were mapped using aerial imagery, remotely sensed data (Yang et al. 2018; NLCD 2019), and the USFWS NWI (2022a), which were then field-verified. Table 4.I-1 lists the acres of each habitat type mapped within the Facility Area. One of the habitat types that occur within the Facility Area, shrub-steppe, is listed as a Priority Habitat by the WDFW (WDFW 2023). As shown in Table 4.I-1, approximately 19 acres of shrub-steppe occurs within the Facility Area. The areas of shrub-steppe are shown in Figure 4.2 of the Tier 3 Wildlife, Habitat, and Plant Survey Report and Figure 2 of the Addendum to the Tier 3 Wildlife, Habitat, and Plant Survey Report (Attachment F). Shrub-steppe patches were throughout the Project Area Extent with the largest, most contiguous patch located in the northeast, north of the landing strip, between a fence and cropland where cattle were excluded. Shrub species in shrub-steppe was co-dominated by

big sagebrush (*Artemisia tridentata*), and rubber rabbitbrush. Two locations, north of the landing strip (10 acres) and patches in the southeast corner (2 acres), were the few examples where sagebrush was the dominant shrub within a shrub-steppe patch.

Table 4.I-3. Habitat Types Within the Facility Area

Habitat Type	Area (acres)[1/]	Percent Composition
Shrub-steppe	19.1	5
Pasture	365.6	93
Developed/disturbed	7.0	2
Wetlands	0.2	<1
Total	**391.9**	**100**

1/ Totals may not sum exactly due to rounding.
2/ The 0.2-acre wetland feature shown within the Facility Area in Attachment B, Figure 2 and Figure 3 will be avoided during construction and operations. The 40-foot buffer required by Benton County around the category IV wetland will also be enforced and BMPs will be utilized to ensure the wetland retains functionality similar to pre-Facility conditions.

See the Tier 3 Wildlife, Habitat, and Plant Survey Report and the Addendum to the Tier 3 Wildlife, Habitat, and Plant Survey Report (Attachment F) for additional details on habitat types observed.

Based on the National Land Cover Database (NLCD 2019), land cover types within the Project Area Extent are a mixture of shrub/scrub and cultivated cropland. The Project Area Extent is located in a heavily modified landscape and part of AgriNorthwest's Plymouth Farm that grows an assortment of fruits and vegetables.

Wetlands were formally delineated in the Project Area Extent (see Attachment M). No fish-bearing streams were present within the Project Area Extent. Two wetland units were delineated within the Project Area Extent, both rated as Category IV wetlands. Category IV wetlands demonstrate the lowest levels of functions and are often heavily disturbed (Hruby 2014). According to FEMA (1982), no floodplain is mapped within or near the Project Area Extent.

<table>
<tr><td></td><td>For further details on wetland and water features, see the Wetland Delineation Report (Attachment M) and Part 4.C (Water Quality – Wetlands and Surface Waters).</td></tr>
<tr><td>Special Status Species</td><td>The Applicant conducted surveys for threatened, endangered, and sensitive wildlife and plant species (TESS) and for raptor nests. In the absence of state or federal solar energy and wildlife guidelines, study objectives were designed to comply with Tier 3 studies described in the USFWS Land-based Wind Energy Guidelines (2012) and the WDFW Wind Power Guidelines (2009). The USFWS IPaC system (USFWS 2022b) and WDFW Priority Habitats and Species (PHS) lists (WDFW 2023 were queried to develop a list of wildlife special status species.

While the PHS data provided by WDFW did not identify records of TESS wildlife species in the Project Area Extent, when provided the project details WDFW noted high use of the landscape by waterfowl during winter and potential for the occurrence of burrowing owls (Athene cunicularia; OneEnergy 2021, Ritter 2021). WDFW also identified wildlife species of interest at the Facility, including Townsend’s ground squirrel (Urocitellus townsendii), long-billed curlew (Numenius americanus), white-tailed jackrabbit (Lepus townsendii), and black-tailed jackrabbit (Lepus californicus; WDFW 2022; Table 4.I-2).

Table 4.I-4. Species of Interest Provided by WDFW with Potential in the Project Area Extent
<table><tr><th>Species</th><th>Federal Status</th><th>State Status</th></tr><tr><td>Birds</td><td></td><td></td></tr><tr><td>burrowing owl (Athene cunicularia)</td><td>-</td><td>Candidate, Priority Species</td></tr><tr><td>long-billed curlew (Numenius americanus)</td><td>-</td><td>-</td></tr><tr><td>Mammals</td><td></td><td></td></tr><tr><td>black-tailed jackrabbit (Lepus californicus)</td><td>-</td><td>Candidate, Priority Species</td></tr><tr><td>Townsend’s ground squirrel (Urocitellus townsendii)</td><td>-</td><td>Candidate, Priority Species</td></tr><tr><td>white-tailed jackrabbit (Lepus townsendii)</td><td>-</td><td>Candidate, Priority Species</td></tr></table>
No federal or state threatened, endangered, or candidate species were observed during these surveys. Wildlife species observed during field surveys at the Project</td></tr>
</table>

<table>
<tr>
<td></td>
<td>Area Extent include 4 mammal species (Table 4.I-3) and 16 bird species (Table 4.I-4; see Appendix B of Attachment F). The bald eagle (Haliaeetus leucocephalus) was observed, which is protected under the BGEPA managed by the USFWS. Four bald eagles were observed in the Raptor Nest Survey Area feeding on a coyote (Canis latrans) carcass (see photo A1 in Appendix A of Attachment F) along slopes of Bing Canyon northwest of the Project Area Extent (see Figure 2.3 of Attachment F). No suitable bald eagle nesting habitat was observed in the Project Area Extent or Raptor Nest Survey Area; however, carrion, cattle carcasses, calves, and after birth provide supplemental foraging opportunities for all raptors.

Table 4.I-5. Mammal Species Observed During 2022 Surveys Within the Project Area Extent
<table>
<tr><th>Common Name</th><th>Scientific Name</th><th>Status</th></tr>
<tr><td>coyote</td><td>Canis latrans</td><td>-</td></tr>
<tr><td>northern grasshopper mouse</td><td>Onychomys leucogaster</td><td>-</td></tr>
<tr><td>northern pocket gopher</td><td>Thomomys talpoides</td><td>-</td></tr>
<tr><td>sagebrush vole</td><td>Lemmiscus curtatus</td><td>-</td></tr>
</table>
</td>
</tr>
<tr>
<td>Raptor Nests and General Avian Species</td>
<td>The Applicant contracted with WEST to complete a ground-based Raptor Nest Survey in 2022 (see Part 4.I.A above and Attachment F). Three rounds of ground-based raptor nest surveys were conducted between early morning and mid-afternoon in March, April, and May within the Project Area Extent and Raptor Nest Survey Area. The first survey was conducted in early March prior to tree leaf out to increase nest detection and determine territory occupancy. Follow-up surveys were conducted in April and May at previously identified nests and in areas with a higher habitat quality (e.g., trees and elevated structures) where a new nest could be constructed.

WEST identified 12 raptor nests within the Raptor Nest Survey Area (Attachment F, Figure 4.1, Table 4.1). Two nests were located in the Project Area Extent; one nest was occupied by a red-tailed hawk (Buteo jamaicensis) and the other nest was unoccupied. The remaining 10 nests were located outside of the Project Area Extent but within the Raptor Nest Survey Area (see Figure 4.1 in Attachment F).</td>
</tr>
</table>

Of these 10 nests, one nest, located in a cottonwood tree adjacent to the substation and main access road, was occupied by a great horned owl (*Bubo virginianus*) and one nest, located on a high-voltage electrical transmission tower, was occupied by a red-tailed hawk (see Figure 4.1 in Attachment F). The majority (80 percent) of nests in the Raptor Nest Survey Area were unoccupied and were mostly located along *Populus* spp. hedgerows that line the orchards. The majority of the Project Area Extent lacks suitable raptor nesting habitat; the suitable nesting habitat that does exist consists of Russian olive (*Elaeagnus angustifolia*) and cottonwood trees (*Populus* spp.) along the southern boundary adjacent to SR 14. The Project Area Extent lacks cliffs, rock outcrops or other elevated structures suitable for raptor nesting. See Attachment F for a detailed discussion of the raptor nests observed during raptor nest surveys, tables outlining the results of the surveys, and nest status definitions.

Use of the Project Area Extent by general avian species was documented during the TESS surveys (see Attachment F). Avian species observed during 2022 surveys at the Project Area Extent include 16 bird species (Table 4.I-4; see Appendix B of Attachment F). However, no sagebrush associated or sagebrush-obligate species were observed in the Project Area Extent (e.g., greater sage grouse, loggerhead shrike, sagebrush sparrow, sage thrasher). The Project Area Extent primarily consists of pasture. See Attachment F for additional details regarding general avian species detected within the Project Area Extent.

Table 4.I-6. Bird Species Observed During 2022 Surveys Within the Project Area Extent

Common Name	Scientific Name	Status
American kestrel	*Falco sparverius*	-
American robin	*Turdus migratorius*	-
bald eagle	*Haliaeetus leucocephalus*	BGEPA
black-billed magpie	*Pica hudsonia*	-
California quail	*Callipepla californica*	-
common raven	*Corvus corax*	-
European starling	*Sturnus vulgaris*	-

<table>
<tr><td></td><td>
<table>
<tr><th>Common Name</th><th>Scientific Name</th><th>Status</th></tr>
<tr><td>great horned owl</td><td>Bubo virginianus</td><td>-</td></tr>
<tr><td>house finch</td><td>Haemorhous mexicanus</td><td>-</td></tr>
<tr><td>northern flicker</td><td>Colaptes auratus</td><td>-</td></tr>
<tr><td>northern harrier</td><td>Circus hudsonius</td><td>-</td></tr>
<tr><td>red-tailed hawk</td><td>Buteo jamaicensis</td><td>-</td></tr>
<tr><td>red-winged blackbird</td><td>Agelaius phoeniceus</td><td>-</td></tr>
<tr><td>savannah sparrow</td><td>Passerculus sandwichensis</td><td>-</td></tr>
<tr><td>western meadowlark</td><td>Sturnella neglecta</td><td>-</td></tr>
<tr><td>white-crowned sparrow</td><td>Zonotrichia leucophrys</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>Fish</td><td>Mapped riverine features from the NWI and intermittent streams from the NHD are in the Project Area Extent. However, no streams or relict stream channels were observed during surveys. No fish-bearing streams are present in the Project Area Extent. Wetland and waterbody habitats have been formally delineated within the Facility Area. Two wetlands, both rated Category IV with 40-foot regulatory buffers, were delineated within the Project Area Extent (see Attachment M).

For further details on wetland and water features, see the Wetland Delineation Report (Attachment M) and Part 4.C (Water Quality – Wetlands and Surface Waters).</td></tr>
<tr><td>Fish and Wildlife Conservations Areas</td><td>Per the Benton County Critical Area Regulations, “Fish and Wildlife Conservation Areas” include 1) areas where endangered, threatened, and sensitive species have a primary association; 2) habitats and species of local importance; 3) waters of the state; 4) naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat; 5) lakes, ponds, streams and rivers planted with native fish populations, including fish planted under the auspices of federal, state, local or tribal programs or which supports priority fish species as identified by the WDFW; 6) Washington State Wildlife Areas; and 7) Washington State Natural Area Preserves and Natural Resource Conservation</td></tr>
</table>

	Areas. All areas that meet one of more of these criteria are managed per the WDFW's management recommendations for priority habitat and species (see Chapter 15.08 of the Benton County Critical Area Regulations). Shrub-steppe habitat is identified within the Project Area Extent. Shrub-steppe habitat is classified by Benton County as a Fish and Wildlife Conservation Area. The two category IV wetlands identified in Attachment M would also be classified as Fish and Wildlife Conservation Areas per criteria 4.
Big Game Habitats and Migration Routes	There are no big game habitats or migration routes within the Project Area Extent. No big game or evidence of big game were observed during surveys.
Noise, Light, and Glare	The Project Area Extent is located in an area with animals grazing in pastures and agricultural development and accompanying existing sources of noise. Principal contributors to the existing acoustic environment likely include motor vehicle traffic, mobile farming equipment, farming activities such as plowing and irrigation, all-terrain vehicles, local roadways, periodic aircraft flyovers, and natural sounds such as grazing animals, birds, insects, and leaf or vegetation rustle during elevated wind conditions. As noted in Part 4.Pa (Noise), existing ambient sound levels at the Project Area Extent are expected to be approximately 50 A-weighted decibels (dBA) equivalent sound level (Leq) during daytime hours and 40 dBA Leq during nighttime hours (also see Attachment J).
Fire	Fire plays an important role in shaping the environmental conditions and habitat types of an area. Part 4.L (Environmental Health – Hazardous Materials) describes the existing conditions related to historic fires in the area.
Hazardous or toxic spills	Part 3.L (Environmental Health – Existing Site Contamination) and Part 3.M (Environmental Health – Hazardous Materials) provide information regarding the existing conditions regarding hazardous materials within the Project Area Extent.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes

Habitat Types	As described in Part 4.H (Plants), the Facility will result in three types of impacts to habitat—temporary, altered, and permanent—where Facility construction and operations will occur. Table 4.H-2 in Part 4.H (Plants) lists the estimated acres of temporary, altered, and permanent impacts to the priority habitat types that will result from the Facility's construction and operation based on the current Facility design (Attachment A, Figure A-1). However, as discussed in Part 2, the final location of Facility components will depend both upon results from outstanding technical studies and engineering design (e.g. civil design and interconnection studies) as well as ongoing stakeholder consultations, which may require changes to the Facility Area configuration to minimize potential impacts to natural resources and optimize Facility economics. Following construction, areas within the solar array perimeter fence not permanently occupied by Facility components will be revegetated with low-growing vegetation consisting of native species or desirable non-native, non-invasive species (e.g., species that would provide more rapid soil stabilization and vegetative cover than slower-growing native species), resulting in permanently altered vegetation. The altered vegetation community will be compatible with a solar facility and support an altered wildlife community (i.e., consisting of species that are able to pass over, under, or through the perimeter fence), retaining value to some wildlife species that are able to pass through/over the perimeter fence (e.g., small mammals, birds, and reptiles). Additionally, a study demonstrated that successful revegetation under solar panels is possible, even with native grass species adapted to full-sun conditions (Beatty et al. 2017). This study demonstrated that revegetation under solar panels was able to "achieve ground cover sufficient to control erosion and begin to restore wildlife habitat" (Beatty et al. 2017). The temporary, permanent, and altered habitat impacts as well as the associated Facility mitigation needs are identified in Attachment B. These values may be adjusted in coordination with EFSEC and with input from WDFW. Habitat loss through conversion to agriculture, fire, fragmentation, and degradation are the major threats to wildlife in the state of Washington (WDFW 2015). The long-term conversion or loss of habitat associated with the footprint of the area occupied by Facility components will create marginal habitat loss and fragmentation on the landscape; however, the Applicant has prepared a Draft Habitat Mitigation Plan (Attachment B), which provides a framework for determining the compensatory mitigation required to achieve "no net loss." A Final Wildlife Habitat

	Mitigation Plan will be prepared prior to construction. Additionally, once constructed, the area may benefit over time from the removal of the effects from domestic grazing and limit potential effects from increased fire regimes in this area.
Special Status Species	The Facility has been designed to avoid and minimize impacts on habitats associated with the special status species that were observed during surveys and/or are known to occur in the Facility vicinity. The Draft Habitat Mitigation Plan (Attachment B) addresses avoidance, minimization, and potential compensatory mitigation for impacts to upland habitats, including upland areas considered Fish and Wildlife Habitat Conservation Areas such as shrub-steppe. Although 19 acres of impacts are anticipated to shrub-steppe, as described in the Draft Habitat Mitigation Plan (Attachment B), like-kind mitigation of up to 38 acres is anticipated to offset impacts to shrub-steppe. Furthermore, impacts to shrub-steppe have been avoided and minimized to the extent feasible, thus minimizing impacts to special status species associated with this Priority Habitat type. No other impacts are expected to Priority Habitats. Aside from the habitat loss and alteration described above, potential impacts to special status wildlife species include collisions with construction vehicles and equipment, and displacement due to avoidance of activity during Facility construction and operation for more mobile wildlife. Removal of vegetation during the breeding season can result in destruction of nests and injury or death to birds or eggs. Special status raptors (e.g., bald eagle) will experience loss of foraging habitat as a result of the Facility. Federally listed wildlife species are not anticipated to occur within the Project Area Extent, and the Project Area Extent does not contain USFWS designated critical habitat.
Raptor Nests and General Avian Species	If nest territories are occupied during construction, pairs associated with these nests could experience disturbance, particularly early in the breeding season during courtship, nest building, incubation, and brooding. Raptors within active territory could also experience a loss of foraging habitat if prey species are reduced within the pairs' home range. However, the vast majority of the habitat that will be impacted by the Facility is pasture, which typically provides limited forage value to large raptors such as bald eagles given the low prey availability in pasture. Additionally, the Facility avoids impacts to shrub-steppe, to the extent feasible, that likely supports raptor prey species.

	Avian collisions with solar modules during operation is possible, although the available data on avian mortality at utility scale solar energy sites suggest mortality at PV facilities is comparatively low. A study examining avian fatalities at two solar sites and one PV facility found the mortality rate at the PV facility in the study was significantly lower than at the two power tower facilities (Walston et al. 2016). More recently, Kosciuch et al. (2020) synthesized results from fatality monitoring studies at 10 PV solar facilities across southwest United States and calculated a high-end estimate of 2.5 birds per MW per year, but noted that an average annual fatality rate of 1.8 birds per MW per year was also calculated by excluding the one project in the Coastal California Bird Conservation Region that could be considered an outlier in the dataset. In Oregon, preliminary results of a fatality study at a 56-MW PV facility near Prineville detected only two fatalities on native birds, a horned lark and a dark-eyed junco, during 1 year of standardized searches (ODOE 2020). If any overhead power lines are required as collector lines or to connect the Facility to the grid, these lines will be designed and constructed to minimize avian electrocution, according to guidelines outlined in Avian Power Line Interaction Committee standards (APLIC 2012).
Fish	Mapped riverine features from the NWI and intermittent streams from the NHD are in the Project Area Extent. However, no streams or relict stream channels were observed during surveys. Wetland and waterbody habitats have been formally delineated within the Project Area Extent. No fish-bearing streams are present in the Project Area Extent. Two wetlands, both rated Category IV with 40-foot regulatory buffers, were delineated within the Project Area Extent (Attachment M). For further details on wetland and water features, see the Wetland Delineation Report (Attachment M) and Part 4.C (Water Quality – Wetlands and Surface Waters).
Fish and Wildlife Conservations Areas	As discussed above, impacts to shrub-steppe habitats have been avoided and minimized to the extent feasible. The acreage of impact that will occur to shrub-steppe habitat is provided in Table 4.H-2 in Part 4.H. Facility-related impacts on aquatic Fish and Wildlife Conservation Areas (i.e., wetlands) are addressed in Part 4.C.
Big Game Habitats and Migration Routes	There are no big game habitats or migration routes within the Project Area Extent. No big game or evidence of big game were observed during surveys. Therefore, there are no anticipated impacts to big game habitat habitats and migration routes.
Noise, Light, and Glare	As described in Part 4.P.a, the Facility is not expected to have significant noise impacts during operations. Potential impacts on wildlife during construction include general noise

	and visual disturbances from construction activity. Projected noise levels associated with expected Facility construction equipment at 50 feet are identified in Table 6 in Attachment J. These noise levels could disturb wildlife, if present in the Facility vicinity, within the anticipated 12 to 18-month construction period. In general, noise and visual disturbances may cause wildlife to avoid typical foraging and breeding areas, or distract them from those activities within those areas, which can result in reduced fitness. Construction equipment operates intermittently, and noise levels resulting from construction activities will vary depending on equipment and operations being performed. Loud construction activities are anticipated to be infrequent at the site, hours of construction will be limited, and noise mitigation measures will be implemented, which will minimize the impacts on wildlife from the temporary increase in noise due to construction (see Part 4.Pa). For example, evening and nighttime construction activities will be avoided to the extent practicable, which will limit the impacts of construction noise to wildlife. Additional BMPs related to noise are listed in Part 4.Pa. Although wildlife species are susceptible to noise disturbances caused by humans and construction equipment, the BMPs listed in Part 4.Pa will limit these impacts. Lighting can attract some species (e.g., avian species) to the Project Area Extent, thereby exposing them to potential impacts. Lighting is needed for security and occasional after-hours work; however, the Applicant would limit the amount of lighting and would shield lighting as needed. In addition, applicable lighting will be designed in accordance with the National Electric Code and minimized to the extent practicable.
Fire	Fires (both those potentially generated by the Facility as well as those generated by other factors off-site) have the potential to directly affect botanical resources through alteration of habitats as well as destruction of plant species including special status plant species. Fire can also indirectly affect botanical resources by creating conditions for colonization or expansion of non-native, invasive plant species, such as cheatgrass. As described in Part 3.M (Environmental Health – Hazardous Materials), Part 3.S (Public Services and Facilities), and Part 4.M (Environmental Health – Hazardous Materials), the Facility will implement measures to address fire risk. Prior to construction, the Applicant will develop an Emergency Management Plan and implement BMPs for fire prevention. The Applicant will coordinate with the Benton County Sheriff's Office, Benton County Emergency Management, Benton County Fire Marshal, Benton County Fire District 6, and DNR Wildland Fire Management Division to collaboratively develop safety measures that will be incorporated into the

	Facility's design and construction. The Applicant will also coordinate with these entities regarding necessary equipment or training, if any are identified as needed, that may be required to provide fire protection services to the Facility. To further mitigate the need for fire protection services, the Facility's facilities will incorporate multiple layers of protection to avoid failures and risks of fire or spills and will be designed to applicable requirements of the National Electric Code, NFPA, and Institute of Electrical and Electronics Engineers standards. Access roads will be developed and maintained with a minimum 20-foot width with approved turning radii and turnarounds to provide 1) sufficient access for fire fighters to the area and 2) additional fire breaks, including a 16-foot gravel fire break surrounding the Facility. Each lithium-ion BESS would contain a fire suppression system in accordance with the Fire Code and NFPA standards, specifically NFPA 855 – "Standard for the Installation of Stationary Energy Storage Systems." The BESS will include monitoring equipment and alarm systems with remote shut-off capabilities. Routine mowing and spot treatment for invasive grasses will occur in the spring and the fall and will follow the plan outlined in the Vegetation and Weed Management Plan (to be submitted prior to construction). Vegetation management will also establish and maintain fire breaks around each solar array, structures, the Facility substation, and along the Facility's fence line. Implementation of these measures will minimize the risk of wildfires occurring in the Facility Area. The implementation of these measures will minimize the risk of wildfires occurring and adversely affecting botanical resources.
Hazardous or toxic spills	As demonstrated in Part 4.M, the risk of hazardous or toxic spills at the Facility is low. The Applicant will prepare an SPCC Plan, consistent with requirements of 40 CFR Part 112, to prevent spills during construction and to identify measures to expedite the response to a release if one were to occur. Preventative procedures and rapid response measures will address and prevent potential risks to organisms and the environment. Implementation of these measures will minimize the risk that an accidental release of a hazardous or regulated liquid will affect wildlife species.

C.2. Changes to the Proposal from the Existing Condition		
Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☐ No	☒ Yes
Topical area/issue	Changes	

Habitat Types	Also, as discussed in Part 4.H, shrub-steppe will be avoided to the extent feasible. Construction and operation of the Facility will result in both permanent and temporary impacts on vegetation, as well as permanent alterations of vegetation within the solar array's perimeter fence lines, for the life of the Facility.
Special Status Species	N/A
Raptor Nests and General Avian Species	N/A
Fish	N/A
Fish and Wildlife Conservations Areas	Also, as discussed in Part 4.C, waters and wetlands will be avoided.
Big Game Habitats and Migration Routes	N/A
Noise, Light, and Glare	N/A
Fire	N/A
Hazardous or toxic spills	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Avoidance and Minimization Measures	During siting and design, the Applicant took several measures to avoid and minimize impacts to wildlife and habitat. The Applicant coordinated with WDFW prior to conducting surveys, and used the feedback obtained during this coordination to inform surveys and the assessment of impacts. The Facility has been designed to avoid and minimize impacts on shrub-steppe habitat, a priority habitat, which is associated with the special status species that are known to occur in the Facility vicinity. WDFW requires shrub-steppe mitigation, which will be a 2:1 mitigation ratio for permanent impacts and 1:1 for altered and temporary impacts. Additionally, the Facility has been designed to avoid all impacts to the wetlands and wetland buffer identified within the Wetland Delineation Report (Attachment M).	WDFW

Construction and Operations BMPs	Unnecessary lighting will be turned off at night to limit attraction of migratory birds to the area. This includes using lights with timed shutoff or motion-activated lights, downward-directed lighting to minimize horizontal or skyward illumination, and avoidance of steady-burning, high-intensity lights. If construction occurs during the bird nesting season, nest clearance surveys will be conducted prior to site disturbance. Evening and nighttime construction activities will be avoided to the extent practicable, which will limit the impacts of construction noise to wildlife. Prior to construction, construction personnel will be instructed on wildlife resource protection measures, including: 1) applicable federal and state laws (e.g., those that prohibit animal collection or removal); and 2) the importance of these resources and the purpose and necessity of protecting these resources. Construction personnel will be trained in the following areas when appropriate: awareness of biological resources (including Priority Habitats and special status species), potential bird nesting areas, and general wildlife issues. The Applicant will prepare an ESCP that would include BMPs to minimize surface water runoff and soil erosion. Appropriate stormwater management practices will be implemented in accordance with the SWPPPs. The Applicant will prepare SPCC Plans to be implemented during construction and operation to reduce the likelihood of an accidental release of a hazardous or regulated liquid and, in the event such a release occurs, to expedite the response to and remediation of the release (see Part 4.C for more details). Vehicle speeds will be limited to 25 miles per hour on internal Facility access roads to avoid wildlife collisions. Existing posted speed limits on county and private roads will be followed outside of the Facility Area. If any overhead power lines are required to connect the Facility to the grid, these lines will be designed and constructed to minimize avian electrocution, according to guidelines outlined in Avian Power Line Interaction Committee standards (APLIC 2012). Fire hazards from vehicles and human activities will be reduced via use of spark arrestors on power equipment, avoiding driving vehicles off roads, and allowing smoking only in designated areas per the requirements of WAC 463-60-352. The Applicant will prepare an Emergency Management Plan that contains fire safety measures, which will be developed with input from applicable agencies (see the “Fire” section above for more details). Following decommissioning, reclamation of the Facility Area will begin as quickly as possible to reduce the likelihood of ecological resource impacts in disturbed areas. Part 4.H contains additional measures targeted at successfully restoring vegetation	WDFW

	communities. Implementation of these vegetation mitigation measures will have indirect benefits to wildlife species as well.	
Compensatory Mitigation	In order to achieve "no net loss of habitat functions and values" as required by WAC 463-62-040, the Applicant will continue to work with the WDFW and EFSEC to determine appropriate compensatory mitigation. The Applicant has prepared a Draft Habitat Mitigation Plan (Attachment B), which provides a framework for determining the compensatory mitigation required to achieve "no net loss." A Final Wildlife Habitat Mitigation Plan will be prepared prior to construction.	WDFW, EFSEC
Have all final proposed commitments been identified?	☒ No	☐ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References:

APLIC (Avian Power Line Interaction Committee). 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC, Washington D.C.

Beatty, B., J. Mcknick, J. McCall, G. Braus, and D. Buckner. 2017. Native Vegetation Performance under a Solar PV Array at the National Wind Technology Center. Technical Report NREL/TP-1900-66218. National Renewable Energy Laboratory. Golden, Colorado.

FEMA (Federal Emergency Management Agency). 1982. FIRM Flood Insurance Rate Map. Benton County, Washington and Incorporated Areas. Effective Date July 19, 1982. Map Numbers FM5302370935B and FM5302370950B. Federal Emergency Management Agency. Available online at: https://msc.fema.gov/portal

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Part 4 – Detailed Analysis

Environment Element Number and Name	4.M – Environmental Health: Hazardous Materials

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Phase I Environmental Site Assessment (Attachment G)	Completed (February 2023)	Prepared by EarthTouch, a consultant for the Applicant.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Hazardous Materials	The Facility Area contains a mix of dryland and irrigated agricultural use, rangeland, transmission and electrical infrastructure, and undeveloped areas. Historical information indicates the subject property was undeveloped or contained vacant grazing areas from at least the 1950s to the 1970s and agricultural land uses from the 1970s to present. Aerial photographs depicted some areas of the subject property as cultivated fields from the mid-1970s to the present (Google Earth 2023). Therefore, applications of persistent organic pesticides (POPs), organochlorine pesticides and/or

	herbicides (OCPs), organophosphate pesticides (OPPs), or metal-based pesticides cannot be ruled out (Attachment G). The application of fertilizers, pesticides, and herbicides is assumed to have occurred according to manufacturer guidance, in a relatively uniform and generally consistent manner typical of agricultural practices. The concentrations of fertilizers and pesticides are likely to be similar to other dryland and irrigated agricultural operations. Risks to human health and the environment associated with soil disturbance during Facility development are assumed to be low and similar to those associated with agricultural operations such as tiling. Therefore, potential past applications of fertilizer, herbicides, and pesticides pose little to no concern of adverse environmental impact with respect to Facility development. No hazardous materials are known to be stored currently in the Facility Area, and the Phase I Environmental Site Assessment (Attachment G) found no evidence of recognized environmental conditions in connection with the property.
Existing Infrastructure	The existing substation and 115-kV transmission line adjacent to the Facility Area is owned by the Benton PUD. The Facility would be tied into the transmission line. Interconnection studies have shown that there is sufficient capacity to support the Facility without cost-prohibitive upgrades. The Facility would interconnect to Benton PUD's 115-kV line near the Prior #2 Substation, then connected to the BPA's transmission network at the McNary Substation. Water use for both Facility construction and operations will be hauled to the site from off-site sources with existing water rights (i.e., a municipal water source or vendor with a valid water right). There is an underground natural gas transmission pipeline (Pipeline ID 2417-T-DL-T) that traverses between (but does not overlap with) Facility Area units (PHMSA 2023).
Risk of Fire or Explosion	The Facility Area is located predominantly on vacant, undeveloped land that has been used for dryland and irrigated agricultural production and grazing. There are no residences in the Facility Area; however, there is one residence north of the Facility Area. The Facility's security fence is set back from the closest residence by approximately 1.5 miles. No petroleum products or other flammable/explosive substances are stored within the Facility Area. Wildland grass fires are the greatest existing fire risk in the vicinity of the Facility Area. At the time of preparing this Application in December 2023, there are currently no active fire related incidents in the immediate vicinity of the Facility (InciWeb 2023). However, the area has a history of wildfires, the most recent of which is the

Paterson Fire from 2019. A list of large fires greater than 500 acres in the last 40 years and recorded within 10 miles of the Facility Area follows in Table 4.M-1 (DNR 2023).

Table 4.M-1. Fires Within 10 Miles of the Facility Area Greater than 500 Acres in the Past 40 Years

Fire Name	Acres	Year	Cause	Overlaps with Facility Area
Paterson	1,462	2020	Unknown	No
Train	1,897	1986	Unknown	No
Locustgrove	17,185	1990	Unknown	No

Most materials used in construction of the Facility will not be hazardous or dangerous, and the risk of fire will be low. However, the Facility includes an optional lithium-ion BESS. The BESS may be configured as a DC-coupled system (distributed throughout the solar array) or an AC-coupled system (consolidated in a centralized BESS yard located near the Facility substation). BESS options are described further in Part 2, Section A.2. The BESS units will be designed to incorporate multiple layers of protection to avoid failures and risks of fire or spills and will comply with the applicable requirements of the National Electric Code, NFPA Standards, and Institute of Electrical and Electronics Engineers Standards.

Emergency Plans and Procedures	The Facility is located within Benton County Fire Protection District 6. Prior to construction, the Facility will develop and maintain an Emergency Management Plan that will include BMPs for fire prevention. The Applicant will coordinate with Benton County Emergency Management and DNR Wildland Fire Management Division.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Hazardous Materials	Earthwork associated with Facility construction will disturb soils and may expose soils that contain remnants of historical fertilizer, pesticide, and herbicide use. Potential risks associated with soil disturbance are expected to be low and similar to those associated with agricultural operations such as tiling. The Applicant or the Applicant's contractor will manage noxious weeds and control vegetation during construction and operations. The Facility will only use herbicides approved for use in the state of Washington by

	the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Agriculture. As needed, herbicides will be transported and applied to the Facility Area but will not be stored in the Facility Area. During construction, small amounts of hazardous materials (e.g., petroleum-based fuels, mineral-based transformer oils, and oilbased lubricants) will be transported, stored, or used to operate equipment. These materials will be stored in compliance with a SPCC Plan that follows the EPA Amended Spill Prevention, Control, and Countermeasure Rule issued in 2006 (EPA-550-F06-008). The SPCC Plan provides preventative procedures and rapid response measures to handle hazardous spills if one were to occur, and reduce the risk of potential soil or groundwater contamination to negligible. Facility operations will not require large quantities of fuels, oils, or chemicals in the Facility Area, except those required for the operation of certain Facility components where such substances are fully contained (e.g., transformers, inverters, back-up generators, and certain BESS equipment, if installed). If selected, the Facility may use lithium-ion BESS technology. The BESS will store power in a series of modular, self-contained containers (typically steel) and would be designed in accordance with industry standard safety systems. The lithium-ion BESS will be composed of individual hermetically sealed cells and will not be opened on-site for any installation or maintenance purposes and will not have any wastewater discharges. Lithium-ion batteries do contain flammable liquids that can become heated during operation. Each lithium-ion BESS would contain a fire suppression system in accordance with Fire Code and NFPA standards, specifically NFPA 855 – "Standard for the Installation of Stationary Energy Storage Systems." The BESS will include monitoring equipment and alarm systems with remote shut-off capabilities. Installation, maintenance, and decommissioning of BESS components will be done in compliance with 49 CFR §173.185, which regulates the transportation of lithium-ion batteries. The Facility will use thoroughly proven, financeable batteries, inverters, and related equipment, including battery products that are listed or certified by UL, the industry's foremost safety and sustainability third-party standard.
Existing Infrastructure	The water required for the Facility's construction and operations will come from existing water sources with valid water rights, to be verified by Ecology. Depending on the time of year, water used may come from a point of use on a Facility parcel, or from a facility owned by the same landowner about 4.5 miles away. For water required during construction, the Applicant will obtain a construction temporary water use permit from Ecology. Since the Facility Area does not overlap with the existing natural gas transmission pipelines and none are proposed as part of the Facility, no change to this existing condition will occur. However, the Applicant's construction contractor will ensure utility locating is carried out for safety purposes given the adjacent natural gas pipeline. The Facility will introduce new subsurface infrastructure such as 34.5-kV electrical collector lines and a 115-kV gen-tie line, which will connect to the existing Benton PUD substation and transmission infrastructure. Proposed

	subsurface infrastructure will not contain hazardous materials nor pose significant fire risk. Two segments of the proposed collector lines will cross the natural gas transmission pipeline ROW. No changes will occur to existing transmission lines outside of the gen-tie interconnection. The Applicant is coordinating with Benton PUD regarding the proposed interconnection actions.
Risk of Fire or Explosion	Risks of fire or explosion may affect the Facility in the form of fires caused by Facility-related activities or fires that start outside of the Facility Area and spread to it. In terms of the risk from Facility-related activities, the Facility could theoretically increase existing fire or explosion risk due to introduction of potential ignition sources such as gasoline-powered vehicles and equipment, human activities, and heat-producing electrical components (including BESS, wiring, and balance-of-system devices). However, the risk of actual ignition is low due to the following: • Petroleum products will be used and stored in accordance with the SPCC Plan, applicable regulations, and best practices during both construction and operation of the Facility. • BESS units (and all electrical installations) will be designed to incorporate multiple layers of protection to avoid failures risks of fire or spills and will comply with the National Electric Code, NFPA Standards, and Institute of Electrical and Electronics Engineers Standards. If installed, some BESS contain flammable liquids that can heat up during operation. To ensure safe handling, these batteries comprise individual, hermetically sealed cells that have no waste discharge and will not be opened in the Facility Area for installation or maintenance purposes. In addition, each BESS will contain a fire suppression system that complies with NFPA standards; in particular, NFPA 855 “Standard for the Installation of Stationary Energy Storage Systems.” The fire suppression system will include sensing equipment and alarm systems with remote shut-off capabilities. Installation, maintenance, and decommissioning of BESS components will be done in compliance with applicable regulations, including 49 CFR §173.185, which regulates the transportation of lithium-ion batteries. Therefore, the potential ignition risk of either of these types of battery systems is low. For emergency service access, roads within the Facility Area will include both improved existing roads and new access roads. All roads including the access road would be built to fire code standards as set by the Benton County Planning Department, Benton County Fire Marshal, and local Fire District #6. Roads would be constructed of an all-weather road surface, have a minimum width of 20 feet, and approved turning radii and turnarounds. The final layout would be provided to EFSEC and local building officials. The Applicant has completed early-stage consultation with the Benton County Fire District #6 Fire Marshal, providing them with the Preliminary Site Layout and the commitments made in this ASC related to fire planning (see Attachment C).

	Vegetation management will also establish and maintain fire breaks around each solar array, structures, the Facility substation, and along the Facility's fence line. Implementation of these measures will minimize the risk of wildfires occurring in the Facility Area. The Facility will develop and maintain an Emergency Management Plan (to be developed and finalized prior to construction) and implement BMPs for fire prevention. The Applicant will coordinate with the Benton County Sheriff's Office, Benton County Emergency Management, and DNR Wildland Fire Management Division to collaboratively develop safety measures to be incorporated into the Facility's design and construction. The final layout will be provided to the Benton County Fire Marshal's Office. The Applicant will also coordinate with these entities regarding necessary equipment or training (if identified) required to provide fire protection services to the Facility. To further mitigate the need for fire protection services, the Facility will include and incorporate multiple layers of protection to avoid failures, fires, and spills, and will be designed to applicable requirements of the National Electric Code, NFPA Standards, and Institute of Electrical and Electronics Engineers Standards. Furthermore, the Facility's design will incorporate graveled areas around the O&M building and substation, as well as graveled access roads and fire breaks, where applicable. In terms of the risk of fire spreading to the Facility, high temperatures, arid conditions, and dry vegetation could lead to wildfires originating outside the Facility posing a risk to Facility construction and components, including lithium-ion batteries contained in the optional BESS. The Applicant will monitor wildfire activity during Facility construction and operations and will comply with the Benton County 2023-2028 Community Wildfire Protection Plan (BCCWPP 2023). If necessary, the Applicant will modify Facility activities, change schedule, cease construction/operation activities, or take other action requested by emergency service providers to ensure the safety of Facility personnel and avoid any interference with emergency operations. During Facility operations, there will be minimal fuel use on-site, and electrical equipment will be designed to reduce the potential for fire damage. Therefore, while the Facility itself may be damaged in the event of a wildfire spreading across the site, it will not significantly change the risk posed by the wildfire to the surrounding vicinity.
Emergency Plans and Procedures	The Emergency Management Plan (to be developed prior to construction) will address worker health and safety, as well as fire prevention and control measures for construction and operation. Access roads will have a compacted gravel surface, with a permanent width of approximately 20 feet as well as the required clearance and turning radius needed for emergency response vehicles, in accordance with fire code. The final layout will be provided to the Benton County Fire Marshal's Office.
C.2. Changes to the Proposal from the Existing Condition	
Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No ☐ Yes
Topical area/issue	Changes

N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Emergency Management Plan	Prior to Facility construction and operations, the Applicant will develop an Emergency Management Plan to address worker health and safety, standards concerning potential release of hazardous materials, and fire prevention and control. This plan will provide safety guidelines and procedures for potential emergency-related incidents during the Facility's construction, operation, and decommissioning phases. This includes coordination with emergency service providers and fire suppression measures associated with the Facility. Specifically, the plan will be developed with input from, and in coordination with, the Benton County Emergency Management, Benton County Sherriff, Benton County Fire Marshall, and DNR Wildland Fire Management Division. Applicable laws/codes include: • WAC 463-60-352 (2 through 4), which addresses fire and explosion, hazardous materials release, and safety standards compliance. • WAC 463-60-352(6), which describes emergency plans to ensure public safety and environmental protection. • 49 CFR §173.185m, which regulates the transportation of lithium-ion batteries. • 49 CFR §173.159, which regulates the transportation of lead-acid batteries. • International Fire Code	Benton County Emergency Management, Benton County Sherriff, Benton County Fire Marshall, and DNR Wildland Fire Management Division
BMPs – Fire Prevention	To minimize risk of fire or explosion, the Facility will implement BMPs to be detailed in the Emergency Management Plan noted above. Typical BMPs will include, but are not limited to, the following:	Benton County Fire Marshall and DNR Wildland Fire Management Division

	• Equip construction vehicles with fire extinguishers, spark arrestors and heat shields, as appropriate. • Establish roads before accessing the site to minimize vehicle contact with grass. • Use diesel construction vehicles instead of gasoline vehicles, where feasible, to prevent potential ignition by catalytic converters. • Prohibit vehicles from idling in grassy areas. • Restrict the use of high temperature equipment in grassy areas. • Install lightning protection measures to protect generators and other equipment. • Install fire protection equipment in accordance with Washington state fire code. Notify the local fire district of construction plans and access to Facility equipment. • Provide mutual assistance in the case of fire in or around the Facility during construction. • Monitor wildfire activity during Facility construction and operations and, if necessary, modify Facility activities, change the schedule, cease construction operations, or remove equipment. • Prevent and control potential fires inside the Facility Area with trained staff who have 24-hour access to the site. A Vegetation and Weed Management Plan will be prepared and will includes revegetation management and noxious weed control measures.	
BESS design	The BESS will be compliant with UL9540 and UL9540a certification requirements. The BESS will contain a fire suppression and detection system in accordance with fire code and NFPA Standards, specifically NFPA 855, "Standard for the Installation of Stationary Energy Storage Systems." The system will include monitoring equipment and alarm systems with remote shut-off capabilities. In addition to this the BESS will comply with industry best practices and safety standards including:	NFPA, UL

	• UL 9540: Standard for Safety of Energy Storage Systems and Equipment • UL9540a: Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems Standard • NFPA 855: Standard for the Installation of Stationary Energy Storage Systems • Large-Scale Fire Testing: Testing that induces a significant fire into the BESS device and evaluates if the fire will spread to adjacent BESS units, surrounding equipment, or through an adjacent fire-resistance-rated barrier. • AHJ Compliance: Early communication with AHJ on BESS permitting and fire safety requirements. • Emergency Response Plan: BESS specific HAZMAT training and response plan for local fire departments.	
CSWGP, Construction Phase SWPPP, and ESCP	The Applicant will obtain a CSWGP from Ecology, which requires a SWPPP and ESCP. These plans will contain measures to minimize the risk of spills and stormwater pollution, as well as to reduce the effects of erosion to ensure compliance with state and federal water quality standards. Applicable laws/codes include the following: • RCW 90.48, which establishes general stormwater permits for Ecology under the Water Pollution Control Act • WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington • Clean Water Act (33 United States Code 1251)	Ecology
SPCC Plan	The Applicant will prepare an SPCC Plan, consistent with requirements of 40 CFR Part 112, to prevent spills during construction and to identify measures to expedite the response to a release if one were to occur. Preventative procedures and rapid response measures will address and prevent potential risks to water quality.	Ecology
Use of approved herbicides	In compliance with RCW 17.10.140, the Applicant will only use herbicides that are approved for use in the state of Washington by the EPA.	EPA and the Benton County Noxious Weed Control Board

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References:

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Google Earth. 2023. Aerial Imagery for the Wallula Gap Solar Facility Area. Image date April 2021. Accessed November 8, 2023.

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Part 4 – Detailed Analysis

Environment Element Number and Name	4.N – Land Use, Natural Resource Lands, & Shoreline Compatibility

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Land Use Consistency Review (Attachment E)	Complete (January 2024)	Prepared by Tetra Tech, a consultant for the Applicant.	☐ No	☒ Yes
Phase I Environmental Site Assessment (Attachment G)	Complete (February 2022)	Prepared by EarthTouch, a consultant for the Applicant.	☐ No	☒ Yes
ALTA/ACSM Land Title Survey (Attachment N)	Complete (May 2023)	Prepared by Pioneer Surveying & Engineering, Inc., a consultant for the applicant.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Existing Land Ownership	The Facility will be located across a portion (approximately 437 acres) of three parcels, known herein as the "Project Area Extent." The parcels are owned by Farmland Reserve, Inc., a Utah nonprofit corporation (Landowner), and are known herein as the "Facility Parcels" (approximately 1,220 acres).

Existing Land Use	The Facility will be entirely located within the County's GMAAD zoning district, which is part of the County's GMA Agricultural land use designation in the Comprehensive Plan. The Facility's 2023 Wildlife, Habitat, and Plant Survey Report determined land cover types within the Facility Area are a mixture of pasture, mixed environs and minor shrub/scrub. The Facility Area is located in a heavily modified landscape and part of AgriNorthwest's Plymouth Farm that grows an assortment of fruits and vegetables. Land use in the Facility Area is mostly livestock grazing, rock and soil quarries, and roads used to access the surrounding agricultural fields. A gravel-packed airplane landing strip bisects the northern portion of the Facility Area. Portions of the Facility Area were last used for irrigated cropland in 2013 (e.g., half pivot north of the landing strip and full pivot directly to the south; Attachment E, Figure 3) and have been converted to pasture lands where cattle (Bos taurus) grazing occurs. Within the Facility Parcels, WSDA agricultural land uses are mapped as 325.9 acres of cereal grain, 148.7 acres of orchard, 195 acres of pasture, and 67.3 acres of vegetable cropland. Within these 736.8 acres of agricultural lands mapped by WSDA, 541.9 acres are identified as irrigated lands (center pivot, drip, sprinkler, or wheel line irrigation types). The Facility Area contains only non-irrigated pasture. Non-agricultural land uses to the east and south of the Facility Area include scattered unoccupied structures (e.g., agricultural storage), existing electrical transmission infrastructure (i.e. existing substation and transmission lines), and local roads and state highways.
Electrical Infrastructure / Electrical Generation Capacity and Service	There is no current electrical generation service within the Facility Area.
Benton County Zoning District and Comprehensive Plan Designation	The Facility Area is located entirely within Benton County's GMAAD zoning district and GMA Agricultural Comprehensive Plan designation.
Natural Resource Lands under RCW 36.70A.030	There is no forest or mineral resource land within the Facility Area. Agricultural land is defined under RCW 36.70A.030(3) as "land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, finfish in upland hatcheries, or livestock, and that has long-term

	commercial significance for agricultural production." Per RCW 36.70A.170(1)(a), counties shall designate where appropriate, "Agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products." Benton County completed that designation analysis as described in the Comprehensive Plan (Benton County 2022). Agricultural lands were designated based on the primary factors of urban growth (i.e., lands not already characterized by urban growth), production capability, and long-term commercial significance. Benton County's designation of agriculture lands of long-term commercial significance used the factors established in WAC 365-190-050(3) as well as County-specific supplemental factors as described in detail in the Land Use Consistency Review (Attachment E). Per the Comprehensive Plan, all lands within the GMA Agricultural designation, including those lands within the Facility Area, are agricultural resource lands under RCW 36.70A.030.
Benton County Critical Areas	As listed in Part 2, Section B.6, the Facility Area includes critical areas for aquifer recharge and geological hazards. Further details regarding the existing conditions for these critical areas are provided in Part 4.A and 4.E.
Shoreline Master Program	There are no shorelines designated under the Benton County Shoreline Master Program within the Facility Area.
Transportation, Utility, or Service Demands	Existing transportation conditions are discussed in Part 4.R. Existing public service and utility conditions are discussed in Part 3.S and 3.T, respectively. Where relevant for assessment of Benton County code criteria, aspects of transportation, public service, and utility conditions are also addressed in the Land Use Consistency Review (see Attachment E).

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes

Changes to Land Ownership	Ownership of the land will not change as a result of the Facility. The Applicant has entered into a long-term lease with the Landowner for adequate acreage to accommodate the Facility for the life of the Facility. The Facility will be sited within the Project Area Extent and will consist of multiple fenced areas and the generation-tie (gen-tie) line, which are herein known as the "Facility Area."
Existing Land Use	The Applicant believes the Facility is not incompatible with surrounding agricultural uses because it minimizes impacts through implementation of environmental best practices related to noise, traffic, erosion control, stormwater management, dust mitigation, and noxious weed control. Minimal traffic impacts are expected during operation for the up to five maintenance employees.
Electrical Infrastructure / Electrical Generation Capacity and Service	The Facility has nearby access to electrical infrastructure, which is owned and operated by Benton PUD, including the existing substation and 115-kV transmission line adjacent to the Project Area Extent, to which the Facility would be tied. Interconnection studies have shown that there is sufficient capacity to support the Facility without cost-prohibitive upgrades. The Facility would interconnect to Benton PUD's 115-kV line near Prior #2 substation, then connected to the BPA's transmission network at the McNary Substation. Construction of this renewable energy resource would help Washington meet its goal of 100 percent clean electricity supply as set forth in the Clean Energy Transformation Act, passed by the Washington legislature in 2019.
Benton County Zoning District and Comprehensive Plan Designation	The Applicant has carefully reviewed the goals and policies of the Comprehensive Plan and evaluated how they inform this ASC. The Facility will be entirely located within the County's GMAAD zoning district, which is part of the County's GMA Agricultural land use designation in the Comprehensive Plan. As a "solar generation facility, major," the Facility was previously an allowed conditional use in the GMAAD district prior to the adoption of OA 2021-004, and therefore was previously deemed compatible with surrounding land uses in the GMAAD district as long as certain conditions were met as required by the CUP process. In total, the Facility Parcels within the GMAAD represent 0.2 percent of the 649,153 acres of land designated as GMAAD in the County (Benton County 2022). The Facility Area will occupy approximately 392 acres, or 0.06 percent of GMA Agricultural Lands. The impervious disturbance footprint (including paved and/or compacted surfaces including driveways, access roads, inverters, optional O&M building, substation) will occupy approximately 12 acres, which is 0.002 percent of GMA

	Agricultural Lands. Since the impervious disturbance reflects a small percentage of the total GMA Agricultural Lands, the Facility supports the aims of LU Goal 1, Policy 1 by providing mix of land uses that does not detract from the larger rural community. Section 2.0 of the Land Use Consistency Review (Attachment E) demonstrates further how the proposed Facility is consistent with applicable Comprehensive Plan (Benton County 2022) goals and policies. Section 3.0 of the Land Use Consistency Review (Attachment E) describes how the proposed Facility is consistent with the County's zoning code requirements that are applicable to the Facility in the GMAAD zoning district. Despite the adoption of OA 2021-004, the Applicant demonstrates the Facility is able to meet the lot, building, and setback requirements of the conditional use and general use regulations that would have been required prior to OA 2021-004. The expected life of the Facility is assumed to be 35 years. However, depending on the commercial market for renewable energy, the Facility could be updated with more efficient components over time which could extend its useful life. At the time of decommissioning, the Facility would be returned to agricultural use at the landowner's discretion.
Natural Resource Lands under RCW 36.70A.030	The Facility is designed to be compatible with ongoing agricultural activities. Operation of the Facility will not conflict with agricultural uses on surrounding lands and represents compatible use in the GMA Agricultural lands designation. As stated above, the Facility Area will occupy approximately 392 acres, or 0.06 percent of GMA Agricultural Lands. The impervious disturbance footprint (including paved and/or compacted surfaces including driveways, access roads, inverters, optional O&M building, substation) will occupy approximately 12 acres, which is 0.002 percent of GMA Agricultural Lands. This would be a de minimis reduction of farmland utilized for crop and livestock production throughout Benton County. According to the Natural Resources Conservation Service, approximately 58 acres or less than 5 percent of the mapped soil units in the Facility Parcels are classified as prime farmland if irrigated and an additional 13 percent (159.2 acres) are classified as farmland of statewide importance (refer to Table 1 and Figure 3 in Attachment E). However, none of the 58 acres within the Facility Area classified by the Natural Resources Conservation Service (NRCS) as prime farmland if irrigated are currently irrigated. Portions of the Facility Area once used for irrigated cropland (e.g., half pivot north of the landing strip and full pivot in the southern area) have been converted to pasture lands where cattle grazing occurs. Therefore, none of the acres within the Facility Area are prime farmland. Attachment E Figures 3 and 4 overlay NRCS mapped soil units with areas mapped by WSDA

	as irrigated within the Facility Area and Facility Parcels. Table 2 in Attachment E provides a breakdown of NRCS soil classifications within the Facility Parcels, Facility Area, and impervious disturbance footprint. As noted in Attachment E (Figure 3, Figure 4, and Table 2), the Facility Area contains only 2.4 acres (0.07 percent of the total Facility Area) of farmland of statewide importance. None of the 2.4 acres of farmland of statewide importance are within the impervious disturbance footprint. Anticipated water needs are described in Part 3 and Part 4 of the ASC and they are substantially less than typical farm operations. Water use during construction will primarily be associated with dust control and is estimated at approximately 30,000 to 50,000 gallons per day over the approximately 12- to 18-month construction period. During operations, the Facility is expected to use less than the groundwater permit-exempt well threshold of 5,000 gallons per day, and actual water use is estimated to be approximately 30,000 to 50,000 gallons per year (including the water use related to the potential panel washing). Section 2.0 of the Land Use Consistency Review (Attachment E) demonstrates further how the proposed Facility is consistent with applicable Comprehensive Plan (Benton County 2022) goals and policies specifically related to Natural Resource Lands.
Benton County Critical Areas	The Land Use Consistency Review (Attachment E) demonstrates that the Facility will comply with Benton County's applicable critical area regulations. Further details regarding the existing conditions for these critical areas are provided in Part 4.A and 4.E.
Shoreline Master Program	Since no designated shorelines are present within the Facility Area, the Facility will not change the existing condition for this topic.
Transportation, Utility, or Service Demands	Existing transportation conditions are discussed in Part 4.R (Traffic and Transportation). Existing public service and utility conditions are discussed in Part 3.S and 3.T, respectively. Where relevant for assessment of Benton County code criteria, aspects of transportation, public service, and utility conditions are also addressed in the Land Use Consistency Review (see Attachment E). Overall, the Facility is not anticipated to significantly increase demands on transportation, public services, or utilities. Construction traffic is expected to be within the capacity of existing roadways and will not block or obstruct access to surrounding lands. A Traffic Control Plan will be prepared in coordination with the Washington State Department of Transportation and the Benton County Public Works Department for traffic management during construction and for construction of access approaches from county rights-of-way or state highways. Given the current uncongested state of roads, the

	temporary increase in traffic counts, and the Applicant's proposed traffic control measures described in ASC Part 4.R (Traffic and Transportation), significant impacts to traffic flow are not expected. Furthermore, Facility construction routes were chosen to minimize the use of urban roads to the extent possible.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
The current land use of the Facility Area does not affect the Facility. The Facility Area was selected for its favorable site suitability characteristics, including high solar energy resource, topography, proximity to electrical infrastructure, compatibility with allowed uses on surrounding lands, and low resource conflicts. Further, as a "solar generation facility, major," the Facility was previously an allowed conditional use in the GMAAD district prior to OA 2021-004. The Facility's inconsistency with Benton County's amended zoning regulations for the GMAAD does not change the siting considerations or Facility's compatibility with surrounding land uses. As described above, the Facility was designed to meet the setback and other land use restrictions in the GMAAD. Additionally, the setback and land use restrictions in the GMAAD prevent future land uses that conflict with solar generation facilities (such as those that would reduce the Facility's solar resource or disrupt access to the Facility Area) from occurring in the vicinity of the Facility.	

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☒ No	☐ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Based on the information provided above and in the Land Use Consistency Review (see Attachment E), the Facility will have no significant adverse effects on land use. Therefore, no land use mitigation or monitoring measures are proposed. Mitigation measures specific to other topics (e.g., wetlands and surface waters, wildlife habitat, or geological hazards) are addressed in their respective resource sections in Part 3 and Part 4 of this ASC and are summarized in Part 2, Section A.5.		

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

Part 4 – Detailed Analysis

Environment Element Number and Name	4.P.a – Noise

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Acoustic Assessment Report (Attachment J)	Complete (September 2023)	Prepared by Tetra Tech, a consultant for the Applicant.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Regulatory Context	No noise regulations with numerical decibel limits are applicable to the Facility at the federal level. However, state and county-level regulations apply. WAC 173-60 establishes environmental noise limits on sound crossing property boundaries per the Environmental Designation for Noise Abatement (EDNA) of the sources and the receiving properties. WAC 173-60-040 prescribes temporal limits on permissible noise levels during certain daytime (starting 7:00 a.m.) and nighttime (starting 10:00 p.m.) hours among Class A, B, and C source and receiver properties. The WAC regulatory limits are absolute and independent of the existing

	acoustic environment; therefore, a baseline noise survey is not requisite to determine conformance. Attachment J provides numerical decibel limits. At the county level, Chapter 6A.15 in the Benton County Code regulates noise as a public nuisance and does not provide numerical decibel limits.
Existing Conditions	As stated above, no baseline noise survey is required because applicable noise regulations with numerical decibel limits (WAC 173-60) are absolute and independent of the existing acoustic environment. In the absence of ambient measurement data, the existing sound level environment in the vicinity of Facility was estimated with a method published by the Federal Transit Administration in its Noise and Vibration Impact Assessment Manual (FTA 2018). The manual presents the general assessment of existing noise exposure based on the population density per square mile and proximity to area sound sources such as roadways and rail lines. The proposed Facility is approximately 9 miles (14.5 kilometers) northwest of the city of Hermiston, which has a population density of 19,423 per square mile according to the U.S. Census Bureau (2022). A range of noise settings occurs within the Project Area Extent. Variations in acoustic environment are due in part to existing land uses, population density, and proximity to transportation corridors. Elevated existing ambient sound levels in the region occur near major transportation corridors such as interstate highways and in areas with higher population densities. Nearby rural airstrips and airports, including the Hermiston Municipal Airport, Tri-Cities Airport, and Richland Airport, also contribute to ambient noise levels in both surrounding urban and rural areas. Principal contributors to the existing acoustic environment likely include motor vehicle traffic, mobile farming equipment, all-terrain vehicles, local roadways, periodic aircraft flyovers, and natural sounds such as birds, insects, and leaf or vegetation rustle during elevated wind conditions. Diurnal effects result in sound levels that are typically quieter during the night than during the daytime, except during periods when evening and nighttime insect noise dominates in warmer seasons. Table 5 in Attachment J shows estimated baseline sound levels for daytime, nighttime, and day-night average sound level.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Construction	Construction work will not consist of a phased approach. The construction of the Facility may cause short-term but unavoidable noise impacts that could be loud enough at times to temporarily interfere with speech communication outdoors and indoors with windows open. Noise levels resulting from the construction activities would vary significantly depending on several factors such as the type and age of equipment, specific equipment manufacturer and model, the operations being performed, and the overall condition of the equipment and exhaust system mufflers. Table 6 in the Acoustic Assessment (Attachment J) shows equipment anticipated to be used during construction and their associated noise levels. Facility construction would generally occur during the day, Monday through Friday. Furthermore, all reasonable efforts would be made to minimize the impact of noise resulting from construction activities including implementation of standard noise reduction measures. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction and the implementation of noise mitigation measures, the temporary increase in noise due to construction is considered to be a less than significant impact. Table 7 in the Acoustic Assessment (Attachment J) shows the projected noise levels from Facility construction at the one nearby noise sensitive receptor. Periodically, sound levels may be higher or lower than those presented in Table 7; however, the overall sound levels should generally be lower due to excess attenuation and the trend toward quieter construction equipment.
Operation	Attachment J presents modeling results for sound levels that are anticipated to be generated by the Facility. Operational sound levels were analyzed using CadnaA (Computer Aided Noise Abatement), an acoustic modeling software program that conforms with the International Organization for Standardization (ISO) 9613, Part 2: “Attenuation of Sound during Propagation Outdoors” (ISO 1996). The method described in this standard calculates sound attenuation under weather conditions that are favorable for sound propagation, such

	as for downwind propagation or atmospheric inversion, conditions which are typically considered worst-case. The Facility layout was reviewed and directly imported into the acoustic model so that on-site equipment could be easily identified, buildings and structures could be added, and sound emission data could be assigned to sources as appropriate. The primary noise sources during operation are the PV inverters, their integrated step-up transformers, optional BESS units with associated PCS inverters, and substation transformers. Electronic noise from inverters can be audible but is often reduced by a combination of shielding, noise cancelation, filtering, and noise suppression. The Facility layout consists of 17 PV inverters with collocated transformers and 60 tracking motors operating for approximately 17.91 minutes per day for the PV portion of the site. The BESS portion of the Facility consists of up to 240 megawatt-hours of BESS units. Additional BESS equipment depends on the final site architecture (up to 17 PCS inverters for AC-coupled BESS or up to 120 DC/DC converters for DC-coupled BESS). Substations have switching, protection, and control equipment, as well as a main power transformer, which generate the sound generally described as a low humming. Three chief noise sources are associated with a transformer: core noise, load noise, and noise generated by the operation of the cooling equipment. The core is the principal noise source and does not vary significantly with electrical load. The load noise is primarily caused by the load current in the transformer's conducting coils (or windings); consequently, the main frequency of this sound is twice the supply frequency: 120 hertz [Hz] for 60 Hz transformers. The cooling equipment (fans and pumps) may also be an important noise component, depending on fan design. During air forced cooling method, cooling fan noise is produced in addition to the core noise. The resulting audible sound is a combination of hum and the broadband fan noise. Breaker noise is a sound event of very short duration, expected to occur only a few times throughout the year. Reference sound power levels input to CadnaA were provided by equipment manufacturers, based on information contained in reference documents or developed using empirical methods. The source levels used in the predictive modeling are based on estimated sound power levels that are generally deemed to be conservative. The projected operational noise levels are based on sound power level data for the major sources of equipment provided by the applicant. Table 8 in Attachment J summarizes the equipment sound power level data

	used as inputs to the acoustic modeling analysis. It was assumed for this analysis that all equipment would operate consistently during both daytime and nighttime periods. Incorporating several conservative assumptions, acoustic modeling results indicate that the Facility is well below the WAC 173-160 the 60 dBA daytime limit and 50 dBA nighttime limit. In addition, the Facility is predicted to comply with all the applicable WAC regulatory limits at the Facility lease boundary.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Noise BMPs	WAC 173-60-050 exempts temporary construction noise from the state noise limits; however, BMPs will be implemented to reduce off-site construction noise impacts. Since construction equipment operates intermittently, and the types of machines in use at the Facility change with the stage of construction, noise emitted during construction will be mobile and highly variable, making it challenging to control. Facility construction will generally occur during the day, Monday through Friday. Furthermore, reasonable efforts will be made to minimize the impact of noise resulting from construction activities, including implementation of standard noise reduction measures listed below. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction, and the implementation of noise mitigation measures, the temporary increase in	EFSEC

	noise due to construction is considered to be a less than significant impact. The construction management protocols will include the following noise mitigation measures to minimize noise impacts: • Maintain construction tools and equipment in good operating order according to manufacturers' specifications. • Limit use of major excavating and earth-moving machinery to daytime hours. • To the extent practicable, schedule construction activity during normal working hours on weekdays when higher sound levels are typically present and are found acceptable. Some limited activities, such as concrete pours, will be required to occur continuously until completion. • Equip any internal combustion engine used for any purpose on the job or related to the job with a properly operating muffler that is free from rust, holes, and leaks. • For construction devices that use internal combustion engines, ensure the engine's housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers' guidelines, if possible. • Limit possible evening shift work to low-noise activities such as welding, wire pulling, and other similar activities, together with appropriate material-handling equipment. • Use a complaint resolution procedure to address any noise complaints received from residents.			
Have all final proposed commitments been identified?			☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed		
Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References:

FTA (Federal Transit Administration). 2018. FTA Noise and Vibration Impact Assessment Manual, FTA Report No. 0123.

U.S. Census Bureau. 2022. Decennial Census of Population and Housing Datasets.ISO (International Organization for Standardization). 1996. Standard ISO 9613-2 Acoustics – Attenuation of Sound during Propagation Outdoors. Part 2 General Method of Calculation. Geneva, Switzerland.

Part 4 – Detailed Analysis

Environment Element Number and Name	4.P.b – Light, Glare and Aesthetics

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Visual Impact Assessment (Attachment I)	February 2024	Prepared by Tetra Tech, environmental consultant for the applicant.	☐ No	☒ Yes
Glare Analysis (Attachment P)	January 2024	Prepared by Tetra Tech, environmental consultant for the applicant.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
General Description of the Site	The Facility will be located across an approximately 437-acre portion of three parcels, known herein as the Project Area Extent. Lands within the Project Area Extent have historically been used for agricultural activities including crop cultivation and livestock grazing. The Project Area Extent is located in a heavily modified landscape and includes livestock grazing lands, rock and soil quarries, and roads used to access the surrounding agricultural fields. A disused gravel-packed airplane landing strip bisects the northern portion of the Facility Area.

Visual Setting	The visual setting of the Project Area Extent is agricultural land with a mix of irrigated cropland, dryland agriculture, and open rangeland with a small number of adjacent agricultural structures and minimal rural residential development. The Facility will be located approximately 4 miles northwest of the unincorporated community of Plymouth, north of SR-14, approximately 5 miles west of its intersection with Interstate 82. An existing Benton PUD substation with a 115-kV transmission line (referred to in Figure A-1 as the Interconnection Area) is adjacent to the southeastern portion of the Project Area Extent. The entire site is gently south-sloping.
Visibility of the Site	The Visual Impact Assessment (Attachment I) will describe the visibility of the Facility and its components in greater detail and from several key observation points. Due to the site's gentle southward slope, the Facility is generally more visible from viewpoints directly east or west from the site, and from the Oregon shoreline of the Columbia River. Areas along the Washington shoreline of the Columbia River are generally low enough in elevation not to have a view of the Facility, with some exceptions due to terrain features. Visual simulations will be completed for representative key observation points and included in the Visual Impact Assessment. The visual simulations will be prepared using digital photographs collected previously as a base layer, to illustrate views of the fully constructed solar panel arrays.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Views	Views of the Project Area Extent will change from irrigated cropland, dryland agriculture, open rangeland, and agricultural structures to include solar arrays and supporting components associated with the facility. The greatest shift in view will be the presence of solar arrays. The changes in view will be experienced mainly by drivers on SR-14 and US Route 730 located south of the Columbia River. The Facility will also be briefly visible to drivers on Interstate 82.

	The Visual Impact Assessment (Attachment I) identifies eight key observation points that were selected to assess the level of visual change resulting from construction of the Facility using the Bureau of Land Management's contrast rating system (BLM 1986). This system uses criteria to evaluate the degree of visual contrast (i.e., none, weak, moderate, and strong) and was followed to objectively measure potential changes to the visual environment. The BLM's contrast rating system is summarized in Section 4.2 of Attachment I. The eight selected KOPs provide views of each side of the Project Area Extent from publicly accessible locations. Factors considered in the selection of the KOPs included locations with sensitive viewers (e.g., local residences, recreationists, and motorists) and potential for the Project Area Extent to be visible (e.g., distance and view angle). Potential visual impacts at each KOP are evaluated using the BLM contrast rating system (see Section 4.2 of Attachment I). The Visual Impact Assessment (Attachment I) found that the Facility would introduce moderate contrast to the existing visual character immediately adjacent to SR-14, but this would be a temporary viewing experience for travelers along these roads. The Facility would introduce weak contrast to the existing visual character from viewpoints farther east, west, or south. In addition, the Facility components, while appearing as new features, would be consistent with other horizontal and vertical lines and geometric shapes associated with existing electric transmission lines, roads, and the built environment visible throughout the landscape. Furthermore, the Facility would not block views of the surrounding hills and agricultural land, and it is not located on or near any scenic resources identified in the Benton County Comprehensive Plan as significant or important. Therefore, no significant visual impacts are expected. See Attachment I for a detailed analysis of each KOP, including representative visual simulations of how the Facility may appear in the region (see Figures 7 to 10 in Attachment I). Additionally, Facility will be installing vegetation screening (evergreen trees) along the southern boundary, adjacent to SR-14, and portions of the southeast and southwest corners of the Facility, reducing contrast of visual impacts to the nearby travel corridors.
Light	The Facility is not expected to create a substantial new source of nighttime lighting. The Facility will provide external safety lighting for both normal and emergency conditions at the primary access points, substation, optional BESS, and optional O&M building. However, lighting will be designed to provide the minimum illumination needed to achieve safety and

	security and will be downward-facing and shielded to focus illumination in the immediate area. Therefore, the Facility will not introduce a source of light that will significantly impact views or night skies in the area.
Glare	As presented in Attachment P, the Facility's preliminary layout was modeled on SGHAT GlareGauge in order to evaluate the potential extent of any glint and glare the Facility may have upon nearby points of observation and vehicle routes. Three analyses were performed, and the analyses represented a single axis tracking system with 52 degree tilt and panel specifications of smooth glass with anti-reflection coating. Minor amounts of green glare (3.6 annual hours) and yellow glare (2.1 annual hours) were predicted along a segment of SR-14. Only a small section in the central portion of SR-14 that is directly adjacent to PV Array 5 (see Attachment P) is predicted to received glare. Analysis 3 found that if the resting angle of PV Array 5 was increased to 10 degrees it would eliminate all predicted glare. In addition to adjusting the resting angle, the Facility will be installing vegetation screening (evergreen trees) along the southern boundary, adjacent to SR-14, and portions of the southeast and southwest corners of the Facility, further mitigating potential glare and visual impacts. Attachment P contains full methodology and analyses of glare for the Facility.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Management Practices – Light, Glare and Aesthetics	The Facility will implement BMPs including: • Setting the resting angle for the area of arrays predicted to cause glare to 10 degrees to prevent glare (see Attachment P).	N/A

	• Downward-directed lighting to minimize horizontal or skyward illumination, and avoidance of steady-burning, high-intensity lights. • Utilizing solar panels with an anti-reflective coating to minimize glare. • Revegetation will occur based on the Revegetation and Weed Management Plan (to be submitted prior to construction). • Installation of screening vegetation (evergreen trees) across the south, southeast, and southwest-facing portions of the Facility.	

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References

BLM (Bureau of Land Management). 1986. Visual Resource Inventory. BLM Manual Handbook H-8410-1.

Part 4 – Detailed Analysis

Environment Element Number and Name	4.R – Traffic and Transportation

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Traffic Impact Analysis (Attachment K)	January 2024	Heath & Associates, transportation planning consultant for the Applicant. The Washington State Department of Transportation (WSDOT) provided concurrence on the TIA in February 2024 (see Attachment Q).	☐ No	☒ Yes
WSDOT Concurrence Letter (Attachment Q)	February 2024	WSDOT	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☐ No	☒ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Transportation Systems	Transportation routes in the Facility vicinity are shown in Attachment A, Figure A-11. No improvements to existing approaches or access roads are proposed as part of the Facility.

	Access to the Facility Area is proposed at an existing approach along SR-14 (see Attachment K), under the jurisdiction of WSDOT. The Applicant has consulted with Benton County Public Works Department and confirmed that access is not under Benton County jurisdiction. The access roadway off SR-14 provides access to agriculture uses to the north and is primarily a service road. The TIA did not identify any intersection spacing deficiencies at the existing access intersection (Attachment K). SR-14 is a two-lane, rural minor arterial highway that runs east and west along the Washington/Oregon border. Per WSDOT classification, SR-14 is considered a Limited Access Partially Control highway (see Attachment K). SR-14 accommodates one travel lane in each direction across the property frontage. Each lane is approximately 11 to 12 feet wide and transitions to paved shoulders approximately 6 to 9 feet in width. Non-motorist infrastructure is not available in the subject area. The posted speed limit is 65-mph. SR-14's Annual Average Daily Traffic was reviewed using WSDOT's historic database. Between 2014 and 2022, the lowest average daily traffic was 2,700 vehicles (2020) and the highest was 3,500 vehicles (2016 through 2018). The vehicle composition is approximately 64% passenger vehicles and 36% trucks and heavy vehicles. WSDOT also provides a map determining road level of service (LOS) (WSDOT 2023). According to their standards, SR-14 has a LOS grading of "C." WSDOT states that a LOS grading of "C" means that speed remains near free flow but the freedom to maneuver is restricted.
Waterborne, Air, and Rail Traffic	There are no deep draft shipping ports near the Facility Area. However, the Ports of Seattle, WA, or Portland, OR are the most likely ports to receive solar equipment, which will then be trucked to the Facility Area. The Port of Seattle is approximately 230 miles northwest of the Facility via roadways, and the Port of Portland is approximately 175 miles west of the Facility Area via roadways. Air transportation is not anticipated for use in Facility construction or operation. The Yakima Air Terminal in the city of Yakima provides air service to Seattle. Rail transportation is not anticipated for use in Facility construction or operation.

Public and Pedestrian Traffic	The Facility access route is located near US, state, and county roads that are not associated with public transportation, although school bus routes may include these roads. The roads in the vicinity of the Facility are not designated for pedestrian traffic.
Parking	No designated public parking areas are currently present at the Facility.
Movement of People or Goods	The existing conditions related to the movement of people and goods near the Facility is described above, under "Transportation Systems," "Waterborne Air and Rail Traffic," and "Public and Pedestrian Traffic."
Transportation Hazards	Given the mountainous terrain along transportation routes, steep grades and winding or curved sections of roads are occasionally present along the access routes. Inclement weather such as snow and icy conditions may also contribute to hazards on steep and winding roads. A list of the recorded collision history from the beginning of 2018 through 2022 for three nearby intersections (including the access) was requested from WSDOT. See Table 4 in Attachment K for incident descriptions and summary by year.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Transportation Systems	**Improvements** There are no anticipated changes or improvements to existing transportation infrastructure. Per the TIA (Attachment K), no public improvements are proposed. The spacing of the access road intersection with SR-14 and sight distance at the site meet the standards set by WSDOT and a left-turn lane was not warranted under a peak construction activity scenario (see Attachment K for access road intersection location). The 9 acres of new service roads constructed for the Facility will be private and internal to the Facility Area. These roads will generally be inside the Facility fence line and will not provide any new travel routes for area residents.

	Construction During the 12-to-18-month construction period, there will be a noticeable increase in vehicle traffic to and from the Facility Area. At the peak of construction activities, the Facility is projected to temporarily generate an additional 326 daily trips (Attachment K). The peak of 326 daily trips is assumed to coincide with the expected peak of 105 workers on site. However, the peak in traffic and on-site personnel will be temporary, and an average of 59 workers are expected on-site during the construction period. Since the historical average daily traffic on SR-14 ranges from a low of 2,700 to a high of 3,500, the peak of 326 additional daily trips will not increase traffic beyond historical normal ranges. **Operations** Operations traffic will be negligible since there will be no more than five employees on-site up to two times monthly for O&M activities. Therefore, the limited number of daily trips anticipated during Facility operations will be negligible relative to current and projected level of services and trips.
Waterborne, Air, and Rail Traffic	No appreciable changes are anticipated to occur to waterborne traffic. While it is anticipated that construction materials may be shipped, normal container traffic would not noticeably increase, either in the shipping lanes or at the delivery port. Barge or rail transport may be used for shipping equipment to the Facility; the items shipped would represent a small proportion of total shipping volume on these routes, and no changes are anticipated for barge or rail traffic.
Public and Pedestrian Traffic	There are no public transportation or pedestrian changes anticipated to occur given the low level of known pedestrian and public transportation use of these routes.
Parking	The Facility will create three new private parking spaces within the Facility Area. There will be no negative impact on public parking. There are currently no designated public parking spaces in the Project Area Extent. During construction, workers will park within designated areas of the construction site and not on public roads. Parking needs during operations would be limited to occasional use by up to five employees within the Facility Area. As stated above, the Facility will add three new private parking spaces to accommodate these employees. Because the spaces would be within the Facility Area, no vehicular backing up or maneuvering would occur within a public right-of-way.

Movement of People or Goods	Construction and use of the Facility approach along SR-14 may temporarily increase traffic along that roadway. Therefore, a Traffic Control Plan, in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD) will be prepared for approval by WSDOT.
Transportation Hazards	Use of the existing Facility approach onto SR-14 has the potential to cause traffic hazards if not marked and mitigated. Therefore, a Traffic Control Plan, in compliance with the current MUTCD, will be prepared prior to construction site activities. The Applicant will obtain oversize and overweight haul permits in compliance with WSDOT and Benton County requirements to safely haul equipment on highways and county roads. A Traffic Control Plan will be prepared in coordination with WSDOT and the Benton County Public Works Department to mitigate transportation hazards during the construction of the Facility. If included, the Facility's optional BESS components would be delivered by truck to the Facility in compliance with 49 CFR §173.185, which regulates the transportation of lithium-ion batteries and provides criteria for battery packaging and transport. For these reasons, the Facility will not result in significant transportation hazards or impacts to traffic safety.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☒ No	☐ Yes

Topical area/issue	Changes
N/A	N/A

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
WSDOT Oversize and Overweight Permit	A permit will be obtained for heavy or oversized loads in accordance with WSDOT regulations including RCW 46.44 and WAC 468-38.	WSDOT
Traffic Control Plan	A Traffic Control Plan will be prepared in consultation with WSDOT for traffic management during improvement of highway access. This plan would contain measures to facilitate safe movement of vehicles in the vicinity of the construction zone and would be in accordance with 23 CFR	WSDOT, Benton County Public Works Department

	§655 Subpart F that provides for the Federal Highway Administration to maintain the Manual on Uniform Traffic Control Devices for Streets and Highways, which defines standards for traffic control. The Applicant has consulted with Benton County Public Works Department and confirmed that access is not under Benton County jurisdiction.	
General Mitigation Measures	General mitigation measures for road access and transportation include: • Development and implementation of an ESCP and SWPPP to minimize impacts from erosion and sedimentation from construction related soil disturbance to include Facility access locations, on-site dirt access routes, haul routes, etc. • Obtaining applicable building permits and grading and excavation permits as required prior to construction.	N/A

Have all final proposed commitments been identified?	☐ No	☒ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

References:

WSDOT. 2023. Level of Service Standard Map. Available online at: https://wsdot.maps.arcgis.com/apps/mapviewer/index.html?layers=3f840aeeb1ba481c905270ca103cd1db

Part 4 – Detailed Analysis

Environment Element Number and Name	4.U – Archaeological Resources

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Cultural Resource Survey for the Wallula Gap Solar Project, Benton County, Washington (confidential Attachment L)	Ongoing Revisions	Prepared by Archaeological Investigations Northwest (AINW). Government-to-government consultation is ongoing.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☒ No	☐ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Site Conditions from Cultural Resources Survey	The Area of Impact (AOI), which covers approximately 437 acres of private land, was surveyed for archaeological and built environment resources in May 2022 and July 2023, including excavation of 28 subsurface probes placed in areas with the highest potential for physical evidence of past use by people. The survey identified one cultural resource, site 45BN2219, a historic artifact deposit of three bottles. The site was recommended ineligible for listing on the National Register of Historic Places (NRHP).

Missing Data	The Applicant is currently in discussions with agencies and tribes regarding potential additional fieldwork (additional probing) and/or studies (traditional cultural property study).
Tribal consultation	Government-to-government consultation with the tribes is ongoing.

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Disturbance of Archaeological and Historic Property Sites	The Facility will be designed to avoid direct impacts to cultural resources that are eligible, potentially eligible, or unevaluated for listing on the NRHP. • Archaeological site 45BN2219 is the only cultural resource that has been identified. It is recommended not eligible for NRHP listing. Pending DAHP concurrence, no further management is needed. • Historic Properties located within the built-environment were identified. A power transmission line that has been determined eligible for the NRHP is located within the Cultural Resource Survey's 1-mile search area.
Unanticipated Discoveries of cultural materials or Human remains	It is possible that construction of the Facility (including, but not limited to, clearing of vegetation, grading, and excavation) could unearth previously undiscovered archaeological resources and result in significant impacts to archaeological resources and/or human remains. If cultural resources (i.e., precontact sites, historic sites, or shell or bone, isolated artifacts or other features) are discovered, during the course of construction, cultural resources (i.e., precontact sites, historic sites, or shell or bone, isolated artifacts or other features) are discovered, the Unanticipated Discovery Plan will be implemented. An Unanticipated Discovery Plan will be submitted at least 90 days prior to construction. In order to comply with RCW 27.53, if any significant archaeological resources would be impacted by the Facility, a DAHP excavation permit will be obtained and mitigation measures will be discussed and implemented.

C.2. Changes to the Proposal from the Existing Condition		
Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☐ No	☒ Yes

Topical area/issue	Changes
Potential Additional Studies	The Facility has been designed to avoid direct impacts to known cultural resources. If additional studies are conducted, the Existing Conditions described above would need to be revised.

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Unanticipated Discovery Plan	RCW 27.53.060 - If the Facility will disturb any pre-contact-era archaeological resources or any NRHP-eligible or -listed historic-era archaeological resource, a DAHP excavation permit will be obtained. In the event unrecorded archaeological resources are identified during Facility construction or operation, work within 30 meters (100 feet) of the find shall be halted and directed away from the discovery until it can be assessed in accordance with steps in the Unanticipated Discovery Plan (to be submitted at least 90 days prior to construction).	DAHP, EFSEC, CTUIR, CTWSRO, the Yakama Nation, and the Wanapum Tribe.
Consultation with Native Americans	Only regulatory agencies can formally consult with tribes. Consultation between EFSEC and the tribes is ongoing.	EFSEC, the CTUIR, the CTWSRO, the Yakama Nation, and the Wanapum Tribe.

Have all final proposed commitments been identified?	☒ No	☐ Yes

E. Effects on Other Environmental Elements Not Yet Discussed		
Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☒ No	☐ Yes

Environmental Element	Additional changes or effects
N/A	N/A

Part 4 – Detailed Analysis

Environment Element Number and Name	4.V – Cultural Resources

- As you complete this section, you do not need to repeat relevant information previously provided in another section, but reference that location and summarize what was provided.
- You can provide all the information requested in A. through E. below in a study or report, but should provide the information using this overall organization.
- All of these questions apply to all phases of the proposal (e.g. Construction, Operation, and Decommissioning/Reclamation).
- Information in this section should be related to the issue or topics that resulted in a "Yes" or "Maybe" answer in Part 3.

A. Studies

Describe any studies that have already been conducted or will be conducted related to this topic and provide the expected timing for the studies to be completed.

Study Name	Est. Completion Date	Expert Agency Participation – Name, Title, and Involvement	Included with Submittal?	
Cultural Resource Survey for the Wallula Gap Solar Project, Benton County, Washington (confidential Attachment L)	July 31, 2023	Prepared by AINW. Government-to-government consultation has been initiated by EFSEC.	☐ No	☒ Yes
Have all proposed studies for this topic been completed?			☒ No	☐ Yes

B. Existing Condition and Issues

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Existing Condition and Problems
Tribal Consultation	The Applicant reached out to the CTUIR, the CTWSRO, the Yakama Nation, and the Wanapum Tribe on February 25, 2022. CTUIR, CTWSRO, and Yakama Nation requested copies of the cultural resource report for review. The draft report was sent to all affected tribes on November 1, 2022. Both CTUIR and Yakama Nation have reviewed the draft report, responding back with requests for additional surveys for subsurface investigations and Traditional Cultural Properties, respectively. CTWSRO did not provide comment on the report.

	The Wanapum were provided a copy of the cultural resources report on November 1, 2022, and provided concurrence on October 9, 2023. Government-to-government consultation has been initiated by EFSEC. Applicant is currently in discussions with agencies and tribes regarding potential additional fieldwork (additional probing) and/or studies (traditional cultural property study).

C. Changes to and from Existing Condition

C.1. Changes to the Existing Condition from the Proposal

Describe the existing condition for this topic, including any existing problems associated with the issue being discussed.

Topical area/issue	Changes
Cultural Resources (Historical Property of Religious or Cultural Significance to Indian Tribes [HPRCSIT])	HPRCSITs may be present in the Project Area Extent or vicinity that potentially could be adversely impacted by the Facility. Informal and formal communication with the local tribes is necessary to identify whether cultural resources are present.
Usual and accustomed area	The Facility is within the usual and accustomed area of the CTUIR, the CTWSRO, the Yakama Nation, and the Wanapum Tribe.
Activities on the site could impede views of tribal cultural sites	Impacts to HPRCSITs and TCPs located within the Project Area Extent and vicinity have not yet been identified or discussed with the tribes.
Existing tribal hunting or fishing rights	The Project Area Extent consists of private land owned by non-tribal members. Based on information provided by the project property owners, no tribal hunting or fishing is known to occur within the Project Area Extent.
Existing tribal plant gathering	As stated above, the Project Area Extent consists of private land owned by non-tribal members. Based on information provided by the project property owners, tribal plant gathering is not known to occur within the Project Area Extent.

C.2. Changes to the Proposal from the Existing Condition

Would the existing condition for this topic have the potential to affect the proposal now or in the future?	☐ No	☒ Yes

Topical area/issue	Changes
Presence of culturally significant resources to the tribes is unknown	Informal communication and formal consultation with the affected tribes is necessary to identify whether significant cultural resources are present.

D. Proposed Commitments and Monitoring

Are you proposing any minimization or avoidance commitments, either required in rules or proposed for impacts?	☐ No	☒ Yes

Commitment	Applicable law and how well it addresses the impact	Expert Agency Participation
Unanticipated Discovery Plan	In the event unrecorded archaeological resources are identified during Facility construction or operation, work within 30 meters (100 feet) of the find should be halted and directed away from the discovery until it can be assessed in accordance with steps in the Facility's Unanticipated Discovery Plan (to be submitted at least 90 days prior to construction).	DAHP and interested tribes.
Continued Coordination with Native Americans	Only regulatory agencies can formally consult with tribes. Informal and open communications will continue with interested tribes during Facility permitting and design to incorporate tribal input regarding avoidance of potential impacts to cultural resources, including traditional use areas or other areas of significance to tribes. Lines of communication will remain open to better facilitate any response to unanticipated discoveries during construction.	DAHP, the CTUIR, the CTWSRO, the Yakama Nation, and the Wanapum Tribe.

Have all final proposed commitments been identified?	☒ No	☐ Yes

E. Effects on Other Environmental Elements Not Yet Discussed

Does any information provided for this topic affect other environmental elements (e.g. water, plants, animals, noise), that has not already been considered and discussed in this form?	☐ No	☒ Yes

Environmental Element	Additional changes or effects
Water, plants, and animals	Natural resources such as water, plants, and animals have cultural significance to the Tribes. Access to and protection of these resources within Usual and Accustomed areas within the Project Area Extent should be assessed and maintained.