

STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

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Memorandum

To: Sonia Bumpus, SEPA Responsible Official, Energy Facility Site Evaluation Council (EFSEC) Manager, (360) 664-1363

From: Amí Kidder, EFSEC Siting and Compliance Manager, (360) 664-1305

Date: June 24, 2021

RE: Environmental Review and Staff Recommendation for State Environmental Policy Act (SEPA) Review and SEPA Determination for Goose Prairie Solar

PROPOSAL: Goose Prairie Solar (Facility) is an 80 megawatt (MW) solar photovoltaic project

with an optional battery energy storage system proposed by OneEnergy

Renewables (OER) WA Solar 1, LLC (Applicant). The proposed Facility would be constructed on up to 625 acres in rural Yakima County. Facility components

include:

• solar modules

• tracking system

posts

• underground and aboveground cabling

inverters and transformers

collector lines

• facility substation

• operations and maintenance building

access and service roads

fences

• gates and security lighting

 optional battery energy storage system capable of storing 80 megawatts (BESS)

The Facility would interconnect to the electrical grid at Bonneville Power Administration's Midway-to-Moxee 115 kV transmission line via a line-tap to the existing line. A generation tie-line (approximately 250 feet in length) would be constructed from the Facility's substation to the transmission line line-tap.

CASE NUMBER: EFSEC Docket No. EF-20012

APPLICANT: OneEnergy Renewables WA Solar 1, LLC

LOCATION: The Facility is located approximately eight miles east of the City of Moxee on

parcels located just north of Washington Highway 24, between its intersections with Morris Lane and Desmarais Cutoff in Yakima County. See Attachment 1.

Figure 2-2: Regional Context Map.

A. ENVIRONMENTAL RECORD and EXHIBITS

The environmental review conducted by EFSEC included analysis based on the following documents which are included in the environmental record. The documents listed are available for review on EFSEC's website at: https://www.efsec.wa.gov/energy-facilities/goose-prairie-solar or at the links provided in the description.

Acronym	Description	Date
ASC 6/21	Updated Goose Prairie Solar Application for	June 22, 2021
	Site Certificate (ASC) (including Section	
	2.A.5, Applicant's Mitigation Measure	
	Summary)	
Attch A-R	Subject area and relevant information	January 19, 2021
	attachments to ASC	
DR-1	Applicant's Data Request (DR) Response	April 21, 2021
	(including Cover Letter and Attachments 1	
	and 2)	
OE 5/21	Applicants Response to Washington	May 13, 2021
	Department of Fish and Wildlife (WDFW)	
	Impacts Table	
SEPA	Cross-Reference SEPA Checklist	6/21/2021
WPG 4/09	WDFW Wind Power Guidelines	April 2009
	https://wdfw.wa.gov/publications/00294	
Ho 2011	Methodology to Assess Potential Glint and	August 2011
	Glare Hazards from Concentrating Solar	
	Power Plants – Ho et al.	
	https://share-ng.sandia.gov/glare-	
	tools/references/2011_Glare_J.SolarEnergyE	
	ngr Vol133.pdf	
BLM 2013	Bureau of Land Management (BLM)Best	2013
	Management Practices for Reducing Visual	
	Impacts of Renewable Energy Facilities	
	(2013)	
	https://blmwyomingvisual.anl.gov/docs/BL	
	M_RenewableEnergyVisualBMPs_LowRes.	
	<u>pdf</u>	
MR 09/20	Management Recommendations for	September 1, 2020
	Washington's Priority Habitats: Managing	
	Shrub-steppe in Developing Lands	
	https://wdfw.wa.gov/publications/01333	
USACE 4/21	U.S. Army Corp of Engineers (USACE)	April 20, 2021
	Jurisdictional Determination Letter	

The environmental review also consisted of input or recommendations from state and local agencies, tribes, and EFSEC's consultant as listed below.

Commenter and	Description	Date of	Form of
Acronym		Input	Comment
Eric Bartrand, WDFW	WDFW Application	2/22/2021	Written
WDFW 2/21	review comments		
Lori White, WA. Dept. of	WA. Department of	3/1/2021	Written
Ecology	Ecology (WDOE) project		
WDOE 3/1/21	review of shorelands,		
	wetlands and waters of		
	the state		
Yakima County	Certificate of Zoning	3/11/2021	Written
YC 3/11/21	Compliance		
Yakima County	Yakima County Land Use	3/15/2021	Written
YC 3/18/21	Consistency Analysis		
Golder	Golder Application	3/15/2021	Written
Golder 3/15/21	Review Comments		
Walter Fertig PHD, WA Dept.	WA State Department of	4/12/2021	Written
of Natural Resources	Natural Resources (DNR)		
DNR 4/21	comments on sensitive		
	plants		
Michael Ritter, WDFW	WDFW response to OER	4/13/2021	Written
WDFW 4/21	April 13 letter		
Lori White, WA Dept. of	WDOE comments during	5/4/2021	Verbal
Ecology	site visit		
WDOE 5/4/21			
Casey Barney, Yakama Nation	Yakama Nation	5/4/2021	Written
Cultural Resources Program,	comments on Project		
YN 5/4/21	Application		
Lori White, WA Dept. of	WDOE comments post	5/10/2021	Written
Ecology	site visit		
WDOE 5/10/21			
Golder Associates Inc.	Golder review of OER	5/6/2021	Written
Golder 5/6/21	Data Request 1 (DR-1)		
	response		
Golder Associates Inc.	Golder response to	5/24/2021	Written
Golder 5/24/21	EFSEC DR-1 follow-up		
	questions		
Golder Associates Inc.	Golder review of OER	6/7/2021	Written
Golder 6/7/21	DR-1 response for air		
Golder Golder Associates Inc.	Golder review of OER	6/10/2021	Written
Golder 6/10/21	DR-1 response for noise		
Mike Ritter, WDFW	WDFW comments on	6/21/2021	Written
WDFW 6/21/2021	Staff Memo		

B. STAFF REVIEW OF THE ENVIRONMENTAL INFORMATION

EFSEC staff visited the site on May 4, 2021.

OER submitted an application in January which EFSEC used for conducting the SEPA environmental review. During that environmental review, and partly in response to the results of that review, the

Applicant corrected some errors, and made some revisions and clarifications to the application which is reflected in the current revised application (June 2021) provided for the public SEPA comment period.

The following sections correspond with elements of the environment listed in Washington Administrative Code (WAC) 197-11-444 and with the sections in the environmental checklist WAC 197-11-960. They were also used to organize and document EFSEC's environmental review for the *Goose Prairie Solar* proposal. Additional information (listed in Part A above) was provided by the Certificate Holder and by Washington regulatory subject matter experts as contracted to EFSEC and used as part of the environmental review. Please note that the information normally required for the SEPA Environmental Checklist is included in the application; an environmental checklist is provided but only refers the reader to pertinent sections in the application.

The review of all elements listed below is based, at a minimum, on information in the applicant's application (ASC 6/21). When additional information is relevant to a particular topic, it is referenced in parentheses.

1. EARTH

• The information provided by the applicant regarding changes to the site and mitigation measures as it relates to earth, is adequate. (Golder 3/15/21)

Mitigation: No additional mitigation measures for earth recommended.

2. AIR

• The information provided by the applicant regarding air quality and expected air emissions is adequate. (Golder 6/7/21)

Mitigation: No additional mitigation measures for air recommended.

3. WATER

Water Quality – Wetlands and Surface Waters

- Applicant's wetland site study indicated no wetlands are present within the project study area (809 acres) (ASC 6/21, Attch O). A site visit by Dept. of Ecology confirmed that no wetlands are present within the project study area. (WDOE 5/4/21, WDOE 5/10/21).
- A jurisdictional determination letter from the USACE determined that the drainages within the 809 acres of the project study area are not waters of the U.S. because they are excluded nonwaters of the U.S. per 33 CFR Part 328.2(b). As such, work that would occur within these areas does not required Department of the Army authorization under Section 404 of the Clean Water Act. (USACE 4/21)
- A discharge into one of the five stream features, identified as non-federally regulated waters, is
 regulated through the Department of Ecology. An Administrative Order authorizing work to be
 conducted within waters of the state could be needed if the water crossing proposal indicates the
 project would fall below the State's water quality standards (WAC 173-201A). (WDOE 3/1/21)
- <u>Draw crossing</u>. One crossing of the ephemeral stream in the draw would be necessary to connect the north and south areas of the project. The Applicant has proposed to construct an improved (i.e. hardened), unvented (i.e. without a culvert) ford to cross the ephemeral stream, and WDFW has agreed this is the best approach for this location. If practicable, the Applicant would upgrade the existing stream crossing that is located within the Bonneville Power Administration Right-of-Way. In either case, the crossing would be designed to be as close to grade as possible to minimize flow obstruction. Construction would be restricted to times when water is not flowing (which would also be preferable from a construction standpoint). The crossing would be designed

and constructed in accordance with WAC 220-660-190 (10) and (12) and applicable construction provisions from WAC 220-660-120 would be followed. (OE 5/21)

Water Use, Water Quality and Quantity – Stormwater/Washwater

- During construction, an estimated 50,000 gallons of water per day would be used. A Water Availability Letter from the City of Moxee confirms availability of adequate water supply to support construction activities. (ASC 6/21, Attch. Q)
- During operations, panels would be washed 2-4 times per year requiring up to 250,000 gallons of water per washing.
- The source of the water for use as washwater needed during Project operation has not been identified, although it is proposed to be trucked in from offsite.
- The Applicant was asked about additives to the washwater and responded that "Water for washing the solar panels will not have any cleaning solvents, detergents, or other additives in it." (DR-1, ASC 6/21)
- How the panel washwater might affect soil erosion, water quality, stormwater management, vegetation management and the aquifer recharge was not discussed in the original application. The applicant provided additional information which showed that the washing "can be controlled in such a manner as to be able to infiltrate all water on site…it would be spread out to allow infiltration." (DR-1, WDOE 5/10/21, ASC 6/21)
- WDOE reviewed the applicant's information and determined there are no issues with water quality or quantity associated with washwater and stormwater. (WDOE 5/10/21)

Mitigation:

Water Quality – Wetlands and Surface Waters

Draw crossing.

- Final construction details for the crossing would be developed in consultation with WDFW and WDOE, and approved by EFSEC prior to the start of construction.
- If the draw crossing cannot be constructed while meeting all relevant Washington State water quality regulations an Administrative Order authorizing work in waters of the state would be required.
- If the draw crossing can be constructed while meeting all relevant Washington State water quality regulations, an Administrative Order would not be required; however additional documentation such as the use of appropriate Best Management Practices (BMPs) in an erosion and sediment control plan and water quality protection plan would be needed to ensure all work would be done in accordance with the State's water quality standards.

<u>Water Use.</u> Prior to construction, an approved source of water with enough legally available water to supply the needed amount for construction and continued operation would be identified and confirmed via a contract or certificate of availability for the following project water uses:

- 50,000 gallons for construction (Letter of Availability provided by City of Moxee);
- up to 250,000 gallons of water 2-4 times per year during operation for photovoltaic panel washing, site maintenance; and
- potentially additional water for domestic use and maintenance activities during operation.

<u>Water Quality and Quantity – Stormwater/Washwater</u>. No additional mitigation measures related to water quality and quantity recommended.

4. PLANTS

- Short term laydown areas. Staging and parking during construction is expected to require 2-4 acres and is planned to occur on Conservation Reserve Program (CRP) lands. Short term laydown areas throughout the Facility Area may be necessary as construction progresses. (DR-1)
- Special status plant species. State special status plant species such as Hoover's biscuitroot blooms and Coyote tobacco flowers have been identified as likely or possible to occur on the northern portion (non-CRP) of the project site. The applicant proposes "During construction, existing trees, vegetation, and wildlife habitat would be protected and preserved to the extent practical." Attachment D, Vegetation and Weed Management, states "Applicant will employ BMPs to avoid impacts to native plant species when possible." Protecting and preserving special status plant species is a high priority; but they need to be identified and located in order to protect them. Surveys to identify their presence and location would need to be conducted in April/early May for some species and June-September for others. (DNR 4/21)

Mitigation:

- <u>Short term laydown areas.</u> Short term laydown areas would be located in areas that would also be disturbed for operational project components (e.g., solar arrays, roads, graded/filled areas), and not in areas that would be otherwise left undisturbed.
- Special status plant species. Two surveys for state special status plant species would be conducted in the northern portion (non-CRP habitat) of the project site during the appropriate season for identifying them (April/May and June-September). The information would be used to protect and preserve any identified plants during final design, construction, and operation to the extent practicable. Results of the surveys would be provided to EFSEC and DNR prior to start of construction (April/May surveys have been conducted).

5. ANIMALS AND HABITAT

Design.

- Fencing and other non-natural elements may impact wildlife movement in the vicinity of these features. Fencing placed near the draw in the vicinity of Den Beste Rd may impact wildlife movement through and usage of this corridor. The applicant has committed to widening the draw corridor width to 100 meters at minimum. (OE 3/21, WDFW 2/21, OE 05/21)
- Installation of infrastructure such as electrical cabling can impact habitat and wildlife. Subsurface installation can disturb soil characteristics, remove vegetation, and degrade habitat function. Above surface installation can impact avian wildlife. (OE 5/2021)

<u>Mitigation Plan/Ratio.</u> The applicant has committed to developing a final Habitat Restoration and Mitigation Plan in consultation with WDFW and approved by EFSEC. This plan would incorporate mitigation commitments in the application materials and the Site Certification Agreement (SCA) and would be implemented prior to the start of construction on the site. (ASC 6/21, Attch R, WDFW 2/21, YC 3/18/21)

Habitat Types.

- The ASC references the presence of degraded shrub steppe habitat. This habitat type is not considered for determining compensatory mitigation per shrub steppe management guidelines. When placing structures or performing ground disturbing activities consideration to shrub steppe quality should be made per shrub steppe management guidelines. (ASC 01/2021, MR 09/2020)
- The ASC and associated appendices reference Eastside Grasslands as occurring within the project boundaries based off the Wind Power Guidelines and site surveys. The review of this project

determined that these areas are shrub-steppe habitat in various seral stages and exhibiting varying degrees of land usage impacts such as cattle grazing. (ASC 6/21, Attch R, Attch F, WPG 4/09, WDFW 2/21, WDFW 4/21)

Altered and Permanent Impacts to Habitat.

- Permanently Impacted Acres are those areas which permanently remove all habitat function and value. That includes areas with foundations, internal service roads, access road, fencing, substations, energy storage system and O&M building. (WPG 4/09).
- Altered Impacted Acres is the total area within the fence line subtracting out the Permanently Impacted Acres to avoid double-counting. Existing Shrub Steppe and CRP habitats would be converted (altered) to planted and managed (mowed, sprayed) native grasses, and residual habitat value and/or function would remain.
- Onsite and offsite mitigation is feasible to mitigate for the altered and permanent impacts to
 existing habitat. Onsite mitigation is generally preferred. Some actions could also improve
 connectivity and animal movement and/or protect existing Townsend's squirrel locations.
 - <u>Land Acquisition.</u> Offsite mitigation for permanent and altered habitat impacts could be the purchase of property in the Cold Creek corridor identified by WDFW. Acquisition of this land would provide multiple benefits to wildlife as an important connectivity corridor for shrub-steppe habitats and species and is critical for sustaining connectivity on a landscape scale between two of the largest functioning shrub-steppe blocks in the region.
 - Onsite. Onsite mitigation could include implementing actions on the land containing the draw and associated shrub steppe habitat in the vicinity of Den Beste Road to increase existing habitat function and values on those properties. Examples of possible actions on these adjacent lands: exclude cattle access (except for some prescriptive grazing to manage weeds and excess biomass), plant native vegetation, weed treatment, site and/or sound screening for any protected travel corridors.
 - o <u>Fee-based</u>. Offsite mitigation for permanent and altered habitat impacts could be a fee paid by the applicant which would be applied to purchase of offsite in-kind property.

Site preparation

- Site preparation activities could damage existing vegetation and habitat. Site preparation activities would consist of clearing the existing vegetation only in those areas where construction, grading, and road improvements would occur and leaving existing vegetation intact when feasible. (ASC 6/21 2.A.2 and Attch D)
- Removing topsoil can alter the soil profile and can impact vegetation and wildlife. For example, non-native topsoil may reduce effectiveness of native seed establishment or reduce acceptable habitat for subsoil wildlife. (OE 5/21)
- Site preparation and construction activities would remove existing habitat. This can result in reduced ecological function and impacts to native vegetation and wildlife. Reestablishment of native vegetation through reseeding would occur in disturbed areas within the project boundaries. (OE 5/21, ASC 6/21 4.9.D, App D)

Construction - Avian

• Site preparation and construction activities can impact nesting raptors. Noise, habitat disturbance, and general disruption of the natural environment during the nesting season can have an impact. (OE 05/21, Attch R)

Operations

• Mowing reduces the function and value of the native grasses. For example, mowing can impact wildlife that may be nesting. Less frequent mowing or no mowing during certain times of the year could reduce the adverse effect on function and value. (OE 5/21)

Mitigation:

- <u>Design Fenced Arrays</u>. Solar array fencing would not reduce the width of undisturbed area around the draw in the vicinity of Den Beste Road to less than 100 meters, except for roads and electrical crossings.
- <u>Mitigation Plan/Ratio.</u> The mitigation ratio for project impacts to habitat would be:
 - o Permanent impacts to shrub steppe would be mitigated at 2:1 (2 acres of mitigation land for each acre of impacted land)
 - o Altered impacts to shrub steppe would be mitigated at 1.85:1 (1.85 acres of mitigation land for each acre of impacted land.)
 - o Permanent impacts to CRP land would be mitigated at 1:1 (1 acre of mitigation land for each acre of impacted land).
 - o Altered impacts to CRP land would be mitigated at 0.5:1 (0.5 acres of mitigation land for each acre of impacted land).
- Altered and Permanent Impacts to Habitat. The Applicant would provide compensatory
 mitigation through one or more actions of land acquisition, onsite, and/or fee-based mitigation.
 The total acres of compensatory mitigation would be determined using the mitigation ratios
 outlined above and be based on the final approved project extent. The final composition of the
 compensatory mitigation would be determined by EFSEC in coordination with WDFW and
 incorporated into the Habitat Restoration and Mitigation Plan.
 - o Calculation of Compensatory Mitigation Acres (CMA)

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(acres shrub steppe permanent * 2) + (acres shrub steppe altered * 1.85) + (acres CRP permanent * 1) + (acres CRP altered * 0.5) = CMA
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- Land acquisition. Land, located in Section 23,24,25,26 T13N, R23E, identified by WDFW as the Cold Creek corridor, would be acquired by the applicant at a ratio of 1 acre of Cold Creek corridor land for every 1.4 acres of identified Compensatory Mitigation Acres. Consultation with WDFW would be required to identify the area and orientation of acquired land. This land and a fee of 15% of the negotiated sale price would be transferred to WDFW or a WDFW identified third party for the management of these lands. Any remaining compensatory mitigation requirement would be met via the fee-based option and/or onsite option below.
- Onsite. Land in the draw and associated shrub steppe habitat in the vicinity of Den Beste Road between the proposed solar arrays would be provided a mitigation ratio of one acre of fenced land for each acre of compensatory mitigation commitment. The applicant would control cattle access to these lands with 4 strand fencing, while allowing wildlife access for use including connectivity and movement. To be viable as mitigation and to provide the intended benefit for habitat connectivity, this option must maintain draw connectivity throughout the mitigated area extent. Additional credit for habitat enhancement activities may be applied in consultation with WDFW and as approved by EFSEC. Any remaining compensatory mitigation requirement would be met via the fee-based option below and/or land acquisition option above.

<u>Fee-based</u>. The applicant would compensate for the permanent and altered impacts by providing money to WDFW or a third party identified by WDFW to purchase other lands suitable as in-kind and/or enhancement mitigation. This per acre fee would be determined by market rates and land sales within the general vicinity of the Facility for lands containing comparable habitat types and quality present within the project area. The per acre fee would be developed by the applicant in consultation with WDFW and approved by EFSEC. The Total Financial Obligation (TFO) would be determined by multiplying the cost per acre by the total Compensatory Mitigation Acres and would include a one-time 15% premium to cover administration and management costs for the purchased lands. The TFO for compensatory mitigation would be determined prior to issuance of the SCA. If construction has not begun within 12 months of the approval of the SCA, the TFO identified in the SCA would expire and be recalculated prior to beginning construction; comparable land sales at the time the TFO is recalculated would be used.

Fee calculation:

(Average Comparable Land Sale Cost
$$peracre$$
) * (CMA) * 1.15 = TFO

• Site preparation

- o Prior to ground disturbance activities, clearing/grading areas would be staked/flagged and workers informed of their purpose in order to ensure vegetation removal does not extend beyond the area necessary for construction, grading and road improvements.
- Two weeks prior to ground disturbing activities, the applicant would notify EFSEC and WDFW, provide the opportunity for onsite review of the final layout of the facility, and to discuss any additional micrositing adjustments that would further avoid or minimize impacts to wildlife habitat.
- o All electrical cabling would be placed under ground to the greatest extent practicable and utilize the narrowest trench permitted per relevant regulation to minimize disturbance.
- o Topsoil removed during excavation or grading activities would be retained, segregated, and used for replacement during revegetation.
- Reseeding timeframe, watering schedule, and monitoring would be incorporated into vegetation management and habitat management plans in consultation with WDFW and approved by EFSEC.

Construction - Avian

o If construction is planned between March 1 through July 15, a pre-construction raptor nest survey would be conducted in the project area and within a 0.25 mile buffer around project boundaries. Results of these surveys would be made available to WDFW and EFSEC two weeks prior to beginning of construction. Findings would be used in the development of a wildlife and habitat mitigation plan.

• Construction and Operations - Avian

o Any new above-ground transmission line or electrical cabling would be constructed in accordance with Avian Power Line Interaction Committee (APLIC) standards.

Operations

Mowing. Mowing would be restricted March 15 to May 15 and limited to the extent practicable from February 1 to March 15 and May 15 to September 30. A native seed mix which minimizes the need for mowing would be chosen in consultation with WDFW, grass

height would be maintained as tall as practicable, and battery powered equipment would be used for maintenance activities where practical.

6. ENERGY AND NATURAL RESOURCES

• Project is not expected to consume significant quantities of energy or other natural resources.

Mitigation: No mitigation measures for energy and natural resources identified.

7. ENVIRONMENTAL HEALTH

- Battery storage could present a flammability hazard. The application (Part 2.A.5) describes several plans and mitigation measures associated with preventing and managing fires.
- Information regarding battery disposal and the availability of disposal sites was not initially provided. The applicant provided additional information regarding flow battery technology, battery lifespan, and disposal and recycling options. (DR-1)
- No concerns related to fire prevention and response, battery operation, management, or disposal.

Mitigation: No additional mitigation measures for impacts to environmental health.

8. NOISE

Construction.

- EFSEC requested additional information regarding noise levels and hours of construction which was provided in the response to Data Request 1: Loud machinery would be limited to the hours of 7 a.m. to 6 p.m., which would be the normal working hours. Evening shift work between 6 pm and 10 pm would be limited to electrical work such as welding, wire pulling and making electrical connections. The optional concrete batch plant has been removed as part of the proposal. (DR-1)
- EFSEC requested additional information regarding noise levels during construction at identified receptors (e.g., nearby residences).
- Review of noise sources showed the potential for significant noise impacts at two noise sensitive receptors ID 6 and ID 7 if construction activities were concentrated and operating simultaneously at that same boundary location. A buffer of 1200 ft would reduce estimated noise levels to at or below 55 dBA. 55 dBA is considered to have a minimal impact on human outdoor activities. (DR-1, Golder 5/24/21, Golder 6/10/21)

Operations.

- The two proposed project layouts for operations, pose no noise concerns to neighboring sensitive receptors. (Golder 3/15/21)
- Noise Sensitive Receptors ID 6 and ID7 could be impacted by an alternative layout where the operational noise sources, particularly a transformer and/or an inverter, would be located on the boundary directly across the street from these receptors. (Attch I, Table 7; Golder 6/10/21)

Mitigation:

Construction.

• Construction laydown, construction equipment maintenance, or assembly areas would be set back a minimum of 1,200 feet from Noise Sensitive Receptor ID 6 and ID 7.

Operations.

• Operations. If an alternative layout for the inverter/transformer, BESS, or substation transformer is proposed, these noise sources would not be located in any project area which

would result in a greater than 50 dBA noise level at the property boundary of any identified sensitive receptor (e.g., ID 6 and ID 7).

9. LAND AND SHORELINE USE

Yakima County reviewed the proposal for land use concerns. One concern was shared regarding: "The proposal is sited in an agricultural area and may be subject to impacts from nearby agricultural practices including, but not limited to: marketed produce at roadside stands or farm markets, noise, odors, dust, fumes, operation of machinery and irrigation pumps, ground and aerial seeding and spraying, the application of chemical fertilizers, conditioners, insecticides, pesticides, and herbicides and associated drift of such materials; and the employment and use of labor." (YC 3/15/21).

Mitigation: No mitigation measures for land and shoreline use recommended. However, the applicant should be aware that nearby agricultural practices could cause some minor impacts to the solar project in the form of dust and drift from spraying farm-related material or treatments.

10. HOUSING

• No concerns regarding impacts to housing.

Mitigation: No mitigation measures for housing recommended.

11. VISUAL AND AESTHETICS

- The Applicant provided complete and reasonable analysis of six Key Observation Point (KOP) locations. Impacts were analyzed using the contrast rating system used by the U.S. Bureau of Land Management (BLM). The applicant provided rationale for the contrast rating for each and further details in contrast rating worksheets. This includes qualitative descriptions of dimensions of Project visibility (e.g., appearing as new and highly visible features; would attract attention to the casual observer) and visual contrast such as visual dominance (e.g., the proposed facility would co-dominate the landscape with the agricultural fields) and visual design elements (e.g., would introduce dark blue and gray colors, geometric shapes, and horizontal lines). (ASC 6/21, DR-1, Golder 3/15/21, Attch J)
- Of the six KOPs, two visual impact simulations were provided for KOP 1 and KOP 6. (Attch J)
- Of the six KOPs, two received a rating of minor contrast and visual impact (KOPs 3, 5), four received a rating of moderate contrast and visual impact (KOPs 1, 2, 4, 6). A moderate rating indicates that the visual contrast begins to attract attention and begins to dominate the characteristic landscape. (ASC 6/21, Golder 3/15/21)
- EFSEC requested additional information which was provided in the Applicant's response to Data Request 1. However, no additional simulations were conducted at that time.
- Additional best practices are available to address the visual impacts of solar facilities based on the BLM Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities (BLM 2013)

Mitigation:

- Following final design, provide additional simulations as requested by EFSEC, for EFSEC review, for current KOPs that do not already have simulations to further support the characterization of visual contrast and to assist with identifying mitigation opportunities. For all KOPs with a moderate contrast rating, provide mitigated scenarios that would be used to assist with determining effectiveness of the mitigation.
- Following review of the additional simulations, mitigation such as visual screening (e.g., vegetation or physical) or surface treatments would be implemented for KOPs: 1) with a

moderate rating for contrast and 2) that have specific aspects that contribute to visual contrast that could be mitigated to a less than moderate level by additional best management practices such as visual screening or surface treatments.

12. LIGHT AND GLARE

Night lighting.

• Unnecessary lighting would be turned off at night to limit attraction of migratory birds. This includes downward-directed lighting to minimize horizontal or skyward illumination, and avoidance of steady-burning, high-intensity lights. (ASC 6/21, Section 2.A.5)

Glare.

• Impacts from glare would be reduced through the use of anti-reflective coatings on the photovoltaic panels. (ASC 6/21) Remaining instances of moderate level glare (classified as Yellow Glare) would be present in areas with little traffic and is limited in duration and seasonality. (ASC 6/21, Attch K, Golder 5/24/21) Impacts from Yellow Glare are moderate in nature, temporary, and does not constitute a significant impact. (Ho 2011)

Mitigation: No additional mitigation measures for light and glare identified.

13. RECREATION

No concerns regarding impacts to recreation.

Mitigation: No mitigation measures for recreation identified.

14. HISTORIC AND CULTURAL PRESERVATION

- The Application and Attachment H do not accurately reflect criteria for requiring site protection, specifically in relation to RCW 27.53. The applicant agrees the criteria are not updated and the ASC and Attachment H will be updated with the correct criteria. (DR-1, YN 5/4/21)
- Three sites plus the Midway-Moxee transmission line are identified as expected to be avoided during Project construction and operations. If these sites cannot be avoided by the project, appropriate mitigation should be developed in consultation with Washington State Department of Archaeology and Historic Preservation (DAHP) and any concerned Tribes. Before any alteration to these sites takes place, an archaeological excavation permit issued by EFSEC in coordination with DAHP must be obtained.
- Fencing large acreages could have the potential to inhibit the ingress and egress of Yakama Nation members to public lands. (YN 5/4/21) The project is located on private lands. As proposed, construction and operation of this project would not be expected to affect access to public lands.

Mitigation:

- If any of the 4 sites identified as being avoided, are going to be altered during construction or operations, the applicant would consult with DAHP, any concerned Tribes, and EFSEC. An archaeological excavation permit issued by EFSEC in coordination with DAHP would be required prior to any alteration.
- The applicant would submit to EFSEC a Concurrence Letter from DAHP stating approval of the revised Cultural Resources Survey Report.

15. TRANSPORTATION

• No concerns regarding impacts to transportation.

Mitigation: No mitigation measures for transportation identified.

16. PUBLIC SERVICES

- The project is not anticipated to generate large quantities of solid waste (beyond those expected for a facility this size) during construction or operation. A discussion on recycling was included.
- The potential battery energy storage system would have its own fire suppression system and cooling system.
- Four plans, (construction phase fire control plan. emergency plan, operations phase fire control plan. and emergency plan) would be developed in consultation with the Yakima County Sheriff's Office, Yakima County Fire Marshal, and East Valley Fire Department.

Mitigation: No additional mitigation measures for public services identified.

17. UTILITIES

- Approximately 50,000 gallons per day was identified as being needed for construction activities such as dust control. Water would be trucked in during construction from an off-site source. The City of Moxee has indicated they can provide 50,000 gallons per day for construction (Attch Q).
- For operations, a well could be installed on the property to supply water for the project. If a well is not installed, water would be trucked in through an existing permitted source and stored in an on-site water tank.
- Water would be trucked in for washing photovoltaic panels.
- If an Operations and Maintenance building is constructed an on-site wastewater disposal system would be installed on-site.

Mitigation: Prior to construction, an approved source of water with enough legally available water to supply the needed amount for construction and continued operation would be identified and confirmed via a contract or certificate of availability for the following project water uses:

- 50,000 gallons per day for construction (Letter of Availability provided by City of Moxee);
- up to 250,000 gallons of water 2-4 times per year during operation for photovoltaic panel washing, site maintenance; and
- potentially additional water for domestic use and maintenance activities during operation.

Cumulative Effects:

<u>Wildlife movement/habitat connectivity</u>. Large, fenced areas, such as multiple solar facilities have the potential to adversely affect wildlife movement. Each solar project can cover hundreds to thousands of acres. The Goose Prairie Solar project would cover up to 625 acres and proposes to fence 3 smaller array areas in order to provide some habitat connectivity through the site and maintain connectivity with adjacent sites. In general, the site provides local connectivity functions and value. Some wildlife movement would be able to occur both between and around the Goose Prairie solar arrays, although within the fences the character of the land would be altered to a more industrial setting and could discourage movement between the fenced areas of some larger species. This project alone would not likely substantially affect wildlife movement.

In regard to movement and connectivity for small animals, raising the fence 4 inches from the ground (proposed for the Goose Prairie project) would allow small animals to move freely within or outside the fences areas.

If additional projects which fence large areas occur, wildlife movement and connectivity could be more substantially affected. Creating protected wildlife corridors connecting Yakima Ridge (Yakima Training Center area) and Rattlesnake Ridge (Department of Energy; Hanford Site), north to south would sustain

vital connected core habitat areas in the Black Rock landscape. Additional wildlife corridors could be identified and protected as mitigation for future large, fenced projects in this rural area. (WDFW 6/21/2021)

C. APPLICABLE SEPA RULES

Mitigated Determination of Nonsignificance (DNS).

WAC 197-11-350 specifies when a Mitigated DNS is issued.

WAC 197-11-350. (3) Whether or not an applicant requests early notice under subsection (2), if the lead agency specifies mitigation measures on an applicant's proposal that would allow it to issue a DNS, and the proposal is clarified, changed, or conditioned to include those measures, the lead agency shall issue a DNS.

Comment period

WAC 197-11-340 identifies 5 circumstances when a 14-day comment period is required.

WAC 197-11-340 (2) (a) An agency shall not act upon a proposal for fourteen days after the date of issuance of a DNS if the proposal involves:

iv) a DNS under WAC 197-11-350 (2), (3) or 197-11-360(4)

Consistent with WAC 197-11-350, EFSEC has identified conditions that would allow it to issue a DNS, or the applicant has clarified or changed their proposal to include additional measures that allow EFSEC to issue a DNS. The DNS should be identified as mitigated and a 14-day comment period should be provided.

Nothing in this environmental review or the associated SEPA Mitigated DNS shall preclude further review or conditioning of future development proposals for the subject property.

I have reviewed and considered the referenced material in Part A for Goose Prairie Solar. I have identified no probable significant adverse environmental impacts if the mitigation measures identified in part B are included in a DNS and in the Site Certification Agreement. I hereby recommend a Mitigated Determination of Nonsignificance with a 14-day public comment period.

	_	06/24/2021
Amí Kidder	Date	
EFSEC Siting and Compliance Manager		

Attachment 1: Figure 2-2 Regional Context Map

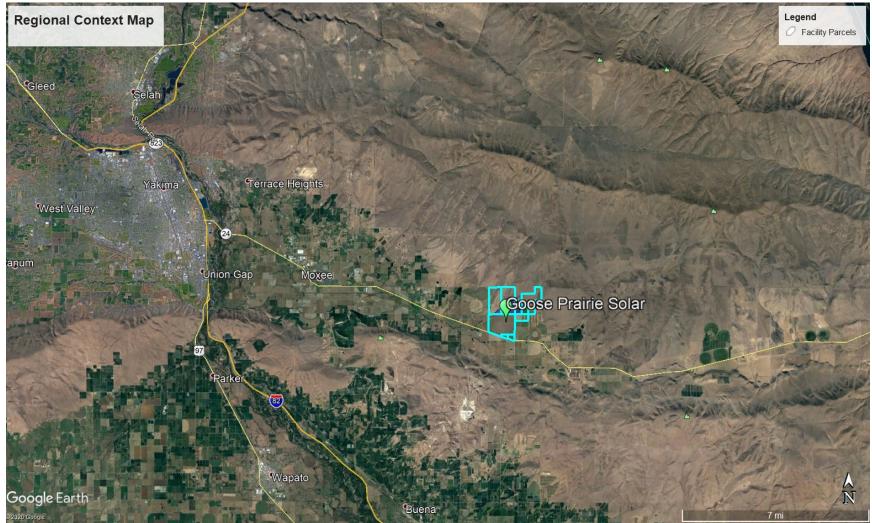


Figure 2-2: Regional Context Map