Final Environmental Impact Statement

Horse Heaven Wind Farm

Executive Summary

October 2023

Table of Contents

TABLES

FIGURES

ATTACHMENTS

This Page Intentionally Left Blank

EXECUTIVE SUMMARY

Horse Heaven Wind Farm, LLC (Applicant) is proposing to construct and operate the Horse Heaven Wind Farm (Project, or Proposed Action) in unincorporated Benton County, Washington, within the Horse Heaven Hills area. The Washington State Energy Facility Site Evaluation Council (EFSEC) is the state agency responsible for evaluating and making recommendations to the governor on the approval or denial of certain major energy facilities in Washington. This includes voluntary applicants, as in the case of the proposed Project.

ES-1 Purpose of this Environmental Impact Statement

During the site certification process, EFSEC reviewed the Application for Site Certification[1] (ASC) and is serving as the "lead agency" responsible for complying with the Washington State Environmental Policy Act (SEPA) procedural requirements (Washington Administrative Code [WAC] 463-47). EFSEC prepared this Environmental Impact Statement (EIS) under SEPA with the assistance of an independent consultant and cooperating state agency support, reviewing all Applicant-prepared information and analyses in the ASC and conducting additional analyses as needed during preparation of this EIS.

ES-2 Proposed Action and Alternatives

ES-2.1 Proposed Action: Horse Heaven Wind Farm Project

The Project would consist of a renewable energy generation facility that would have a nameplate generating capacity[2] of up to 1,150 megawatts[3] for a combination of wind and solar facilities, up to two battery energy storage systems (BESS), and other Project components, including underground and overhead electrical collection lines, transmission lines, underground communication lines, new Project substations, access roads, operations and maintenance facilities, and meteorological towers.

At its closest point, the Project would be located approximately 4 miles south/southwest of the City of Kennewick and the larger Tri-Cities urban area, along the Columbia River. **Figure ES-1** shows the Project Lease Boundary and Project vicinity. The Project's Lease Boundary (approximately 72,428 acres) incorporates all of the parcels for which the Applicant has executed a lease to construct the turbines, solar arrays, and associated facilities.

The Project's Wind Energy Micrositing Corridor encompasses 11,850 acres within the Lease Boundary and is defined as the areas where the turbines and supporting facilities would be sited during the final design. As shown in **Table ES-1**, the Applicant in the Final ASC seeks authorization for up to 231[4] turbine locations. The analysis presented in the EIS includes both the maximum number of turbines (244) and the maximum turbine height (671 feet), as stated in the 2022 ASC (Horse Heaven Wind Farm, LLC 2022) and the amended request of 231 turbines presented in the Final ASC (Horse Heaven Wind Farm, LLC 2023). The analysis was performed for Turbine Option 1 and Turbine Option 2, and, for the purpose of analyzing the maximum footprint and impact, the EIS assumes that the road disturbance associated with Turbine Option 1 and Turbine Option 2 would be identical.

[1] An Application for Site Certification (ASC) is a formal submittal prepared by an applicant that provides EFSEC with information regarding the Applicant, the proposed project design and features, the natural environment, and the built environment in sufficient detail to enable EFSEC to go forward with its application review.

[2] Nameplate generating capacity is the amount of electricity a generator can produce when running at its maximum designed output.

[3] Since the initial ASC was submitted to EFSEC in February 2021, BPA has allowed interconnection requests that facilitate greater installed aggregate nameplate generating capacity. This is a result of newer equipment being more efficient than what was intended for installation at the facilities during design and permitting. Irrespective of BPA's change in policy, the maximum number of wind turbines, solar arrays, and BESS would not exceed what is presented in the Final ASC and analyzed in the EIS.

[4] Reflects the reduction in turbines from 244 turbines to 231 turbines for Option 1 and 150 to 147 for Turbine Option 2 proposed in the Final ASC (Horse Heaven Wind Farm, LLC 2023).

Table ES-1: Proposed Action - Wind Turbines

	Turbine Option 1	Turbine Option 2
Wind Turbines	231[a] turbines up to a maximum blade tip height of 499 feet[b]	147[a] turbines up to a maximum blade tip height of 671 feet[b]
Temporary Disturbance	1,014 acres[c]	
Permanent Disturbance	28 acres[d]	
Lease Boundary	72,428 acres	

Source: Table 2.1-1 and Table 2.3-1 of the Final ASC, Horse Heaven Wind Farm, LLC 2023
Note:
[a] Reflects the reduction in turbines from 244 turbines to 231 turbines for Option 1 and 150 to 147 for Turbine Option 2 proposed in the Final ASC (Horse Heaven Wind Farm, LLC 2023).
[b] As proposed in the Final ASC.
[c] As proposed in the Final ASC, the acreage reflects the reduction in turbines from 1,070 acres of temporary disturbance to 1,014 acres of temporary disturbance (Horse Heaven Wind Farm, LLC 2023).
[d] This value, specific to turbine-only disturbance, does not include supporting infrastructure, which is identified in Table 2-2 of this EIS. As proposed in the Final ASC, the acreage reflects the reduction in turbine disturbance from 30 acres of permanent disturbance to 28 acres of permanent disturbance (Horse Heaven Wind Farm, LLC 2023).

The Project's Solar Siting Areas, which include three locations under consideration for the proposed solar arrays, encompass 10,755 acres within the Lease Boundary. **Table ES-2** presents the temporary and permanent disturbance acreage for the solar siting and supporting infrastructure for the wind and solar facilities. Although this EIS analyzes the maximum impact acreage requested in the 2022 ASC and the reduced acreages presented in the Final ASC, the disturbance acreage presented in **Table ES-2** is based on the Final ASC. The wind energy components would be combined with the solar arrays, BESS, and other infrastructure to provide solar and wind energy.

Table ES-2: Proposed Action - Solar Siting and Supporting Infrastructure for Wind and Solar Facilities[a]

	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Solar Arrays in Fields		
East Solar Field[a]	12	639
County Well Solar Field	18	2,641
Sellards Solar Field	22	1,935
Total Disturbance Acreage of Solar Arrays in Fields	**52**	**5,215**
BESS[b]		
BESS adjacent to the Bofer Canyon - HH-East Substation	1	16
BESS adjacent to the Primary HH-West Step-Up Substation		
BESS adjacent to the Alternate HH-West Step-Up Substation		
Substations		
HH-East Substation	1.9	27
HH-West Substation		
HH-West Solar Substation and Switchyard		
HH-West Solar Switchyard		

Table ES-2: Proposed Action - Solar Siting and Supporting Infrastructure for Wind and Solar Facilities[a]

	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Supporting Infrastructure		
Roads,[c] Crane Paths[a], Laydown Yards[d], O&M Facilities, Met Towers	580.8[e]	185.5
Collector Lines		
Overhead	0.5[e]	<0.01
Underground	787[e]	0.06
Transmission Lines		
230 kV	235	0.02
500 kV	12[e]	<0.01
Total Disturbance Acreage of Supporting Infrastructure	**1,618.2**	**228.6**

Source: Table 2.1-1 of the Final ASC, Horse Heaven Wind Farm, LLC 2023

Note: For new and unevaluated components to be included as part of the Project, supplemental analysis would be required prior to EFSEC authorization.

[a] Updated acreage reflects the reduction in disturbance proposed in the Final ASC (Horse Heaven Wind Farm, LLC 2023).

[b] The Applicant provided three locations for consideration to construct two BESS.

[c] Includes new access roads and road modification (turning radius widening). This EIS assumes that road disturbance would be identical under both Option 1 and Option 2.

[d] In the Applicant's Final ASC, a third laydown yard was proposed to the north and outside of the Project Lease Boundary. Additionally, the western laydown yard was proposed outside of the micrositing corridor. The proposed disturbance for these laydown yards has been omitted from analysis within this EIS.

[e] Additional disturbance was proposed in the Applicant's Final ASC. Calculations of specific elements, omitting newly proposed disturbance, were completed independently using the spatial layers provided by the Applicant (Horse Heaven Wind Farm, LLC 2023). Newly proposed disturbance has been omitted from analysis within this EIS.

ASC = Application for Site Certification; BESS = battery energy storage system; EIS = Environmental Impact Statement; HH = Horse Heaven; kV = kilovolt; met tower=meteorological tower; O&M = operations and maintenance

This Page Intentionally Left Blank

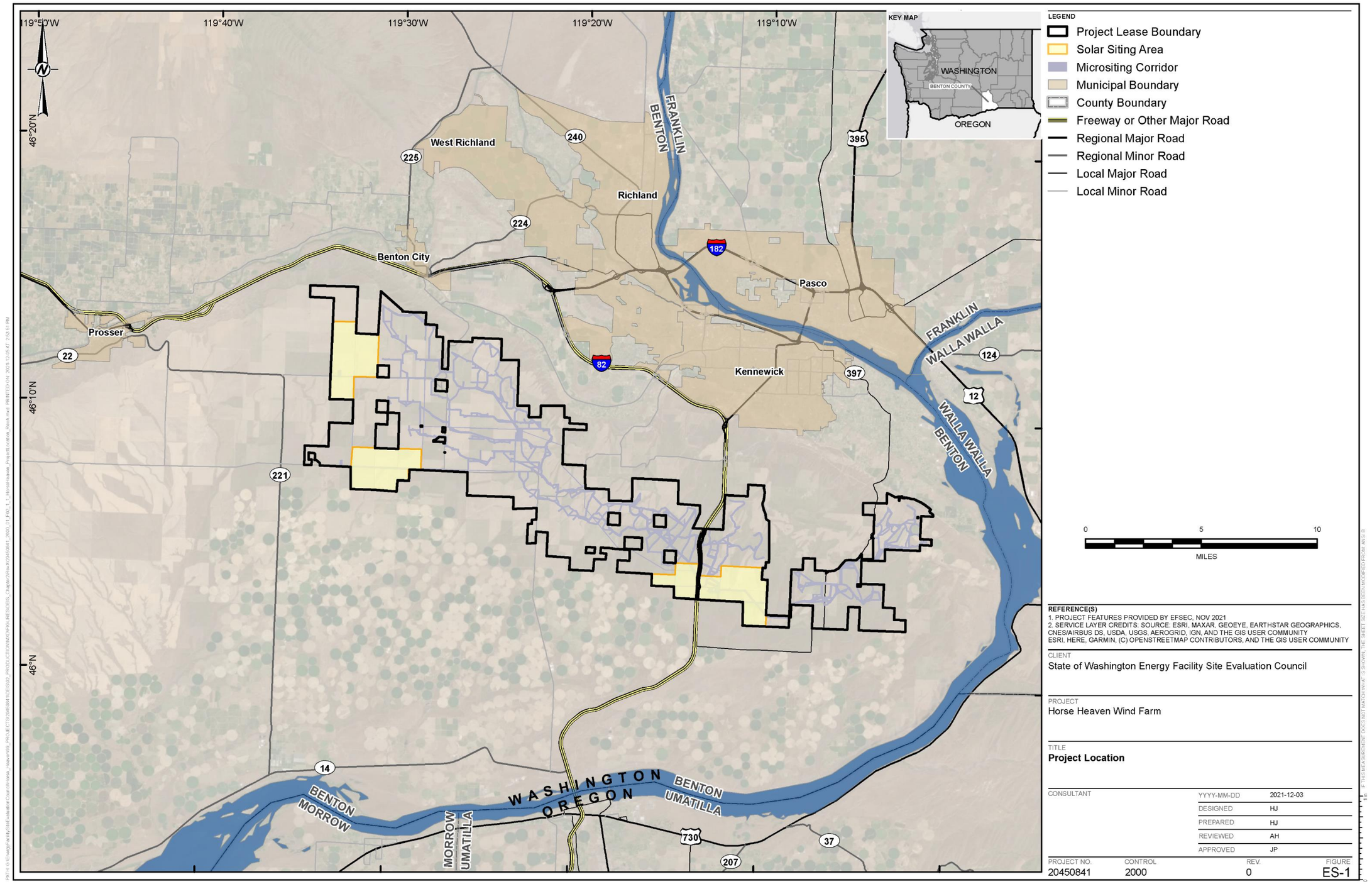

Figure ES-1: Project Lease Boundary and Project Vicinity

ES-2.2 Alternatives to the Proposed Action

Several alternatives were considered for analysis but were eliminated from detailed evaluation in the EIS because they would not generate the designed nameplate generating capacity required by the Applicant. The No Action Alternative was carried forward for analysis in the EIS. Under the No Action Alternative, the Project would not be constructed or operated, power would not be supplied by the Project, and the potential environmental impacts associated with the Project would not occur. As part of the No Action Alternative, existing agricultural use in the Lease Boundary would continue without interruption.

ES-3 Environmental Impact Analysis

ES-3.1 Approach to Impact Assessment

This EIS identifies impacts from the Proposed Action and the potential environmental impacts associated with the No Action Alternative. “Impacts” are the effects or consequences of actions (WAC 197-11-752) upon the environmental resources listed in ES-3.2. For example, an impact from grading during construction could result in the production of fugitive dust. The dust would then have the potential to affect various nearby resources such as surface waters, where it could contribute to nutrient loading, or, if it landed on neighboring vegetation, could smother, and kill the plants. In accordance with SEPA, this EIS weighs the likelihood of occurrence with the severity of an impact (WAC 197-11-794) and considers several factors when analyzing potential impacts.

This EIS presents an analysis of impacts for each of the three Project stages (i.e., pre-construction and construction, operation, and decommissioning) on the elements of the environment identified in ES-3.2. The impacts associated with the Proposed Action and under the No Action Alternative are described quantitatively if sufficient data or information were available to do so.

When detailed information was not available and that information was not essential to determining the level of adverse environmental impacts, impacts are described qualitatively. To characterize potential impacts, this analysis considers existing laws and regulations, conservation measures, and best management practices proposed by the Applicant in the 2022 ASC to avoid or reduce potential impacts at each Project stage. Following submittal of the 2022 ASC, the Applicant prepared a list of Post-Adjudication Applicant Commitments that are presented in the Final ASC. Impacts for each resource evaluated in Chapter 4 were re-analyzed with consideration of the anticipated effectiveness of the Post-Adjudication Applicant Commitments. If the Post-Adjudication Applicant Commitments were deemed to be effective in reducing the impact rating, the corresponding impact rating was modified to reflect the change. Further Applicant Commitments were provided subsequent to the Final ASC. Due to the late submittal of these post-Final ASC commitments, they were not incorporated into the EIS analysis, but are available to the EFSEC Council for consideration in their deliberations. Three types of environmental impacts are described in the EIS:

Direct impacts: These are the effects of an action (i.e., construction, operation and maintenance, or decommissioning) on a resource that occur at the same time and place as the action. An example of a direct impact would be increased noise levels experienced by residents living near a construction site.

Indirect impacts: These are impacts that are similar to direct impacts in that they are caused by an action; however, they occur later in time or further from the activity causing the impact. An example of an indirect impact would be a decline in numbers of a wildlife species due to fragmentation of that species’ habitat by installation of fencing.

Cumulative impacts: These are the combined results of incremental direct and indirect impacts on resources from a project or plan, past and present actions, and other reasonably foreseeable developments. An example of a cumulative impact would be if increased runoff and contaminants from construction were added to the volumes and levels of contamination from similar development projects surrounding the same wetland.

The EIS presents the discussion of impacts that could result from the comprehensive Project and the various individual components (e.g., Turbine Option 1, Turbine Option 2, solar arrays and supporting infrastructure). An analysis of the comprehensive Project evaluates the full extent of the Proposed Action's impacts. The additional information obtained from the various individual components can identify which, if any, components would contribute to a medium or high impact and will assist in further examination of possible options to mitigate the impact of those components and, ultimately, reduce the impact of the comprehensive Project.

ES-3.2 Environmental Resources Analyzed

The following resources of the built and natural environment are characterized for existing conditions and analyzed for potential impacts:

- Earth Resources (including seismic hazards)
- Air Quality
- Water Resources
- Vegetation
- Wildlife and Habitat
- Energy and Natural Resources
- Land and Shoreline Use
- Historic and Cultural Resources
- Visual Aspects, Light and Glare
- Noise and Vibration
- Recreation
- Public Health and Safety
- Transportation
- Public Services and Utilities
- Socioeconomics

ES-3.2.1 Special Studies

During the preparation of the EIS, EFSEC asked its independent contractor to prepare special studies related to collision risk of birds and bats with wind turbines and the visual impacts of turbines for the two turbine options (Turbine Option 1 and Turbine Option 2) described in ES-2.1. The following special studies are included as appendices to this EIS:

The Wind Turbine Wildlife Collision Risk Assessment: Horse Heaven Wind Farm: This special study, presented as Appendix 4.6-1 of the EIS, compares the potential bird and bat collision risk associated with each turbine option. The information and conclusions presented in the study are based on existing information collected during the Proposed Action's baseline studies and a review of published scientific literature pertaining to bird and bat interactions with wind turbines (GAL 2022).

Horse Heaven Wind Farm Project Final Visual Impact Assessment Report: This special study, presented as Appendix 3.10-2 of the EIS, focuses on potential visual impacts resulting from modification of the landscape and the response of viewers to those features. Additionally, the study analyzes whether the Proposed Action would be consistent with and comply with state and local visual resource guidance. The

information contained in the special study report was provided by the Applicant and supplemented with publicly available data where necessary. Information and conclusions presented in the special study focused on the introduction of the Proposed Action into the setting and characterization of long-term modifications to the existing landscape's form, line, color, and texture (SWCA 2023).

ES-3.3 Impacts from the Proposed Action for Which EFSEC Identified Mitigation and/or Significance

Mitigation measures can be implemented to reduce impacts associated with the construction, operation and maintenance, and decommissioning of the Project. **Attachment ES-3-1** presents a comprehensive list of EFSEC identified Mitigation Measures. Such measures may be imposed by EFSEC pursuant to their authority under Revised Code of Washington (RCW) 80.50 or through the use of their SEPA "substantive authority," which provides the ability to condition or deny a proposal based on identified environmental impacts (WAC 197-11-660).

Mitigation measures put forth by EFSEC in this EIS are identified by an abbreviation of the affected resource and sequential numbering system. If the same mitigation measure is recommended to address impacts to another resource later in the EIS, the mitigation measure retains its initial unique identifier. For example, mitigation measure ENR-5 is first recommended in the analysis of Energy and Natural Resources. ENR-5 is subsequently presented as a recommended mitigation measure to address impacts to Public Services and Utilities.

Taking mitigation into account, each impact identified in this EIS is categorized as significant or nonsignificant. **Tables ES-3 and ES-4** described below and attached to this Executive Summary as **Attachment ES-3-2** provide a summary of the impacts identified in this EIS:

Tables ES-3 (a, b, & c) summarize the impacts identified for each element of the environment (see Section ES-3.2 above for the complete list). The impacts are presented in respect to the comprehensive Project, mitigation identified by EFSEC, and the determination of significant unavoidable impacts that may occur during the construction, operation, and decommissioning of the Project. Impacts identified with a medium to high magnitude of impact are highlighted in light blue.

Tables ES-4 (a, b, & c) summarize the impacts identified for each element of the environment (see Section ES-3.2 above for the complete list). The impacts are presented in reference to Project components (Turbine Option 1, Turbine Option 2, solar arrays, BESS, and substations), mitigation identified by EFSEC, and the determination of significant unavoidable impacts that may occur during the construction, operation, and decommissioning of the Project. Impacts identified with no mitigation and with a negligible to low magnitude of impact were not included in these tables. Impacts identified with a medium to high magnitude of impact are highlighted in light blue. All impacts, including negligible and low magnitude impacts are included in the tables at the end of each resource Section 4.

EFSEC is the State of Washington agency that is responsible for making the decision about whether a potential impact is significant. "Significant" in SEPA means a reasonable likelihood of more than a moderate adverse impact on environmental quality. An impact may also be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred. This EIS weighs the likelihood of occurrence with the severity of an impact (WAC 197-11-794) when determining the significance of identified potential impacts (WAC 197-11-330 and WAC 197-11-794). "Significant unavoidable impacts" are impacts that remain significant, even after all measures committed to by the Applicant and mitigation recommended by EFSEC have been applied.

ES-3.4 Cumulative Impacts

When impacts are assessed for an individual proposed action, they may be determined less than significant, but when considered collectively (cumulatively) with the impacts of other actions, especially over a period of time, they can be significant (40 Code of Federal Regulations 1508.7). SEPA requires that agencies address cumulative impacts.

Cumulative impacts are the combined result of incremental direct and indirect impacts on resources of concern from a project or plan, past and present actions, and other reasonably foreseeable developments. Reasonably foreseeable developments generally include actions that are currently underway, formally proposed or planned, or highly likely to occur based on available information. The EIS identifies past, present, and reasonably foreseeable future developments that could interact with resources impacted by the Proposed Action and analyzes the potential for cumulative impacts.

Information about direct and indirect impacts of past and present actions is useful in identifying and predicting the level of impact a proposed action might have on the natural or built environment. However, the impacts of past actions may have no cumulative relationship to the impacts of a proposed action. To fully evaluate cumulative impacts, it is necessary to assess the type and extent of a proposed action's impacts and how the project and its alternatives would add to, modify, or mitigate impacts from past actions. In accordance with Council on Environmental Quality (CEQ) guidance, this cumulative impact analysis focuses on the current aggregate impacts of past actions without delving into the historical details of individual past projects (CEQ 2005).

Table ES-5 presents the resources that the Proposed Action would cumulatively impact in a meaningful way. It describes the direct or indirect impact that the Proposed Action would have for each resource, and whether that impact would be significant. It then identifies whether cumulative impacts to that resource have been identified from past and present actions and RFDs. Finally, it indicates whether the impact from the Proposed Action would make a meaningful contribution to a cumulative impact when combined with past and present actions and RFDs.

Table ES-5: Summary of Significance Determinations and Cumulative Impact

Section	Topic	Description of Impact from the Proposed Action	Significant Direct or Indirect Impact from the Proposed Action	Cumulative Impacts from Past and Present Actions and RFDs	Proposed Action Meaningfully Contributes to a Cumulative Impact
Vegetation	Priority Habitat	Loss and degradation of Priority Habitat	No	**Yes**	**Yes**
Vegetation	Special Status Plant Species	Loss and isolation of special status plant species	No	**Yes**	**Yes**
Wildlife and Habitat	Habitat Loss	Habitat loss and degradation	No	**Yes**	**Yes**
Wildlife and Habitat	Barriers to Movement and Fragmentation	Fencing as a barrier to movement and fragmentation of habitat due to Project footprint	No	**Yes**	**Yes**
Wildlife and Habitat	Wildlife Mortality	Mortalities from wildlife-vehicle collisions or turbine strikes	No	**Yes**	**Yes**
Wildlife and Habitat	Special Status Species	Loss of special status species from mortalities or loss or degradation of habitat	No	**Yes**	**Yes**
Historic and Cultural Resources	Archaeological Resources	Partial or complete loss of archaeological resources	**Yes**	**Yes**	**Yes**
Historic and Cultural Resources	Traditional Cultural Properties	Partial or complete loss of traditional cultural properties and resources	**Yes**	**Yes**	**Yes**
Visual Aspects, Light and Glare	Visual Aspects	Turbines would dominate the existing landscape and viewshed.	**Yes**	**Yes**	**Yes**
Visual Aspects, Light and Glare	Light and Glare	Security lighting would introduce sources of light and glare	No	**Yes**	**Yes**
Noise and Vibration	Noise	Noise from construction and Project components during operation.	No	**Yes**	**Yes**
Noise and Vibration	Vibration	Vibration during construction and decommissioning	No	No	No
Recreation	Recreation - Use	Reduction in access to available recreation lands	No	**Yes**	**Yes**
Recreation	Recreation – Public Health and Safety	Health and safety of paragliders and hang gliders	**Yes**	**Yes**	**Yes**
Transportation	Traffic Volume	Increased traffic volume from construction and decommissioning	No	**Yes**	**Yes**
Transportation	Level of Service	Decreased level of service for motorists, particularly at intersections close to Project	No	**Yes**	**Yes**
Transportation	Roadway Safety	Safety of motorists due to the presence and movement of heavy vehicles	No	**Yes**	**Yes**

ES-4 Key Issues Resolved from the Draft EIS

ES-4.1 Additional Analysis Completed

ES-4.1.1 Air Quality for Construction and Decommissioning

For the Draft EIS, the air quality environmental impact analysis was based on two phases of construction, which would reduce the amount of construction equipment operating at one time as compared to constructing all components in one phase. The Applicant provided air emission information based on the assumption that the Project would be constructed based on this two phase assumption (see Section 2.15 of the 2022 ASC).

For the final version of the EIS, supplemental emission calculations and air quality dispersion modeling was prepared by the Applicant in 2023. The two-phased approach to construction remains in the EIS and underlying air quality modeling. With the incorporation of additional air quality data, the EIS provides an updated air quality impact analysis based on computer dispersion modeling of concrete batch plant and emergency generator emissions, including a worst-case set of assumptions that captures the Applicant's desire for flexibility in overlapping construction activities.

ES-4.1.2 Transportation Impact Analysis

For the Draft EIS, transportation impacts for the Project were evaluated based on two phases of construction with limited information on haul routes and vehicle traffic. The Applicant prepared a Traffic Impact Analysis (TIA) for their Final ASC that provides supplemental information on the Project's impact on traffic conditions, road conditions, and safety (Horse Heaven Wind Farm, LLC 2023). The Applicant's TIA was developed in consultation with representatives from the Washington State Department of Transportation (WSDOT) South Central Region. The study evaluates existing and future traffic operations (with and without the proposed Project) at 29 existing intersections and the proposed site driveways serving two laydown areas and 10 roadway segments serving the Project site.

The study provided an analysis of roadway and intersection capacity during the weekday morning and weekday evening peak hours when the combination of existing traffic on the surrounding area roadways and new traffic associated with peak construction activity of the Project is expected to be greatest. The Applicant indicated that the turbines would be hauled from southern Washington, along I-82, to an interim laydown yard, outside of the Project Lease Boundary. The Applicant has not provided an analysis of the haulage of turbines from the interim laydown yard to the two laydown yards analyzed in this EIS. With the incorporation of the additional information provided in the Applicant's TIA, the EIS provides an updated analysis of impacts and mitigation for transportation.

ES-4.2 Significant Impacts Worst Case Analysis

ES-4.2.1 Cultural Resources

SEPA directs EFSEC to analyze adverse environmental impacts on cultural resources caused by the proposed Project. A third-party consultant has completed cultural resource investigations and inventory reports of both private land and Washington Department of Natural Resource-administered land within the Project Lease boundary. The Project would impact Traditional Cultural Properties (TCPs) that include but are not limited to spiritual sites, traditional use sites, and the specific geographic availability of foods and medicines. The Yakama Nation has stated that several TCPs would be impacted by the proposed Project. Furthermore, the Yakama Nation has indicated to the third-party consultant that a documented archaeological resource located within the Project Lease Boundary is directly associated with a TCP. Tribal coordination is currently ongoing and would continue through Project completion. The Yakama Nation has provided a map identifying impacts that Project components would have on TCPs that will be supplied to the EFSEC Council under separate cover in order to

maintain the confidentiality of Yakama Nation information. As allowed by RCW 43.21C.405(6), this map will not be displayed within the EIS due to its inclusion of confidential information. Any information on TCPs in the Project area and vicinity will remain confidential and will not be available to the public. In the meantime, EFSEC is required to include a worst-case analysis of adverse environmental impacts and likelihood of occurrence (WAC 197-11-080). A number of impacts on cultural resources, including TCPs, are identified as significant.

ES-4.3 Impacts and Mitigation Affecting Multiple Resources

ES-4.3.1 Wildlife, Cultural Resources, Visual Resources

Individual turbines may cause impacts on multiple resources such as cultural, visual, and/or wildlife resources. Figures illustrating turbines with impacts to multiple resources have been prepared for EFSEC and its Council members for review. The figures are intended to provide EFSEC and its Council members with information that could be used in the identification of specific turbines that have multiple impacts. Based on location and magnitude of impact, the Council could require additional mitigation including the removal or relocation of specific turbines within the Micrositing Corridor. Chapter 2 of the EIS includes a redacted version of the figures that are for illustrative purposes only and do not indicate the specific location of any sensitive or protected resource.

ES-4.3.2 Vegetation, Wildlife and Habitat

The EIS identifies loss of Priority Habitats, loss of wildlife habitat, degradation of habitat (e.g., indirect habitat loss), wildlife mortality, and creation of barriers to movement and habitat fragmentation as potential impacts to vegetation, wildlife, and habitat. The extent of these impacts may vary depending on the proximity of individual turbines to sensitive habitats (e.g., nests, Priority Habitats, movement corridors), height of the turbines, and siting of ancillary components.

EFSEC has identified mitigation measures, in addition to Applicant-identified commitments, to reduce impacts on vegetation, wildlife, and habitat. For vegetation, EFSEC has recommended mitigation measures to avoid and reduce impacts on trees and special status plants by requiring that these features be avoided, and additional pre-disturbance surveys be conducted. Further, EFSEC has recommended that an as-built report and offset calculation be provided once construction is complete.

For wildlife and habitat, these mitigation measures include the establishment of a Pre-Construction Technical Advisory Group and a Technical Advisory Committee (TAC) to review and provide input to pre-construction surveys, post-operation monitoring, and implementation of mitigation measures. Additionally, EFSEC has identified measures to avoid sensitive features and habitats, develop wildlife and habitat specific management plans (e.g., Indirect Habitat Loss Management Plan), and conduct additional pre-construction and post-operation surveys to inform the final design and monitor changes in species abundance and richness through operation. Due to the interconnected relationship between vegetation and wildlife and habitat, recommended mitigation measures for each of these resources has the potential to address impacts from the Proposed Action to the other.

ES-4.3.3 Energy and Natural Resources, Public Services and Utilities

There are mitigation measures for retrieving and recycling as much of the natural resources used in construction and operation of the Project as possible. For example, throughout the Project's lifecycle, the Applicant would recycle all components of the Project that have the potential to be used as raw materials in commercial or industrial applications. Similarly, to reduce the amount of water necessary to operate the Project, the Applicant would capture and recycle wash water during the operations stage. These mitigation measures would reduce the amount of waste that would be sent to sewage and solid waste treatment facilities, thereby serving as useful mitigation for both resource areas.

ES-4.4 Non-Significant Impacts but Are Issues of Concern That Warrant Discussion

ES-4.4.1 Curtailment and Exclusion of Turbines to Address Impacts on Ferruginous Hawk

The EIS identifies potential impacts on ferruginous hawk habitat and populations through loss of habitat and potential mortality from collision with wind turbines. As these impacts could result in a high-magnitude impact on ferruginous hawks, EFSEC proposes additional mitigation measures specific to avoiding and reducing Project-related impacts on ferruginous hawks, including exclusion of turbines within core ferruginous hawk habitat and curtailing turbine operation while ferruginous hawks are present. Specifically, mitigation measures for ferruginous hawks would require avoiding siting Project components within 2 miles of ferruginous hawk nests documented in PHS data and reported by the Applicant in the 2022 ASC (Horse Heaven Wind Farm, LLC 2022) to preserve foraging habitat. The Applicant would be required to demonstrate that the nest site and foraging habitat is no longer available to the species prior to siting turbines within 2 miles of a known ferruginous hawk nest. Where siting features within 2 miles of a known, but no longer viable, ferruginous hawk nest is accepted, the mitigation measure would require using options, such as turbine curtailment to reduce potential strikes with ferruginous hawks, in core habitat while nests are active (i.e., during the breeding season). The extent to which ferruginous hawk mitigation may be implemented will be informed by the final Project layout and field data on ferruginous hawk presence and habitat use of the Lease Boundary collected through pre-construction monitoring programs.

ES-4.4.2 Loss of Priority Habitat

The EIS identifies potential impacts on Priority Habitat. These impacts are concentrated within the areas of the Micrositing Corridor and East Solar Field. Impacts to Priority Habitat include:

Permanent disturbance[5] of 72.5 acres of Eastside (interior) grassland and temporary disturbance[6] of 16.2 acres. Eastside (interior) grassland is Class III Priority Habitat.

Permanent disturbance of 1.1 acres of dwarf shrub-steppe and temporary disturbance of 8.9 acres. Dwarf shrub-steppe is Class II Priority Habitat.

Permanent disturbance of 1.4 acres of sagebrush shrub-steppe and temporary disturbance of 31.4 acres. Sagebrush shrub-steppe is Class II Priority Habitat.

Permanent disturbance of 717.2 acres of rabbitbrush shrubland and temporary disturbance of 152.3 acres. While rabbitbrush shrubland is not explicitly stated as a Class II habitat, the Applicant has agreed to consider this a Class II habitat based on discussions with the Washington Department of Fish and Wildlife (WDFW).

Priority Habitats are areas of conservation concern and have experienced continuous loss and degradation from anthropogenic development in Washington. As temporary and permanent impacts would result from the Project, EFSEC proposes additional mitigation measures specific to offsetting impacts on Priority Habitat. Specifically, an as-built report and offset calculation would be required by the Applicant and would indicate the final temporary and permanent disturbance of Priority Habitat listed above and calculation of offsets required based on final temporary, permanent, and modified habitat impacts. EFSEC would determine the number of years that vegetation monitoring of temporary disturbance and modified habitat would be conducted and the success criteria

[5] Permanent disturbance is defined as habitat loss that would persist throughout the life of the Project and would not be restored when construction is complete (WDFW 2009).
[6] Temporary disturbance is defined as habitat loss that would end when construction is complete and the area would be restored to pre-construction conditions (WDFW 2009).

for revegetation. The success criteria would include measurable parameters that the Applicant would apply to determine whether successful revegetation has occurred. In addition, a Detailed Site Restoration Plan has been recommended to provide the Revegetation Plan to be undertaken during decommissioning. The Detailed Site Restoration Plan would include provisions for adaptive management and would be updated based on lessons learned from implementing the Applicant's Revegetation Plan. These documents and associated monitoring reports provide a means to determine the effectiveness of revegetation and offset treatments. Chapter 4.5 Vegetation, Table 4.5-11 presents a summary of the habitat offset ratios provided by the Applicant in Appendix L (Habitat Mitigation Plan) of the Final ASC.

ES-4.5 Other Agencies or Interested Parties Cooperation to Implement Mitigation

Recommended mitigation measures TR-5 and TR-7 would involve the cooperation of other agencies to implement the required actions. Similarly, recommended mitigation measure CR-2 would involve discussions with affected Tribes (e.g., Yakama Nation). This could provide more detailed information about the impacts and potential mitigation. EFSEC will work with the identified agencies, affected Tribes, or interested parties to facilitate cooperation in implementing identified mitigation measures. As EFSEC cannot require actions from other agencies or tribes within its mitigation, these mitigation measures should not be seen as fully effective. The mitigation measures referenced above are defined in Sections 4.14 and 4.9 as follows:

TR[7]-5: The analysis of impacts from decommissioning is based on existing laws and regulations at the time when the Final ASC was submitted to EFSEC. The Applicant would consult with WSDOT and Benton County on the development of a Decommissioning-Stage Traffic and Safety Management Plan, prior to decommissioning. The Traffic and Safety Management Plan must include a safety analysis of the WSDOT-controlled intersections (in conformance with the WSDOT Safety Analysis Guide) and recommend mitigation or countermeasures where appropriate. The analysis would review impacts from decommissioning traffic and be submitted to WSDOT for review and comment prior to decommissioning. Since this measure would require the participation of other agencies before it could be implemented, it cannot be considered fully effective mitigation for the purpose of this analysis. EFSEC would work with the identified agencies to facilitate.

TR-7: Coordinate with WSDOT, Benton County, and EFSEC prior to construction and prior to decommissioning on potential mitigation for intersections with safety concerns. Mitigation may include the installation of warning signs, rumble strips, or other measures to alert motorists of intersections.

CR[8]-2: Archaeological and Architectural Resources Mitigation: Table 4.9-9 of Section 4.9 sets out proposed mitigation measures for historic and cultural resources potentially impacted by the Project. Any mitigation strategies should be detailed in an agreement document between EFSEC, Washington State Department of Archaeology and Historic Preservation (DAHP), the Tribes, and the Project proponent.

Mitigation measures are intended to minimize impacts on historic and cultural resources with elevated sensitivity (precontact archaeological resources, National Register of Historic Places (NRHP)-eligible historic-period archaeological resources, TCPs, and unidentified historic and cultural resources), primarily through avoidance. If avoidance is not possible, the mitigation clarifies which resources would require a

[7] TR-: Identifier of numbered mitigation item for Transportation

[8] CR-: Identifier of numbered mitigation item for Cultural Resources

DAHP permit prior to disturbance. Mitigation measures also identify instances where engagement with DAHP, Tribes, and/or landowners would be required.

ES-4.5.1 Adjudication

EFSEC's siting process requires hearings on the proposed project to allow the Applicant and other qualified interested parties to present expert witness testimony to support their concerns regarding the proposed project. EFSEC as required by law must conduct these hearings as formal adjudicative proceedings. As required by RCW 80.50.090(4), the Washington Administrative Procedure Act (RCW 34.05), and WAC Chapter 463-30, EFSEC issued the order commencing adjudication for the proposed Project on December 15, 2022. Adjudication hearings for the Project were held between August 14, 2023, and August 25, 2023. Information on the adjudication process for the Project is available at the following link: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-adjudication.

ES-4.5.2 Post-Adjudication Applicant Commitments

The Draft EIS for the Project was released in December 2022 and included the Applicant's proposed commitments to minimize or mitigate impacts of the Project on each analyzed element of the environment. The effectiveness of the Applicant's proposed commitments in reducing impacts was analyzed for each resource in the subsections of Chapter 4. During the Draft EIS, EFSEC recommended additional mitigation measures beyond the Applicant's proposed commitments to minimize impacts. Both the Applicant commitments and recommended mitigation measures were considered when characterizing the residual impacts (those remaining after application of mitigation) to determine whether a significant, unavoidable, adverse impact would occur.

Prior to the finalization of the EIS, mitigation measures were further developed and refined by technical working groups convened to review and respond to public comments and concerns. Additional Applicant commitments were identified and finalized in the Applicant's Final ASC, as per WAC 463-60-116 (Horse Heaven Wind Farm, LLC 2023). WAC 463-60-116 requires applicants to submit "application amendments which include all commitments and stipulations made by the applicant during the adjudicative hearings." The EIS includes an evaluation of the effectiveness of the post-adjudication Applicant commitments in minimizing impacts on the natural and built environment.

ES-4.6 Project Areas Not Covered

The Applicant's Final ASC included elements that were not previously submitted as part of the Project nor were they evaluated as part of the Draft EIS. The new elements presented in the Final ASC have not been evaluated as part of this final version of the EIS. The aforementioned elements include:

- Additional unsurveyed micrositing corridors outside or inside the Lease Boundary needed to align with the BPA's proposed substation.
- The addition of a laydown area located outside of the Lease Boundary for the purpose of providing an interim storage location for turbines. The need for the additional laydown area would be determined by the Applicant and their vendors as the Project's procurement progresses.
- If authorized, the associated disturbance and unsurveyed micrositing corridors inside and outside of the Lease Boundary needed to accommodate Aircraft Detection Lighting Systems (ADLS) as required by State of Washington House Bill (HB) 1173, passed in 2023. Authorization of the ADLS would be at the discretion of the Federal Aviation Administration.

- Use of haul routes not evaluated in the Traffic Impact Analysis (Horse Heaven Wind Farm, LLC 2023).
- While the construction of transmission lines within micrositing corridors is evaluated in this EIS, undergrounding of the line was not included as part of the analysis.
- Potential sourcing of water for the Project from the Gould well located on Department of Natural Resource lands.
- Any further reductions in turbines presented by the Applicant following the Post-Adjudication Applicant Commitments.

For any of these new and unevaluated elements to be included as part of the Site Certification Agreement (SCA), supplemental analysis would be required prior to EFSEC authorization.

ES-5 Public and Agency Involvement

ES-5.1 SEPA Scoping

EFSEC initiated a public involvement program, which included SEPA scoping, inter-agency coordination, and multiple public comment periods. Scoping is the first step in the SEPA environmental review process, to identify issues and concerns related to a proposed project, and thus to assist with identifying potential impacts and alternatives to analyze in the EIS. The scoping comment period for this EIS was May 11, 2021 to June 6, 2021. Members of the public, government agencies, tribes, and other interested stakeholders were invited to attend two scoping meetings/hearings and to submit comments verbally or written on comment forms during scoping meetings or by email or surface mail. EFSEC received approximately 370 comments from private citizens, environmental organizations, public agencies, and tribal representatives during the scoping period. EFSEC reviewed and considered these comments when determining the scope of the EIS. The Scoping Memo can be found on EFSEC's website: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-sepa.

ES-5.2 Participating Agencies

EFSEC invited agency representatives with regulatory authority or special expertise with respect to environmental issues to assist in development of the EIS. Representatives from the following agencies cooperated in developing the EIS:

- Washington Department of Fish and Wildlife (WDFW)
- Washington Department of Ecology (Ecology)
- Washington State Department of Transportation (WSDOT)
- Washington State Department of Archaeology and Historic Preservation (DAHP)
- Washington Utilities and Transportation Commission (UTC)
- Washington Department of Natural Resources (DNR)
- Washington State Department of Agriculture (WSDA)

ES-5.3 Public Review of the Draft EIS

The Draft EIS was issued on December 19, 2022. The comment period began on December 19, 2022 and concluded on February 1, 2023. Approximately 2,497 comment submissions were received during the public comment period. A public hearing on the Draft EIS was held virtually on February 1, 2023. The event was attended by members of the public, representatives of governmental agencies and tribes, nongovernmental organizations, private individuals, and representatives of Horse Heaven Wind Farm, LLC (the Applicant). In total, approximately 74 people provided verbal comments at the public meeting. All verbal comments were transcribed by a court reporter and can be found in the meeting transcripts, along with copies of all individual website comments, comment emails, letters, and cards (referred to as "comment submittals"). The meeting transcripts and comments are available for review on the publicly accessible EFSEC website: (https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-sepa).

ES-6 Next Steps

EFSEC will use this EIS along with other sources of information to inform its decision on whether to recommend approval or denial of the proposed Project to the governor. The EIS will inform the governor's ultimate decision. If EFSEC determines the Project should be recommended for approval, it will develop a recommendation report and a draft SCA to be signed by the governor. The SCA would contain all requirements and any other conditions the Applicant must meet for construction and operation throughout the Project's life, and for eventual decommissioning of the Facility. If EFSEC determines the Project should not be recommended to the governor for approval, the recommendation will explain EFSEC's decision.

The governor has 60 days to consider EFSEC's recommendation and can take one of the following actions:

1) Approve the application and execute the draft SCA.

2) Deny the application and reject the application.

3) Direct EFSEC to reconsider certain aspects of the Project and draft SCA.

If an ASC is denied, the Project cannot be constructed and operated. The date of the governor's ultimate decision is not currently known. If the Governor approves the ASC and executes the draft SCA, RCW 80.50 directs EFSEC to regulate the construction and operations of the Project through the SCA. The SCA lists the conditions the Applicant must meet during construction, while operating the facility, and through site restoration following a project's termination. For the entirety of a Project's lifespan, EFSEC is responsible for determining the Project's compliance with state laws and the terms set in the SCA.

The SCA for the Project would include, by reference, a comprehensive list of Applicant-committed measures and additional mitigation required by EFSEC. These additional measures may be identified through the SEPA process or through EFSEC's adjudicative process. EFSEC ensures compliance through an environmental monitoring program that the agency administers for the duration of the Project's lifespan. EFSEC has the regulatory authority to enforce compliance with state laws and the conditions in the SCA through fines and other actions.

ES-7 Further Information about the Project

The following presents hyperlinks to locations on EFSEC's website where documentation about the Project has been cataloged by the agency:

The web page includes the following hyperlinks that catalog EFSEC's review of the Proposed Action: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project.

Hyperlink to the Horse Heaven ASC: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-application.

Hyperlink to public informational meeting and land use consistency hearing: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-land-use.

Hyperlink to comments received: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-sepa.

Hyperlink to EFSEC administrative orders: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-adjudication.

Hyperlink to Agency Correspondence: https://www.efsec.wa.gov/energy-facilities/horse-heaven-wind-project/horse-heaven-sepa.

Attachment ES-3-1

EFSEC Recommended Mitigation Measures

This Page Intentionally Left Blank

EFSEC has identified the following additional and modified mitigation measures for the Project to avoid and/or minimize potential impacts:

Earth Resources

Geo-1[9]**:** Minimize soil disturbance activities with the potential for soil compaction when soils are saturated, such as following a major precipitation event (e.g., five-day antecedent rainfall of greater than 1.1 inches in the dormant season or greater than 2.1 inches in the growing season). Direct construction away from areas with saturated soils and where drainage may concentrate until soils are no longer saturated, and limit vehicular traffic to established access roads. Where possible, leave existing vegetation root structure intact to enhance soil stability and infiltration capacity. Where necessary, utilize best management practice (BMPs) such as low-ground-pressure and/or long-reach equipment, temporary matting and work pads, and localized engineered drainage improvements (e.g., interceptor drains, detention basins). Where soil compaction is observed to have occurred, decompact subsoils to a minimum depth of 18 inches or as identified in site reclamation plans and lease agreements.

Rationale: This mitigation measure limits erosion and disturbance of natural soil profiles.

EFSEC-recommended mitigation measures for earth resources also includes: **A-1**[10], **W-2**[11]**, Veg-7**[12]**, LSU-4**[13]**, and LSU-5.**

Air Quality

A-1: Limit traffic speeds on unpaved areas to less than 15 mph, rather than the Applicant-proposed 25-mph limit. Access-road-related fugitive dust from construction vehicle traffic is the single largest source of PM_{10} and $PM_{2.5}$ emissions from Project construction. Road-related fugitive dust emissions increases with increasing vehicle speed. Consequently, one of the best management practices for mitigation of road-related fugitive dust emissions is to limit vehicle speed. The Applicant has proposed to limit vehicle speed to 25 mph. A lower vehicle speed limit of 15 mph is feasible and would further reduce fugitive PM_{10} and $PM_{2.5}$ emissions.

Rationale: Road-related fugitive dust emissions increase with increasing vehicle speed. Consequently, one of the BMPs for mitigation of road-related fugitive dust emissions is to limit vehicle speed. The Applicant has proposed to limit vehicle speed to 25 mph. A lower vehicle speed limit of 15 mph is feasible and would further reduce fugitive PM_{10} and $PM_{2.5}$ emissions.

A-2: Applicant shall submit a Proof of Contact: Soil Destabilization Notification to both EFSEC and BCAA at least 90 days prior to commencement of construction.

[9] Geo-: Identifier of numbered mitigation item for Geology

[10] A-: Identifier of numbered mitigation item for Air

[11] W-: Identifier of numbered mitigation item for Water

[12] Veg-: Identifier of numbered mitigation item for Vegetation

[13] LSU-: Identifier of numbered mitigation item for Land and Shoreline Use

Rationale: Fugitive dust emissions are a potential concern. This notification will facilitate EFSEC and BCAA awareness of commencement construction so that compliance with implementation of all Applicant-proposed BMPs can be field validated.

Water Resources

W-1: Least Risk Fish Windows: Project construction and decommissioning within ephemeral and intermittent streams would observe the least risk windows for spawning and incubating salmonoids, which are, conservatively, August 1 to September 15 for the Yakima and Columbia Rivers and their tributaries in Benton County (WDFW 2018).

Rationale: This mitigation measure addresses potential impacts on surface water and fish habitat and would minimize risk to aquatic species.

W-2: Minimize Work in Heavy Rain: Project construction and decommissioning would be minimized during rainy periods and heavy rain—in particular, work near ephemeral or intermittent streams.

Rationale: This mitigation measure addresses potential impacts of surface water and runoff and would minimize the risk of sediment release to surface water and wetlands.

W-3: Check Dams: As indicated in Ecology (2019) BMP C207E, check dams cannot be placed or used in streams unless approved by WDFW. Check dams used for work within ephemeral or intermittent streams would be approved by EFSEC in coordination with WDFW and Ecology prior to use. Stream crossing designs and associated mitigation plans would be provided and approved by EFSEC in coordination with WDFW and Ecology.

Rationale: This mitigation measure addresses the use of check dams on site, which would require approval by WDFW and Ecology prior to use.

W-4: Culvert Installation BMPs: Based on the Final ASC, one culvert is proposed along one intermittent stream. Installation of the culvert would follow U.S. Department of Agriculture BMPs:

- Be oriented and aligned with the natural stream channel.
- Be constructed at or near natural elevation of the streambed to avoid or minimize potential flooding upstream of the crossing and erosion below the outlet.
- Use suitable measures to avoid or minimize water from seeping around the culvert.
- Use suitable measures to avoid or minimize culvert plugging from transported debris or bedload.
- Be regularly inspected and cleaned as necessary for the life of the Project (USDA 2012).
- Cover culvert with sufficient fill to avoid or minimize damage by traffic.
- Install culverts long enough to extend beyond the toe of the fill slopes to minimize erosion.

Rationale: This mitigation measure addresses permanent impacts on ephemeral streams. It provides specifications on culvert installation to enable assessment of the potential impacts.

W-5: Employee Training: An employee training plan would be included as part of the SPCC Plan. For the duration of the Project, employees and workers on site would receive appropriate training according to the employee training plan to ensure that any spills are reported and responded to in an appropriate manner (Ecology 1999). This would include training on the use of spill response equipment and

orientations identifying the location of hazardous materials, proper storage of hazardous materials, and location of spill response equipment to ensure that workers are competent in spill response.

Rationale: This mitigation measure addresses potential impacts on water quality including sedimentation and accidental spill. Employee training reduces the risk of human error and increases confidence in the effectiveness of spill response in the event of accidents such as an accidental spill.

W-6: Wetland SWPPP: A Stormwater Pollution Prevention Plan (SWPPP) would be designed specifically for work within the Micrositing Corridor adjacent to the wetland (Figure 3.4-1, Section 3.4). The SWPPP would include BMPs from the Stormwater Management Manual for Eastern Washington (Ecology 2019). The plan would include, but not be limited to, structural measures such as installation of silt fences and sediment ponds, and non-structural measures, including routine inspection and maintenance and enforcement of BMPs, to minimize surface water runoff generated from the construction activities to the wetland.

Rationale: This mitigation measure addresses potential impacts on the wetland situated near the Micrositing Corridor. The wetland is located downgradient from the construction area, so additional mitigation measures are proposed to avoid impacts.

W-7: Clear-Span 100-Year Floodplain: Clear-span the transmission line to avoid temporary disturbance to the 100-year flood plain. Site transmission line poles outside the 100-year floodplain.

Rationale: This mitigation measure addresses physical disturbance of the 100-year floodplain, a CARA. Clear-span would minimize physical disturbance.

W-8: Spill Response Equipment: Spill response equipment would be stored in every vehicle accessing the site during construction, operation, and decommissioning. In addition, an oil pan would be placed below heavy equipment when stored or not in use on site.

Rationale: This mitigation measure addresses spill response impacts by specifying locations for spill response equipment.

W-9: Minimize Water Use: During construction, operation, and decommissioning, water use would be minimized where possible. During drought or water shortage, schedule adjustment would be considered to minimize water needs on the site, where possible, or additional alternate off-site water supplies would be identified.

Rationale: This mitigation measure addresses impacts on public water supply and is proposed to minimize water use on site throughout the life of the Project.

W-10: Panel Washing: During drought or water shortage, panel washing would be postponed or alternate off-site water sources could be identified to minimize impacts on public water supply. Panel wash water would be recycled and re-used where possible during operation.

Rationale: This mitigation measure addresses impacts on public water supply and is proposed to minimize water use on site from panel washing, if required.

W-11: Concrete Batch Plant to Avoid Streams: Laydown areas or locations where temporary concrete batch plants will be sited should be a minimum of 100 ft from mapped streams or waterbodies.

Rationale: Siting temporary concrete batch plants outside of stream and riparian areas reduces the potential impacts off accidents and malfunctions from release of concrete wash water on water quality.

Vegetation

Veg-1: Tree Avoidance: Construction would avoid removing or disturbing trees within the Project Lease Boundary. Disturbance to trees includes any disturbance within the drip-line of the tree (i.e., the area from the edge of the outermost branches), including topping, which preserves an intact root system. Disturbance within the drip-line of the tree should be avoided as this can lead to tree mortality. The avoidance area within the drip-line of trees in work areas should be delineated using snow fencing or similar measure to improve the visibility of avoidance zones. Trees cannot be removed without pre-approval. Where tree disturbance cannot be avoided by the Project (e.g., near transmission lines), the number and location of the trees would be provided to EFSEC, along with a statement justifying why avoidance cannot be achieved, and a mitigation plan. The mitigation plan would include replanting trees within the Lease Boundary to maintain the diversity of habitat structures provided by trees and would require approval by EFSEC prior to proceeding.

Rationale: Trees are a rare feature on the landscape that provide habitat value to wildlife species and structural diversity. Replanting trees may be challenging in an arid environment, and there would be a time lag before trees reach the same size and age. Veg-1 seeks to avoid physical disturbance to existing trees.

Veg-2: Pre-Disturbance Surveys for Special Status Plant Species: Special status plant species are known to occur near the Lease Boundary. Areas with increased potential for special status plant species include areas of Priority Habitat and areas identified by the Applicant as potential habitat for woven spore lichen. Where possible, disturbance to Priority Habitat and high potential areas will be avoided, but if avoidance is not possible surveys for special status plant surveys will be conducted. Surveys would be conducted by a qualified professional. Surveys would be conducted prior to both construction and decommissioning activities. All findings would be documented and provided to EFSEC in an annual report. Where special status plant species are encountered within proposed disturbance areas, the Applicant will modify the Project design to avoid the species or, where modification is not possible, develop additional mitigation measures based on discussions with EFSEC and WDFW, such as relocation where a species is tolerant of relocation; minimization; or other form of mitigation. Mitigation plans for encountered special status plant species will be provided to EFSEC for consideration and to provide additional direction. Any modifications to Project design would also be provided to EFSEC as part of the report. An environmental monitor would be required to track any mitigation associated with the finding of special status plant species.

Rationale: This mitigation measure minimizes potential impacts on special status plant species by providing an opportunity to modify the design to avoid any identified plants, prior to actual disturbance activities during construction and decommissioning. It also provides the opportunity to apply additional mitigation should special status plant species be encountered within disturbance areas.

Veg-3: Special Status Plant Species Education: The environmental orientation provided to workers on site would include information on special status plant species. This would include diagnostic characteristics, suitable habitat descriptions, and photos of special status plant species with potential to occur within the Lease Boundary. A protocol would be established for any chance find by workers, who would notify the environmental monitor on site prior to proceeding with work. The environmental monitoring would report

any findings of special status plant species to EFSEC in a report, and EFSEC would consider these reports and provide additional direction on actions to address any impacts. Workers' completion of the environmental orientation would be tracked by the Applicant and provided in an annual report to EFSEC.

Rationale: This mitigation measure minimizes impacts on special status plant species by educating workers in identification and suitable habitat.

Veg-4: As-Built Report, Offset Calculation, and Monitoring of Revegetation: Within 60 days of completing construction, the Applicant would provide an as-built report that documents the amount of temporary and permanent disturbance associated with the Project. This would include associated maps and georeferenced spatial files. The as-built report would be factored into the final calculation of habitat offset based on the Applicant-provided ratios. The acreages of modified habitat planted for the Project under the solar arrays would also be included in this report. EFSEC would determine the number of years that vegetation monitoring of temporary disturbance and modified habitat would be conducted and the success criteria for revegetation. The success criteria would include measurable parameters that the Applicant would measure to determine whether successful revegetation has occurred. The Applicant would submit annual reports for each year of vegetation monitoring following construction to document the success of revegetation. At the end of the vegetation monitoring period, as determined by EFSEC, areas of modified habitat and revegetated temporary disturbance that have met the success criteria would be eligible for offset by the Applicant at the respective ratios. Any areas of modified habitat or temporary disturbance that do not meet the success criteria after completion of revegetation monitoring would be considered permanent disturbance, and this would be added to the offset requirement. This mitigation measure addresses habitat offset, by providing a final calculation of offset requirements based on actual disturbance.

Rationale: This mitigation measure addresses habitat offset by providing a final calculation of offset requirements based on actual disturbance. In addition, it addresses the uncertainty associated with the success of revegetation and, in particular, of restoring shrub-steppe ecosystems.

Veg-5: Operation and Decommissioning Dust Control Plan: A dust control plan would be prepared for Project operation and decommissioning, similar to the dust control plan presented by the Applicant. The plan would minimize impacts on vegetation from dust during the operations and decommissioning stages of the Project.

Rationale: This mitigation measure minimizes indirect impacts from dust during operation and decommissioning.

Veg-6: Decommissioning Legislated Requirements: Mitigation measures that would be applied during decommissioning would follow the applicable legislated requirements at the time of decommissioning.

Rationale: This mitigation measure enables adjustment of requirements based on changes in legislation once decommissioning occurs, based on the requirements at that time.

Veg-7: Detailed Site Restoration Plan: The Detailed Site Restoration Plan is a required, regulatory document. It would be prepared and submitted for approval by EFSEC for final revegetation prior to Project decommissioning for the temporary and permanent disturbance areas. It would be adapted to include modified habitat.

Rationale: The Detailed Site Restoration Plan would be a living document. It would include the methods, success criteria, monitoring, and reporting for revegetation at the end of the Project life. It would also include provisions for adaptive management and would be prepared based on any lessons learned from implementing the revegetation planned for the temporary disturbance from Project construction as described in Appendix N of the 2022 ASC (Appendix N, Horse Heave Wind Farm, LLC 2022).

Veg-8: Decommissioning Noxious Weed Management Plan: A Noxious Weed Management Plan (or extension of the current plan) to include prevention and control during decommissioning of the Project would be prepared. This Plan would include monitoring of the area for three years following decommissioning of the Project.

Rationale: This mitigation measure addresses noxious weeds during decommissioning. It is designed to minimize the introduction and spread of noxious weeds during decommissioning.

Veg-9: Maintenance of Solar Array Fence: During Project operation, the solar array fence would be maintained, including removal of vegetation material that may become entwined in the fence.

Rationale: Vegetation material entwined within the solar array fence presents a fuel source for fire. Maintenance and removal would minimize this risk.

EFSEC-recommended mitigation for vegetation also includes: **Hab-2**[14], **Hab-3**, **Hab-4**, **Hab-6**, **Hab-7**, and **Hab-8**.

Wildlife and Habitat

Wildlife

Wild-1[15]**: Post-construction bird and bat fatality monitoring program**

Prior to initiation of operation, the Applicant would develop, in coordination with the Technical Advisory Committee (TAC) and approval by EFSEC, a post-construction bird and bat fatality monitoring program. Monitoring would be conducted for a minimum of three years. While the three years of monitoring need not be consecutive, all post-construction monitoring would be conducted within the initial five years of operation to document variation in annual fatality rates. The program would describe survey methods, timing, and effort as described in the Applicant's Bird and Bat Conservation Strategy (Appendix M of the Final ASC). Surveys would include carcass surveys to document the longevity of carcass persistence and detectability of carcasses. Surveys would be conducted year-round to account for variation in bird and bat abundance and diversity. Additional surveys (e.g., survey frequency) would be conducted during sensitive periods for birds and bats (e.g., migration periods). Surveyed area would include turbines, solar arrays, and transmission lines at a minimum.

Bird and bat fatality adaptive management strategy development

Prior to initiation of operation, the Applicant would develop, in coordination with the TAC and approval by EFSEC, an adaptive management strategy. The adaptive management strategy would include additional

[14] Hab-: Identifier of numbered mitigation item for Habitat

[15] Wild-: Identifier of numbered mitigation item for Wildlife

mitigation measures to be applied during sensitive periods (e.g. migration) or if mortality thresholds are exceeded.

Migratory bat species are at risk of population level impacts due to wind power facilities and these species are most at risk of collisions with turbines during spring and fall migration. As such, adaptive management strategies will be applied during these sensitive periods, which are generally April to June (spring migration) and August to October (fall migration) (Hayes and Wiles 2013). Acoustic surveys during operation may be used to define a project-specific migratory period. Acoustic detectors may be deployed across the Lease Boundary prior to spring and fall migration to detect increased bat activity suggesting the onset of bat migration. These data would be used to adjust the generalized bat sensitive periods listed above. Similarly, acoustic data would be used to document the end of bat migration and when adaptive management strategies may no longer be required. Bat data would be downloaded and analyzed on a weekly basis to document the start and end of migration.

Adaptive management mitigation strategies that would be considered include altering the operation of the turbines by increasing the cut-in speed to above 18 feet (5.5 meters) per second (Alberta Government 2013) and curtailing turbines during known bird and bat migration period. As noted in in Section 4.6.2.2, projected impacts of wind power projects estimate that wind power could result in mortality levels of 3 to 46 percent of the hoary bat population by 2050. Friedenberg and Frick (2021) conclude that a 5 m/s curtailment could avoid hoary bat extinction in several of the modeled scenarios. Acoustic monitors and smart curtailment may also be included in adaptive management to refine data on bat presence near turbines and when curtailment mitigation should be implemented. Mitigation strategies may be limited to groups of turbines based on the results of post-construction monitoring.

Bird and bat fatality adaptive management review

The Applicant, the TAC, EFSEC, and WDFW would review the results of the bird and bat post-construction fatality monitoring program after each monitoring period to determine whether the mitigation measures outlined in the adaptive management strategy should be revised or adjusted. The data would also be used to determine whether monitoring efforts are sufficient to verify predicted impacts on birds and bats. EFSEC may require the Applicant to conduct more intensive surveys (e.g., additional spatial extent or frequency) or extend the duration of post-construction monitoring beyond the minimum three years. The Adaptive management mitigation strategies should be periodically reviewed (minimum of every five years) with the TAC during operation to consider inclusion of new science and technologies that may more efficiently reduce bird and bat fatalities.

Rationale: This mitigation allows for continued monitoring and adaptive management of potential Project-related wildlife mortalities.

Wild-2: All trash containers would be wildlife resistant.

Rationale: This mitigation measure reduces potential human-wildlife conflicts thereby reducing potential Project-related wildlife mortalities.

Wild-3: The Applicant would provide EFSEC a summary of the consultation undertaken with the USFWS regarding eagle mortality.

Rationale: This mitigation measure allows for continued monitoring and adaptive management of potential Project-related impacts on eagles.

Wild-4: The Applicant would avoid the use of pesticides, including rodenticides, during Project construction and operation. If pesticides are required, the Applicant would, prior to application of the pesticides, develop a management plan for submission to and approval by EFSEC that describes how the Applicant would avoid and/or otherwise minimize potential impacts on wildlife, including all potentially impacted special status species.

Rationale: This mitigation measure reduces potential impacts on habitat and wildlife mortality while allowing for adaptive management of potential Project related impacts.

Wild-5: The Applicant would limit construction disturbance by identifying sensitive areas on mapping and flagging in the field exclusion zones around any sensitive areas, including wildlife features, such as wildlife colonies, active nests, dens, and wetlands. Encroachment into exclusion zones required during construction would be reviewed by the Applicant's biologist to determine the impacts on the feature and recommend additional measures to manage impacts to the resource. The Applicant would provide information on where encroachment would be required, the rationale for encroachment, and additional mitigation measures for EFSEC to review prior to implementation. The Applicant would conduct ongoing environmental monitoring during construction to ensure that flagged exclusion zones are avoided.

Rationale: The mitigation measure reduces potential loss of habitat and wildlife mortality.

Wild-6: The Applicant would maintain a database of road mortalities throughout construction and operation as part of the operational procedures. The Applicant would review road-based mortalities annually and propose additional mitigation for areas, under the control of the Applicant, with frequent mortalities or wildlife crossing observations. Additional mitigation measures may include speed control, signage, temporary road closures (e.g., during migration periods), or wildlife passageways. The mitigation measure allows for continued monitoring and adaptive management of potential Project related wildlife mortalities and would be reviewed and approved by EFSEC prior to implementation.

Rationale: This mitigation measure allows for continued monitoring and adaptive management of potential Project-related wildlife mortalities.

Wild-7: The Applicant would schedule construction activities to occur during daylight hours, when feasible, to reduce disturbance of nocturnal species and the need for nighttime lighting.

Rationale: This mitigation measure reduces disturbance to wildlife (i.e., indirect loss).

Wild-8: Wind turbine buffer zones would be established around all known raptor nests and be a minimum of 0.25 miles. The Applicant would prepare a Raptor Nest Monitoring and Management Plan for review by EFSEC and the Pre-operational Technical Advisory Group (PTAG) if buffer zones cannot be maintained.

Rationale: This mitigation measure reduces potential impacts on habitat and raptor mortality while allowing allow for adaptive management of potential Project-related impacts.

Wild-9: Vegetation clearing and grubbing would avoid local bird breeding periods, when feasible, to reduce potential destruction or disturbance of nesting birds. If avoidance of this period is not feasible, additional

mitigation measures, such as pre-construction surveys for and buffering of active bird nests, would be undertaken.

Rationale: This mitigation measure avoids or reduces potential bird mortality.

Habitat

Hab-1: The Applicant would locate Project components, including roads and powerlines, outside of movement corridors modeled in Washington Wildlife Habitat Connectivity Working Group (2013) as medium to very high linkage, to the extent feasible. The Applicant would provide rationale to EFSEC for siting components within movement corridors, and a Corridor Mitigation Plan would be required that describes:

- Extent of direct and indirect habitat impact within the movement corridor
- Proposed measures to be implemented to reduce potential impacts on movement corridors (e.g., habitat enhancements to promote continued use of corridors)
- Proposed features (e.g., open-bottom culverts) to accommodate wildlife movement for linear Project components (e.g., roads, powerlines)
- Proposed restoration in movement corridors following Project decommissioning
- Performance standards to assess the effectiveness of mitigation measures and restoration
- Methods to monitor and measure performance standards

The Corridor Mitigation Plan would be developed in consultation with the PTAG and reviewed and approved by EFSEC prior to implementation. Results of corridor monitoring would be reviewed annually with the TAC to evaluate the effectiveness and apply additional measures if necessary. Data would be provided to EFSEC with additional mitigation measures for review and approval prior to implementation.

Rationale: This mitigation measure reduces potential Project related barriers to wildlife movement while allowing for continued monitoring and adaptive management of potential Project related barriers.

Hab-2: Transmission line crossings of canyons and draws would be minimized. Where crossings are required, the Applicant would provide EFSEC with rationale for the crossings and propose additional mitigation measures to reduce potential barriers to movement (e.g., retaining vegetation under transmission lines) and wildlife collisions (e.g., installing flight diverters on overhead lines). EFSEC would approve the final transmission line layout, mitigation, and adaptive management strategy.

Rationale: This mitigation reduces potential Project related barriers to wildlife movement while allowing for continued monitoring and adaptive management of potential Project related barriers.

Hab-3: Temporary laydown areas. Temporary laydown areas would be situated out of native shrub-steppe habitat. Where temporary disturbance of shrub-steppe habitat is required, the Applicant would provide EFSEC with rationale and propose additional mitigation measures to reduce habitat loss.

Rationale: This mitigation measure avoids and reduces impacts to habitat while allowing for adaptive management of potential Project related habitat loss.

Hab-4: The Applicant, in consultation with EFSEC, would establish a PTAG and TAC. The PTAG would be established at least one year prior to construction and would be responsible for reviewing and providing technical advice on documents produced by the Applicant related to wildlife and wildlife habitat. The PTAG would also provide advice on adaptive management. The PTAG would be responsible for, at a minimum:

- Reviewing and providing technical advice on Project wildlife and habitat management plans (e.g., ferruginous hawk management plan)
- Reviewing and providing advice to EFSEC on pre-design and pre-construction data collection requirements to address Project mitigation measures and conditions of management plans
- Reviewing and providing advice to EFSEC on the final Project design
- Advising on thresholds to be applied to the Project that would trigger the requirement for additional mitigation measures

The Applicant, in consultation with EFSEC, would establish a TAC prior to Project operation. The PTAG would cease to exist once the Applicant has completed all planned construction and would be replaced by the TAC, which would exist for the life of the Project. The TAC would be responsible for, at a minimum:

- Advising on the monitoring of mitigation effectiveness and reviewing monitoring reports
- Advising on additional or new mitigation measures that would be implemented by the Applicant to address exceedances of thresholds
- Reviewing the results of annual data generated from surveys and incidental observations and providing recommendations for alternative mitigation and adaptive management strategies, as well as advising on aspects of existing mitigation that are no longer needed.

The PTAG and TAC may include representation by WDFW, the Washington Department of Natural Resources, interested tribes, Benton County, and the USFWS. The PTAG and TAC may also include local interest groups, not-for-profit groups, and landowners. The exact composition of the PTAG and TAC would be determined through discussions between the Applicant and EFSEC and would depend on the relevance and/or availability of proposed members.

Rationale: This mitigation measure avoids and reduces impacts on wildlife and habitat, including habitat loss, wildlife disturbance, barriers to movement, and wildlife mortality. Further the mitigation measure will allow for continued monitoring and adaptive management of potential Project-related impacts.

Hab-5: As noted by the Applicant, the Project is expected to result in indirect habitat loss through loss of habitat function and changes in wildlife behavior in response to the Project. Further, as noted by the Applicant, WDFW guidelines require that compensatory habitat mitigation must fully offset the loss of habitat function and value. To address indirect habitat loss associated with the Project, the Applicant would develop an Indirect Habitat Loss Management Plan that addresses potential indirect habitat loss resulting from the Project. The Applicant would work with the PTAG during the development of the Indirect Habitat Loss Management Plan (IHLMP) for review and approval by EFSEC. EFSEC and the PTAG would review

the IHLMP prior to its implementation. The IHLMP would be provided to the PTAG for review 90 days prior to construction.

The objectives of the IHLMP would be to identify a Project-specific ZOI and required mitigation based on the Project-specific ZOI. The Project-specific ZOI would be developed based on Project conditions and may differ from the ZOI presented in the EIS. The IHLMP would include:

- A description of the study's purpose and objectives
- A description of methods to define Project-specific ZOIs (e.g., gradient analysis, nest density)
- A description of data requirements to establish Project-specific ZOIs and field programs that would be implemented (pre-construction and post-operation)
- A description of the duration of studies required to establish Project-specific ZOIs
- A description of criteria to be used to compensate for loss of habitat function and value
- An environmental effectiveness monitoring strategy of compensatory habitat to ensure that the habitat meets success criteria

The IHLMP would also include a series of compensatory site-selection criteria, developed in consultation with the PTAG. The selection criteria would be used to evaluate candidate habitat compensation habitats. Habitats that achieve more of the criteria would be identified as the preferential sites. Selection criteria would include, at a minimum:

- Proximity to the Lease Boundary (e.g., hierarchy of preferences with respect to location— within the Lease Boundary being the highest priority, adjacent to the Lease Boundary being the second highest priority, and off site being the third priority)
- Protection of existing native shrub-steppe or grassland habitats
- Encompassing sensitive or important wildlife habitat (e.g., mapped movement corridors, ferruginous hawk core habitat, HCAs, areas of high prey abundance)
- Proximity to Project infrastructure

Rationale: This mitigation measure avoids and reduces disturbance to wildlife (indirect habitat loss) while allowing for ongoing monitoring, adaptive management, and offsetting of potential Project related impacts.

Hab-6: **Final Design:** The Applicant would work with EFSEC, with advice from the PTAG, on the development of the final Project layout and design including the application of Applicant commitments and recommended mitigation measures.

Rationale: This mitigation measure avoids and reduces potential habitat loss and disturbance to wildlife (indirect habitat loss).

Hab-7: All roadways constructed for the Project during the construction and operation phases would be removed and restored during decommissioning. The Applicant would provide EFSEC with rationale and propose additional mitigation measures if roadways are not decommissioned post-operation.

Rationale: This mitigation measure restores habitat post-operation and reduces habitat loss.

Hab-8: The Applicant would be required to provide compensation habitat loss and alteration (indirect habitat loss) (See Hab-5, Veg-4) through one or more actions of land acquisition, onsite easement and restoration (excluding areas impacted by the project such as temporary laydowns), and/or fee-based mitigation.

The Applicant would prioritize development of conservation easements (Option 1[16] in the Applicant's Draft Wildlife and Habitat Mitigation Plan) and would compensate for the remaining permanent and altered (indirect) impacts by providing money to WDFW, or a third party identified by WDFW, and agreed to by EFSEC, to purchase other lands suitable as in-kind and/or enhancement mitigation. The Applicant would provide EFSEC, for review and approval, with rationale for fee-based mitigation (Options 2 and 3 in the Applicant's Draft Wildlife and Habitat Mitigation Plan) including a description of how much compensatory habitat would be addressed through Option 1 (conservation easement) and rationale for why fee-based mitigation is required.

The fee-based mitigation includes a per acre fee that would be determined by market rates and land sales within the general vicinity of the Lease Boundary for lands containing comparable habitat types and quality present within the Lease Boundary. 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 (CMA) remaining after the application of Option 1 mitigation strategy 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 and agreed to by EFSEC 90 days before construction. If construction has not begun within 12 months of the approval of the TFO, the TFO identified would expire and be recalculated prior to beginning construction. The TFO would be calculated based on the following:

Average Comparable Land Sale Cost (per acre)(CMA-Option 1 Acres)*1.15 = TFO*

Rationale: This mitigation measure clarifies the process to be followed in selection of offsetting habitat.

EFSEC-recommended mitigation measures for wildlife and habitat also include: **Veg-1**, **Veg-4**, and **Veg-7**.

Recommended Mitigation Measures for Special Status Species

Table ES-6 summarizes the mitigation measures recommended by EFSEC that are specific to special status species. These measures, in combination with those described above, would reduce potential Project-related impacts on these species.

[16] Applicant's Draft Wildlife and Habitat Mitigation Plan identifies three compensation options: Option 1 – Conservation easement within or adjacent to the Lease Boundary; Option 2 – Annual fee or lump sum payment provided to WDFW; Option 3 – payment to local land trusts, conservation organizations, or local tribes to support conservation projects.

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
Spec-1[17]	Striped whipsnake Sagebrush lizard	The Applicant would conduct pre-construction surveys for sensitive reptile species prior to alteration or destruction of suitable habitat such as areas within the Lease Boundary identified as core habitat in GAP mapping, as well as shrubland (e.g., shrub-steppe, rabbitbrush). WDFW would be contacted prior to undertaking these surveys. If these species are identified through pre-construction surveys, the Applicant would prepare a Reptile Management Plan to reduce potential impacts on habitat, mortality, and barriers to movement. The Reptile Management Plan would describe: ▪ How the Applicant would avoid suitable habitat, including where the species were observed ▪ How the Applicant would implement management recommendations in Larsen (1997) ▪ How the Applicant would maintain rodent burrows in suitable reptile habitat (e.g., shrub-steppe) ▪ Additional mitigation measures to reduce potential mortality of these species during the construction and operation stages of the Project The Reptile Management Plan would be reviewed by the PTAG and approved by EFSEC prior to initiation of construction. Survey results and proposed adaptive management would be reviewed by the PTAG and approved by EFSEC prior to implementation (see Hab-4). **Rationale:** This mitigation measure avoids and reduces potential striped whipsnake and sagebrush lizard habitat loss and mortality while allowing for adaptive management throughout Project construction and operation.
Spec-2	American white pelican	The Applicant would maintain a database of American white pelican observations within the Project Lease Boundary. Observational data would be reviewed with the TAC annually, and additional survey strategies would be applied as needed to inform adaptive management. **Rationale:** This mitigation measure allows for adaptive management of potential American white pelican mortality through Project operation.
Spec-3	Eagles	The Applicant would obtain any required federal approvals. The Applicant would continue ongoing coordination with the USFWS (Eagle Coordinator, Columbia Pacific Northwest Region) regarding an eagle take permit for incidental take of bald and golden eagles and would continue to evaluate eagle risk to determine if an eagle take permit is appropriate considering the use of the Project by bald and golden eagles. The Applicant would apply WDFW-recommended buffers for bald eagle and golden eagle nests (Larsen et al. 2004): ▪ Bald eagle – protected zone (400 feet) and conditioned zone (up to 800 feet beyond the protected zone) ▪ Golden eagle – 1.9 miles **Rationale:** This mitigation measure avoids and reduces potential disturbance of eagle nests and eagle mortality.

[17] Spec – Identifier for numbered mitigation measure for Special Status Species (Wildlife)

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
Spec-4	Burrowing owl	The Applicant would conduct burrowing owl surveys within areas of direct loss (permanent, temporary, and modified) and associated ZOIs. The results of these surveys would be provided to the PTAG and EFSEC and used to inform the final Project layout. Active burrows would be retained and satellite burrows with characteristics used by burrowing owls would be avoided where feasible to maintain habitat capacity. WDFW-recommended seasonal buffers (0.5 miles) would be applied around burrowing owl nests to avoid disturbing nesting burrowing owls, if present (Larsen et al. 2004). Seasonal buffers (February 15 to September 25) would be applied during construction and for temporary disturbances, such as periodic maintenance, during operation. If active burrowing owls are identified within the Lease Boundary, the Applicant would develop a species-specific management plan that describes: ▪ The location of active burrows ▪ How active burrows would be avoided through re-alignment or reconfiguration of Project features. ▪ Additional mitigation measures that would be applied where disturbance to active burrows is expected (e.g., construction of artificial burrows) ▪ Additional mitigation measures that would be applied during operation if burrowing owl mortalities are recorded. ▪ How ongoing monitoring of active burrows would be undertaken. The Burrowing Owl Management Plan would be reviewed by the PTAG and approved by EFSEC prior to initiation of construction. Survey results and proposed adaptive management would be reviewed by the PTAG and approved by EFSEC prior to implementation (see Hab-4). The Applicant would monitor access roads for burrowing owl use and mortalities. Mortalities would be reported to the PTAG or TAC (depending on the Project phase) and EFSEC within 5 days of the observation. Incidental observations of burrowing owl use would be provided to the PTAG (construction) or TAC (operation) on an annual basis. **Rationale:** This mitigation measure avoids and reduces potential loss of burrowing owl habitat, disturbance to burrowing owls, and burrowing owl mortality, while allowing for adaptive management throughout Project construction and operation.
Spec-5	Ferruginous hawk	The Applicant would avoid siting Project components within core habitat in ferruginous hawk territories, defined as the habitat within a 2-mile radius surrounding ferruginous hawk nests documented in PHS data and in Horse Heaven Wind Farm, LLC (2022). Siting of features within 2 miles of a known ferruginous hawk nest may be considered if the Applicant is able to demonstrate that the nest site and foraging habitat is no longer available to the species and that compensation habitat, as described below, would provide a net gain in ferruginous hawk habitat. Habitat considered no longer available for ferruginous hawk would include habitat that has been altered by landscape-scale development (cropland conversion, residential development, industrial development) rendering the territory non-viable. This could include habitats that have been altered such that no native or foraging habitat remains and no nesting structures exist. Project infrastructure would not be sited within 2 miles of a

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
		ferruginous hawk nest without prior approval by EFSEC based on the process described below. The extent of encroachment into 2-mile core habitat may vary depending on the type of infrastructure proposed (e.g., turbine, power line, road). If encroachment is considered by the Applicant, the Applicant would provide the PTAG and EFSEC with: 1. A set of habitat parameters, developed in consultation with the PTAG for approval by EFSEC, to document whether habitat in a core range is consider non-viable. The results of habitat surveys would be reviewed by the PTAG and approved by EFSEC. 2. A description of the current nesting habitat available and a description of documented use of the core habitat by ferruginous hawk available through historic background information or field-based surveys. 3. A description of the type and location of infrastructure proposed within the core habitat. 4. The proximity of infrastructure to any known nest site or suitable foraging habitat. In the event that a Project component is proposed for siting within the 2-mile buffer, the Applicant would, in consultation with the PTAG for approval by EFSEC, develop a Project-specific ferruginous hawk mitigation and management plan: 1. A description of efforts to site Project infrastructure to avoid core habitat, identified as the area within 2 miles of nests documented in PHS data and Horse Heaven Wind Farm, LLC (2022): a. If Project components are sited within 2 miles of a ferruginous hawk nest, the infrastructure would be reviewed by the PTAG and approved by EFSEC. b. Additional mitigation measures would be developed to reduce potential ferruginous hawk strikes with turbines, including curtailing turbine operation within the 2-mile core habitat of any actively occupied nests during the breeding and rearing periods when ferruginous hawks are present in Benton County. c. The plan would explain how and where the Applicant would create offsetting habitat for direct and indirect habitat loss within the 2-mile core habitat of ferruginous hawk nests documented in PHS data and in Horse Heaven Wind, LLC (2022). 2. A description of when construction activities would be undertaken to avoid sensitive timing periods for ferruginous hawk. 3. A description of pre- and post-monitoring programs that would be conducted to establish: a. Habitat use within the Lease Boundary. b. Mapping of ground squirrel colonies and other prey items. c. Identification of potential flyways between nest sites and foraging habitat and monitoring of potential flyways to inform final turbine siting and orientation. d. Ongoing monitoring of nest use and territory success. 4. A description of restoration activities that would be undertaken in disturbed areas to enhance ferruginous hawk habitat during Project decommissioning.

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
		Results of ferruginous hawk monitoring programs and adaptive management would continue through Project operation and decommissioning with review by the TAC and approval by EFSEC. **Rationale:** The mitigation measure avoids and reduces potential loss of ferruginous hawk habitat, disturbance to ferruginous hawk, and ferruginous hawk mortality, while allowing for adaptive management throughout Project construction and operation.
Spec-6	Great blue heron Sandhill crane Tundra swan	The Applicant would maintain a database of incidental observation of great blue heron, sandhill crane, and tundra swan foraging within the Lease Boundary during operation. Observational data and proposed adaptive management strategies would be reviewed with the TAC annually (see Hab-4). The Applicant would reduce the use of overhead power lines, where possible. The Applicant would apply buffers recommended in Larsen et al (2004)[(a)] sandhill crane feeding areas (0.5 miles) and roosting areas (0.3 miles), if documented in the Lease Boundary. The mitigation measure avoids and reduces potential disturbance to and mortality of great blue heron, sandhill crane and tundra swan, while allowing for adaptive management throughout Project construction and operation.
Spec-7	Loggerhead shrike Sagebrush sparrow Sage thrasher Vaux's swift	The Applicant would maintain connectivity between natural habitat patches to reduce potential habitat loss and fragmentation. The Applicant would restore areas with shrubs, where feasible, to reduce potential habitat loss. The Applicant would avoid the use of insecticides and herbicides to reduce potential mortality and loss of prey items. The Applicant would retain trees, shrubs, and hedgerows, as feasible, to reduce habitat loss. The Applicant would consult with the PTAG and TAC and EFSEC if suitable habitat for loggerhead shrike, sagebrush sparrow, and sage thrasher cannot be avoided. If suitable habitat cannot be avoided, the Applicant would, in consultation with the PTAG for approval by EFSEC, develop nest set back buffers that are supported by literature to be applied during clearing and grubbing activities. The Applicant would avoid clearing and grubbing during the active nesting period to reduce potential destruction of active nests and disturbance of nesting birds. If clearing and grubbing occurs during the nesting season, the Applicant would conduct pre-clearing surveys for active nests and maintain appropriate setback buffers around active nests. Observational data and proposed adaptive management strategies would be reviewed with the TAC annually (see Hab-4). **Rationale:** This mitigation measure avoids and reduces potential habitat loss, habitat fragmentation, and mortality to avoid and reduce impacts on loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift. The measure allows for adaptive management throughout Project construction and operation.

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
Spec-8	Prairie falcon	The Applicant would conduct pre-construction surveys for prairie falcon nests for construction work proposed during the prairie falcon nesting season and maintain a seasonal buffer of 2,640 feet from active nest sites (Larsen et al. 2004) to reduce potential destruction or disturbance of active nests. Observational data and proposed adaptive management strategies would be reviewed with the TAC annually (see Hab-4). **Rationale:** This mitigation measure avoids and reduces potential disturbance to prairie falcon, and prairie falcon mortality, while allowing for adaptive management throughout Project construction and operation.
Spec-9	Ring-necked pheasant	The Applicant would consider using native grasses and legumes that support ring-necked pheasant in seed mixes applied during post-construction restoration of temporary disturbances and decommissioning to reduce potential habitat loss (Larsen et al. 2004). Observational data and proposed adaptive management strategies would be reviewed with the TAC annually (see Hab-4). **Rationale:** This mitigation measure reduces potential loss of ring-necked pheasant habitat and allows for adaptive management throughout Project construction and operation.
Spec-10	Black-tailed jackrabbit White-tailed jackrabbit	The Applicant would conduct surveys for jackrabbit in suitable habitat identified through GAP predictive mapping. If jackrabbits are identified, the Applicant would develop and implement a management plan with additional mitigation measures to reduce potential loss of habitat supporting jackrabbits. Observational data and proposed adaptive management strategies would be reviewed with the TAC annually (see Hab-4). **Rationale:** This mitigation measure reduces potential loss of black-tailed and white-tailed jackrabbit habitat, indirect habitat loss, habitat fragmentation, and mortality, while allowing for adaptive management throughout Project construction and operation.
Spec-11	Townsend's big-eared bat	The Applicant would restrict bat access to open water if the water could be contaminated. The Applicant would retain old buildings, outbuildings, and trees where feasible. The Applicant would report mortalities of Townsend's big-eared bat to EFSEC and the TAC. Bat mortality data and adaptive management strategies would be reviewed with the TAC annually (see Hab-4). **Rationale:** This mitigation measure reduces potential loss of Townsend's big-eared bat habitat and mortality and allows for adaptive management throughout Project construction and operation.

Table ES-6: Recommended Mitigation Measures for Special Status Species

Mitigation Identifier	Species Name	Species-specific Mitigation
Spec-12	Townsend's ground squirrel	The Applicant would conduct surveys for Townsend's ground squirrel colonies within the Lease Boundary in areas of the Project disturbance footprint (including ZOI) to inform final design. The Applicant would avoid habitat loss within Townsend's ground squirrel habitat concentration areas, as well as known colonies, in final design. Additional Townsend's ground squirrel colonies identified through surveys would be shown on Project mapping. If Project components are required in habitat concentration areas (rated as medium or greater) or near known colonies, the Applicant would prepare a species-specific management plan for areas where avoidance is not feasible. This plan would provide rationale for why colonies cannot be avoided and would detail additional mitigation measures to reduce impacts to Townsend's ground squirrel. Additional mitigation measures may include identification of setbacks, colony monitoring, habitat restoration, colony relocation, and reconstruction of habitat features. The plan would also describe monitoring and adaptive management measures to be implemented during Project operation. The plans would be provided and discussed with the PTAG, and approved by EFSEC, if avoidance of identified ground squirrel colonies is not feasible. Observational data and adaptive management strategies would be reviewed with the TAC annually. **Rationale**: This mitigation measure reduces potential loss of Townsend's ground squirrel habitat, disturbance of squirrel colonies, and Townsend's ground squirrel mortality, while allowing for adaptive management through Project construction and operation.
Spec-13	Pronghorn antelope	The Applicant would limit fencing where feasible (e.g., around solar arrays). Final fencing layouts and design, including use of non-barbed-wire security fencing, would be provided to the PTAG and EFSEC with rationale for fencing requirements. The Applicant would design and implement a study of seasonal pronghorn antelope occurrence and use of the Lease Boundary before construction and during operation to document the change, if any, of pronghorn antelope presence, abundance, and habitat use within the Lease Boundary. The PTAG would review and provide input to the study design. The results of the study would be used to develop adaptive management measures to respond to changes in pronghorn antelope habitat use. Survey results and proposed adaptive management would be reviewed by the TAC prior to implementation (see Hab-4) The Applicant would maintain a database of pronghorn antelope observations, including details such as numbers, location, age, and sex, and would make this database available to WDFW, EFSEC, and the Yakama Nation. **Rationale**: This mitigation measure reduces potential disturbance to pronghorn antelope and barriers to pronghorn antelope movement, while allowing for adaptive management throughout Project construction and operation.

Notes:
[(a)] Larsen et al. (2004) recommend buffers around great blue heron colonies, which do not occur within the Lease Boundary, and do not provide recommended buffers for tundra swan.
ASC = Application for Site Certification; EFSEC = Washington Energy Facility Site Evaluation Council; GAP = Gap Analysis Project; PHS = Priority Habitats and Species; PTAG = Pre-operational Technical Advisory Group; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Summary of Milestones and Timing

Table ES-7 summarizes wildlife and habitat mitigation milestones and the timing of when milestones would be met.

Table ES-7: Summary of Milestones

Timing	Mitigation Measure	Milestone	PTAG/TAC review
Construction			
One year prior to construction	**Hab-4**	Establishment of Pre-operational Technical Advisory Group (PTAG will be replaced by the Technical Advisory Committee upon the onset of operation).	NA
During appropriate season within 1 year prior to construction	**Spec-1, 4, 8, 10, 12**	Pre-construction surveys	PTAG
180 days prior to construction	**Hab-6**	Final design	PTAG
90 days prior to construction	**Hab-1**	Corridor Mitigation Plan, if necessary	PTAG/ TAC
90 days prior to construction	**Hab-2**	Rationale for and mitigation of canyon and draw crossings	NA
90 days prior to construction	**Wild-8**	Raptor Nest Monitoring and Management Plan	PTAG
90 days prior to construction	**Hab-5**	Indirect Habitat Loss Management Plan	PTAG
90 days prior to construction, if needed	**Spec-5**	Ferruginous hawk Mitigation and Management Plan	PTAG/TAC
60 days prior to initiation of surveys (pre-construction).	**Spec-13**	Pronghorn antelope seasonal study	PTAG/TAC
60 days prior to construction, if needed	**Spec 1, 4, 10, 12**	Species specific management plans	PTAG/ TAC
Prior to construction	**Wild-5**	Flagging sensitive features and habitat	NA
Prior to construction	**Wild-9**	Pre-construction bird nest surveys, if necessary	NA
Operation			
60 days post-construction	**Veg-4**	As-built report and offset calculation	NA
Two years after commencement of operation	**Wild-1**	Review of post-construction fatality monitoring results	PTAG/ TAC
Annually during operation	**Wild-6**	Review mortality database and provide mitigation	NA

Table ES-7: Summary of Milestones

Timing	Mitigation Measure	Milestone	PTAG/TAC review
Annually during operation	**Spec-2, 4, 6, 7, 8, 9, 12**	Incidental databases	TAC
Annually during operation	**Spec-11**	Townsend's big-eared bat mortality database	TAC
Decommissioning			
60 days prior to initiation of decommissioning	**Veg-7**	Detailed Site Restoration Plan	NA
60 days prior to initiation of decommissioning	**Hab-7**	Rationale for and mitigation of remaining roadways, if any	NA

Notes: NA = Not Applicable; PTAG = Pre-operational Technical Advisory Group; TAC = Technical Advisory Committee

EFSEC-recommended mitigation measures for wildlife and habitat also include: **Vis-1**[18], **Vis-2**, **Vis-3**, **Vis-4**, **Vis-5**, **Vis-6**, **Vis-7**, **Vis-8**, and **Vis-9**.

Energy and Natural Resources

ENR-1[19]**:** The Applicant would provide an executed agreement to EFSEC that identifies the source and quantity of water intended to be supplied to the Project prior to its construction, operation, and decommissioning.

Rationale: Provides verification that water being used by the Project is originating from a sustainable source.

ENR-2: The Applicant would install high-efficiency electrical fixtures and appliances in the O&M facility, BESS, and substations to reduce energy needs for the Project's operations stage.

Rationale: Reduces the Project's demands on energy and natural resources.

ENR-3: The Applicant would install high-efficiency security lighting to reduce energy needs for the Project's operations stage.

Rationale: Reduces the Project's demands on energy resources.

ENR-4: The Applicant would install low-water-use flush toilets in the O&M facilities to reduce the Project's water requirements during its operations stage.

Rationale: Reduces the Project's demands on water resources.

ENR-5: The Applicant would capture and recycle wash water to reduce the Project's water requirements during its operations stage.

Rationale: Reduces the Project's demands on water resources.

ENR-6: To retrieve as much of the natural resources used in construction and operation of the Project as possible, the Applicant would demolish and recycle all components of the Project that have the potential

[18] Vis-: Identifier of numbered mitigation item for Visual Aspects

[19] ENR-: Identifier of numbered mitigation item for Energy and Natural Resources

to be used as raw materials in commercial or industrial applications. If the Applicant intends to leave any portion of the facility, including concrete foundations, they must submit a request to EFSEC in an update to their decommissioning plan.

Rationale: Reduces the Project's demands on natural resources.

Land and Shoreline Use

LSU-1[20]**:** The Applicant would prepare a livestock management plan with property owners and livestock owners to control the movement of animals within the Lease Boundary during construction, operation, and decommissioning.

Rationale: To limit conflicts between the Project and farmers and ranchers.

LSU-2: The Applicant would prepare a dryland farming management plan for construction, operation, and decommissioning that outlines communication requirements between the Certificate Holder and the land owners. The plan would establish work windows that would allow farmers uninterrupted access to their fields for dryland wheat planting and harvesting.

Rationale: To limit conflicts between the Project and farmers and ranchers.

LSU-3: The Applicant would be responsible for ensuring that arrangements for the removal of all livestock have been made during Project construction and decommissioning.

Rationale: To limit conflicts between the Project and farmers and ranchers.

LSU-4: After construction is completed, the Applicant would restore all temporary disturbance areas to their preconstruction status.

Rationale: This measure would allow the areas of temporary disturbance within the Lease Boundary to return to their preconstruction agricultural production levels as soon as possible.

LSU-5: Prior to decommissioning, the Applicant would submit a Detailed Site Restoration Plan, per WAC 463-72-050, for restoring the site to its preconstruction character. The Applicant would be responsible for working with the landowner to return all agricultural land to its preconstruction status. If future site conditions or land ownership no longer allows for the land to be returned to agricultural production, the Applicant would submit a request to EFSEC for an alternative land use that would be in alignment with the Lease Boundary's preconstruction rural character and resource value. If the Detailed Site Restoration Plan requests an alternative land use, EFSEC may require that the Applicant provide additional mitigation to offset impacts from a permanent conversion of the land.

Rationale: This measure would assist in preventing conversion of a land use that is not in alignment with the Lease Boundary's current designation.

[20] LSU-: Identifier of numbered mitigation item for Land and Shoreline Use

Historic and Cultural Resources

CR-1[21]: Traditional Cultural Properties Mitigation:

Tribal review of site/engineering plans could provide input to guide design and avoidance, without confidential disclosure of locations but such review and input has not yet occurred between the applicant and all affected tribes.

The Yakama Nation has identified numerous TCPs within the project zone of influence where the project's impacts on these TCPs cannot be mitigated, particularly legendary and monumental sites that will be forever impacted. To the extent that mitigation measures for hunting and gathering locations may lessen impacts, those measures have not yet been agreed to by the applicant.

The CTUIR proposed several mitigation strategies (CTUIR 2021a, 2021b). Potential mitigation strategies include:

- Enable continued access for Tribes through an Access Agreement (e.g., continued access to First Foods).
- Create protections for natural resources that support First Foods procurement (e.g., preserve landforms, practice responsible stream management, avoid negative impacts on pollinator species).
- Perform off-site mitigation, including education and outreach work, to assist Tribes in the perpetuation of oral history and legends that would have been taught in-situ in the Area of Analysis; engage with Tribes on appropriate rehabilitation (closure) strategies for the safeguarding of viewshed and cultural landscapes.
- Include Tribal representatives during any ground-disturbing activities (Cultural Resource Monitor).
- Develop an agreement with the Tribes in anticipation of a time when the wind farm would be considered for disassembly to restore the landscape and viewshed.

CR-2: Archaeological and Architectural Resources Mitigation: Table ES-8 sets out proposed mitigation measures for archaeological and architectural resources potentially impacted by the Project. Any mitigation strategies should be detailed in an agreement document between EFSEC, DAHP, the Tribes, and the Project proponent.

Mitigation measures are intended to minimize impacts on historic and cultural resources with high sensitivity (unevaluated resources, precontact isolates, precontact sites, historic archaeological resources, and TCPs), primarily through avoidance. If avoidance is not possible, the mitigation clarifies which resources would require a DAHP permit prior to disturbance. Mitigation measures also identify instances where engagement with DAHP, Tribes, and/or landowners would be required.

[21] CR-: Identifier of numbered mitigation item for Cultural Resources

Table ES-8: Summary of Recommendations for Archaeological and Architectural Resources Potentially Impacted by the Project

Resource ID	Resource Type	Resource Sensitivity	Required Mitigation If Avoidance Not Possible
▪ 45BN2092 ▪ 45BN2146	Archaeological Resources Precontact Isolates	Avoidance requested and recommended	▪ DAHP permit not required for disturbance ▪ Further coordination with Tribes and DAHP
▪ 45BN261 ▪ 45BN2090 ▪ 45BN2153 (precontact component)	Archaeological Resources: Precontact or multicomponent sites	Avoidance requested and recommended DAHP-issued permit required prior to disturbance	▪ Further coordination with Tribes and DAHP
▪ 45BN2081 ▪ 45BN2082 ▪ 45BN2083 ▪ 45BN2084 ▪ 45BN2086 ▪ 45BN2088 ▪ 45BN2091 ▪ 45BN2093 ▪ 45BN2138 ▪ 45BN2139 ▪ 45BN2144 ▪ 45BN2150 ▪ 45BN2155 ▪ 45BN2156 ▪ 45BN2157 ▪ 45BN2158 ▪ 45BN2163	Archaeological Resources: Historic-Period Sites and Isolates	Determined not eligible for the NRHP	▪ None

Table ES-8: Summary of Recommendations for Archaeological and Architectural Resources Potentially Impacted by the Project

Resource ID	Resource Type	Resource Sensitivity	Required Mitigation If Avoidance Not Possible
▪ 45BN205 ▪ 45BN2085 ▪ 45BN2087 ▪ 45BN2089 ▪ 45BN2140 ▪ 45BN2141 ▪ 45BN2142 ▪ 45BN2143 ▪ 45BN2145 ▪ 45BN2147 ▪ 45BN2148 ▪ 45BN2149 ▪ 45BN2151 ▪ 45BN2152 ▪ 45BN2153 (historic component) ▪ 45BN2154 ▪ 45BN2159 ▪ 45BN2160 ▪ 45BN2161 ▪ 45BN2162	Archaeological Resources (Historic Sites)	Unevaluated for the NRHP	▪ DAHP permit required prior to any disturbance ▪ Evaluate site for NRHP eligibility
▪ 667765 (Nine Canyon Road) ▪ 721665 (McNary–Badger Canyon No. 1 Transmission Line) ▪ 722996 (147407 E. Beck Road Residence) ▪ 724939 (Farmhouse and Garage) ▪ 724940 (Shop) ▪ 724941 (Machine Shed) ▪ 724942 (Grain Elevator and Grain Storage Silos)	Architectural Resources	Determined not eligible for the NRHP	▪ Notify DAHP of any anticipated physical impacts

Table ES-8: Summary of Recommendations for Archaeological and Architectural Resources Potentially Impacted by the Project

Resource ID	Resource Type	Resource Sensitivity	Required Mitigation If Avoidance Not Possible
▪ 721666 (McNary–Franklin No. 2 Transmission Line) ▪ 722995 (Grain elevator) ▪ 724937 (Nicoson Road Farmstead Barn Storage Building) ▪ 724938 (Nicoson Road Farmstead Cribbed Grain Elevator)	Architectural Resources	Determined eligible for the NRHP	▪ Notify DAHP of any anticipated physical impacts
▪ N/A	Archaeological Resources and Architectural Resources	Unidentified historic and cultural resources	▪ DAHP permit required prior to any disturbance to archaeological sites ▪ Further coordination with Tribes and DAHP

Notes:
APP = Avoidance and Protection Plan; DAHP = Washington State Department of Archaeology and Historic Preservation; NRHP = National Register of Historic Places; RCW = Revised Code of Washington

Visual Aspects, Light and Glare

Visual Aspects Mitigation

VIS-1: Relocate turbines located within the foreground distance zone (0 to 0.5 miles) of non-participating residences to avoid completely dominating views from these highly sensitive viewing locations. Siting the turbines further away would reduce the level of visual contrast and prominence (CESA 2011; BLM 2013).

VIS-2: Do not place piggyback advertising, cell antennas, commercial messages, or symbols on proposed wind turbines, as these have the potential to introduce additional visual contrast and would seem out of place in this natural-appearing agricultural landscape (BLM 2013).

VIS-3: Maintain clean nacelles and towers to avoid any spilled or leaking fluids accumulating dirt, which would contrast with the clean, white/gray wind turbines and result in increased visual contrast within the landscape (BLM 2013).

VIS-4: Avoid complete removal of vegetation beneath solar arrays during construction, where possible, to reduce contrast between the exposed soil and adjacent undisturbed areas during Project operation. If site grading requires the removal of vegetation, the area will be revegetated and maintained during Project operation (BLM 2013).

VIS-5: Install opaque fencing to directly screen views of the solar arrays where sited within 0.5 miles of KOPs (including the alignment of I-82 and other linear KOPs) or residences. To allow the proposed fencing to

blend into the setting, color-treat the fencing to minimize color contrast with the existing landscape (BLM 2013).

VIS-6: Design BESS to blend with the adjacent agricultural character, including selecting materials and paint colors to reduce contrast with the existing setting. By mimicking design characteristics of agricultural structures in the area, the BESS facilities would appear consistent with the area's agricultural setting, including the overall visual scale of those existing structures (BLM 2013).

VIS-7: Maximize the span length across highways and other linear viewing locations to decrease visual contrast at the highway crossings. By moving the structures as far from the road as possible, the effect of those structures being located directly adjacent to these linear viewing locations would be reduced (BLM 2013).

VIS-8: Choose the type of proposed transmission structure (H-frame or monopole) to best match the adjacent transmission lines and to minimize visual clutter from the introduction of different structure types into the landscape, which would result in increased visual contrast (BLM 2013).

Shadow Flicker Mitigation

SF-1[22]**:** The Applicant would attempt to avoid, minimize, and mitigate shadow flicker at nearby residences. Shadow flicker can usually be addressed by planting trees, shading windows, or other mitigation measures. As a last resort, the control system of the wind turbine could be programmed to stop the blades during brief periods when conditions result in a perceptible shadow flicker.

SF-2: The Applicant would set up a complaint resolution procedure that would include the following: 1) A 24-hour "hot line" or other form of communication that the public can use to report any undesirable shadow flicker associated with the operation of the wind turbines, with the ability to log the date and time of a complaint. This line of communication would be maintained for at least one year, at which time it could be reassessed to continue or be terminated; 2) An attempt to contact the complainant within 24 hours; and 3) A requirement to report any complaints and their resolution to EFSEC during monthly reports to the Council.

Light Mitigation

LIG-1[23]**:** The Project would be constructed with LEED-certified building exterior(s) and security lighting to minimize vertical and horizontal illuminance to keep the lighting on site and to reduce impacts at the Lease Boundary and beyond.

Glare Mitigation

There are no recommended mitigation measures proposed for glare.

[22] SF-: Identifier of numbered mitigation item for Shadow Flicker

[23] LIG-: Identifier of numbered mitigation item for Light

Noise and Vibration

Construction and Decommissioning

N-1[24]**:** Avoid laydown and equipment storage/parking areas closer than 2,500 feet from the nearest NSR location.

Rationale: These laydown and storage areas would have more noise sources for longer periods of time than other areas; therefore, siting these locations further from NSR locations would limit the sound level and the duration that such equipment could impact an NSR.

N-2: Limit large, noise-generating equipment operations, such as earth-moving equipment, cranes, and trucks, as outlined in Table 4.11-7, to daytime hours (between 7 a.m. and 10 p.m.), and limit the loudest and most impulsive pieces of construction equipment and activities, such as pile-driver operations and blasting, to typical working hours only: 7 a.m. to 6 p.m., Monday through Saturday.

Rationale: This measure would ensure that a typical workday would not include pile-driver operations or blasting during evening hours (6 p.m. to 10 p.m.) but could include some on-site activities during nighttime hours such as early-morning setup and preparation for the workday. Nighttime operations would be atypical. The purpose is to limit noise impacts during sensitive hours while allowing contractors some flexibility.

N-3: Monitor noise during nighttime construction operations (between 10 p.m. and 7 a.m.), when construction activities have the potential to impact NSRs or reduce activities to ensure that construction noise does not exceed state noise limits.

Rationale: This monitoring would take place throughout the entirety of the nighttime hours or until construction activities cease.

N-4: Update the Applicant's noise complaint resolution procedure to better address and respond to noise complaints from the public. The updates include the following: a complaint hotline during construction and providing a phone number to be posted on signage throughout the construction project and ensure that current site contact information is maintained with EFSEC. The Applicant would log all correspondence and promptly follow up with inquiries to provide appropriate resolution. The correspondence and resolutions would be logged throughout the construction process, and the log would be made available to EFSEC during routine reporting or upon request. During the operation stage, the site would be staffed and contact information would be available

Rationale: This measure would better address and respond to noise complaints from the public.

Operation

N-5: Establish a noise complaint resolution procedure similar to that proposed for construction and decommissioning to better address and respond to noise complaints.

Rationale: This measure would better address and respond to noise complaints from the public.

N-6: Maintain operation of the "noise hot line" (or similar) until the Project has been operational for at least one year at which time this can be reassessed to continue or be terminated.

[24] N-: Identifier of numbered mitigation item for Noise

Recreation

R-1[25]**:** The Certificate Holder would coordinate with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within the Lease Boundary (e.g., multi-use trails).

Rationale: To mitigate the potential loss of recreational activities due to the Project.

R-2: The Certificate Holder would provide a minimum of five informational boards approved by DNR and EFSEC at viewpoints associated with scenic areas of interest. The construction of the informational boards would be completed within five years of the beginning of construction.

Rationale: To mitigate the loss of uninterrupted views of scenic viewpoints and provide information to the public regarding the Project, the Project's expected years of operation and the reclamation of the Project. Additionally, photographs of the viewshed prior to the construction of the Project should be displayed, in color, on the informational boards.

R-3: To mitigate the loss of safe recreation use for recreation enthusiasts, the Certificate Holder would coordinate with local and regional (when appropriate) recreation groups (e.g., the Northwest Paragliding Club, the Tri-City Bicycle Club) to develop and maintain an adaptive safety management plan to continue access to recreation activities in the Project area while keeping recreation enthusiasts safe. This plan should identify potential hazards within the Project Area (e.g., construction on or near common bicycle paths, no fly zones, etc.) and provide opportunities to identify or improve other similar recreation use areas to offset any recreation removed from the Project area as a result of the Project. Specific to paragliding, the Certificate Holder would perform outreach to other regional paragliding entities to share the safety management plan to ensure that recreationists are aware of the limitations the Project creates for safe landing and safe air space.

Rationale: To mitigate the loss of safe use for recreation enthusiasts.

Public Health and Safety

PHS-1[26]**: Fire Suppression Aircraft Access:** In the event of a major wildfire occurring in an area where fire suppression aircraft may need access near the Project, whether related to the Project or resulting from another cause, the Applicant would shut down turbines temporarily.

Rationale: This mitigation measure would allow access for fire suppression aircraft carrying water and fire suppression chemicals, as needed.

Transportation

TR-1[27]**:** The load movement team would review the procedures to be followed if the load should become lodged at a crossing and would review the emergency contact numbers for each crossing daily—that is, before starting travel for the day.

Rationale: Ensures safe practices during the transportation of materials for construction and decommissioning.

[25] R-: Identifier of numbered mitigation item for Recreation

[26] PHS: Identifier of numbered mitigation item for Public Health and Safety

[27] TR-: Identifier of numbered mitigation item for Transportation

TR-2: The Applicant would work with WSDOT and Operation Lifesaver to provide train safety presentations to employees and contractors to increase knowledge regarding train safety, including train track crossings. Since this measure cannot be required by EFSEC, it cannot be considered fully effective mitigation for the purpose of this analysis.

Rationale: Lessens potential collisions at train crossings.

TR-3: A third-party engineer would provide a traffic analysis prior to decommissioning. The traffic analysis would evaluate all modes of transportation (e.g., waterways, rail, roads, etc.) used for the movement of people and materials during decommissioning via the haul route(s) in Washington State.

Rationale: Ensures that no changes have occurred since the traffic analysis was originally provided prior to construction.

TR-4: All railroad crossing and grade changes would be included in a route survey performed by a third-party engineer with the Washington Utilities and Transportation Commission participating to determine if current traffic control systems at crossings are appropriate or if additional mitigation is needed prior to decommissioning. The route survey would include anticipated traffic counts. Since this measure would require the participation of other agencies before it could be implemented, it cannot be considered fully effective mitigation for the purpose of this analysis.

Rationale: Ensures that no changes have occurred since the route survey was originally provided prior to construction.

TR-5: The analysis of impacts from decommissioning is based on existing laws and regulations at the time when the Final ASC was submitted to EFSEC. The Applicant would consult with WSDOT and Benton County on the development of a decommissioning-stage Traffic and Safety Management Plan prior to decommissioning. The Traffic and Safety Management Plan must include a safety analysis of the WSDOT-controlled intersections (in conformance with the WSDOT Safety Analysis Guide) and recommend mitigation or countermeasures where appropriate. The analysis would review impacts from decommissioning traffic and be submitted to WSDOT for review and comment prior to decommissioning. Since this measure would require the participation of other agencies before it could be implemented, it cannot be considered fully effective mitigation for the purpose of this analysis. EFSEC would work with the identified agencies to facilitate cooperation in implementing this mitigation measure.

Rationale: Ensures that no changes have occurred to the laws and regulations used in this analysis.

TR-6: The Applicant provided a Traffic Impact Analysis (TIA) with the Final ASC (Horse Heaven Wind Farm, LLC 2023). Oversize truck routes to the Project Area were analyzed using I-82, north through State Route 397, Locust Grove Road, and Plymouth Road. Additionally, the delivery of turbine towers was only analyzed from I-82 to the Locust Grove/State Route 397 exit. The use of additional routes for oversize or overweight deliveries may require supplemental analysis and requires approval by EFSEC.

Rationale: Ensures consistency with state and county transportation plans and codes.

TR-7: Coordinate with WSDOT, Benton County, and EFSEC prior to construction and prior to demolition on potential mitigation for intersections with safety concerns.

Rationale: Ensures safe practices during the transportation of materials for construction and decommissioning.

Public Services and Utilities

PSU-1[28]**:** To address the potential for the inappropriate disposal of Project waste, the Applicant would dispose of all non-recyclable Project components in an appropriately licensed waste disposal facility.

Rationale: This mitigation measure prevents disposal of Project-related wastes in inappropriate landfills or unauthorized facilities.

EFSEC-recommended mitigation measures for the Public Services and Utilities also includes: **ENR-5** and **ENR-7**.

Socioeconomics

Socio-ec-1[29]**:** Prior to decommissioning, the Applicant would provide an up-to-date analysis on the availability of temporary housing for workers. If sufficient temporary housing for workers is not available, the Applicant would present EFSEC with options for housing workers from outside the community.

Rationale: This mitigation measure would minimize adverse impacts on the availability of housing for residents of the surrounding communities.

[28] PSU-: Identifier of numbered mitigation item for Public Services and Utilities

[29] Socio-ec-: Identifier of numbered mitigation item for Socioeconomics

Attachment ES-3-2

Tables ES-3a through ES-3c and Tables ES-4a through ES-4c

Summary of Potential Impacts of the Comprehensive Project and by Project Component during Construction, Operations and Decommissioning

This Page Intentionally Left Blank

Table ES-3a

Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

This Page Intentionally Left Blank

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Earth Resources (Section 4.2)	Geology (Landscape)	Adverse impacts on geology would occur from the installation of deep turbine foundations.	Low	Constant	Probable	Limited	No mitigation identified	None identified
Earth Resources (Section 4.2)	Soils (Landscape)	The disturbance to natural soil profiles could result in a temporary increase in localized soil erosion. These activities are likely to include site clearing, excavation, and backfilling. The construction and erection of turbine tower foundations would disturb soil resources as the contractor excavates unsuitable material from the Project area.	Low	Short term	Unavoidable	Confined	**Geo-1:** Avoid construction during wet periods **A-1:** Limit traffic speeds **Veg-7:** Detailed Site Restoration Plan **W-2:** Minimize work in heavy rain **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Topography (Landscape)	Construction activities that would impact topography include excavation, grading, and cut-and-fill-slope development. Limited grading and/or placement of additional fill may be needed to obtain necessary grades for access roads, building foundations, and leveling the ground. Surface disturbance from construction-related activities would impact topography around each turbine.	Low	Short term	Unavoidable	Confined	**Geo-1:** Avoid construction during wet periods **A-1:** Limit traffic speeds **LSU-4:** Restoration of temporary disturbance to preconstruction status	None identified
Earth Resources (Section 4.2)	Earthquakes (Safety)	Prolonged earthquake-induced ground shaking could cause minor damage to infrastructure if shaking has an intensity and duration that exceeds code-based structural seismic design levels.	Negligible	Temporary	Feasible	Confined	No mitigation identified	None identified
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	The Project site includes areas susceptible to landslides and bluff failures. Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Geo-1:** Avoid construction during wet periods **Veg-7:** Detailed Site Restoration Plan **W-2:** Minimize work in heavy rain **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified

Notes:
Table continues below, notes apply to remainder of table
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; ASC = Application for Site Certification; BESS = battery energy storage system; BMP = best management practice; dBA = A-weighted decibels; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; mph = miles per hour; NRHP = National Register of Historic Places; NSR = noise sensitive receptor; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; PM_{10} = particulate matter less than or equal to 10 microns in diameter; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; Tribes = Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum Tribe; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Earth Resources (Section 4.2)	Volcanic Activity (Safety)	Hazards from ashfall to construction activities would include the following: ▪ Accumulation of ash on structures ▪ Clogging of electronics, machinery, and filters ▪ Suspension of abrasive fine particles in air and water ▪ Accumulation of ash on transportation routes and vegetation	Negligible	Temporary	Unlikely	Confined	No mitigation identified	None identified
Air Quality (Section 4.3)	Air Quality (Quantity of Emissions, Compatibility with Applicable Rules, Regulations, and Plans, Potential Exposure to Sensitive Receptors)	Adverse impacts on air quality may occur during construction from $PM_{2.5}$, PM_{10}, and fugitive dust	Low	Short Term	Probable	Confined	**A-1:** Limit speeds to less than 15 mph on dirt roads.	None identified
Water Resources (Section 4.4)	Physical Disturbance	Project construction would require temporary and permanent disturbance, which could impact surface water and wetlands, surface runoff/absorption, floodplains, and groundwater.	Low	Short Term (for temporary disturbance) Long Term (for permanent disturbance)	Unavoidable	Confined	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs. **W-6:** Wetland SWPPP. **W-7:** Clear-span 100-Year Floodplain. **W-11:** Concrete Batch Plant to Avoid Streams	None identified
Water Resources (Section 4.4)	Change in Water Quality	Project construction could result in a change to water quality of waterways that intersect or are located adjacent to Project construction activities.	Low	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Change in Hydrology – Temporary Disturbance	Temporary disturbance from Project construction within ephemeral and intermittent streams could result in changes to the hydrology of waterways.	Low	Short Term	Unlikely	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs.	None identified
Water Resources (Section 4.4)	Change in Hydrology – Permanent Disturbance	Project construction would require a culvert installation on one intermittent stream that could result in changes to the hydrology of the stream.	Low	Long Term	Unavoidable	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs.	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Project construction could result in the introduction of hazardous substances that could impact surface water and wetlands, floodplains, and groundwater.	Low	Temporary	Unlikely	Local	**W-7:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)[30]	Public Water Supply	Project construction activities would rely on water sourced from local public facilities, local private irrigators, and/or collector wells fed from regional aquifers.	Medium	Temporary	Feasible	Regional	**W-9:** Minimize Water Use.	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat - Permanent Disturbance	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Low	Short Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified

[30] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Vegetation (Section 4.5)	Loss of Extent of Other Habitat – Permanent Disturbance	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with other habitat.	Low	Long Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified
Vegetation (Section 4.5)	Loss of Extent of Special Status Plant Species	Site clearing associated with the construction of the Project would result in direct loss of populations of special status plant species or their habitat.	Medium	Constant	Feasible	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-3:** Special Status Plant Species Education **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Degradation	Construction activities could result in habitat degradation from introduction of hazardous material, surface runoff, introduction and spread of invasive plants or noxious weeds, and deposition of dust.	Low	Long Term	Feasible	Local	**Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Construction activities could result in habitat fragmentation from fire.	Low	Long Term	Feasible	Local	**Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design	None identified
Wildlife and Habitat (Section 4.6)	Habitat Loss	The Project would result in the direct loss of habitat through construction of the Wind Energy Micrositing Corridor and associated transportation routes. *The Project may also result in indirect habitat loss through increased noise, light, and human presence during construction.*	Medium	Short Term for temporary disturbances (e.g., construction laydown areas) Constant for permanent footprint loss (e.g., turbine footprint)	Unavoidable	Local	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** *Tree Avoidance.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	The Project may result in mortality of smaller animals (e.g., birds, herptiles, small mammals) during clearing and ground preparation works. *Wildlife-vehicle collisions may occur during Project construction due to increased traffic.*	Low	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-4:** Develop TAC. **Hab-6:** *Work with EFSEC on final Project layout and design.*	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Turbines, power lines, roadways, and other linear infrastructure could create barriers to wildlife movement and fragment habitat. *Barriers and fragmentation created during construction would predominantly remain through operation.*	Low	Long Term	Probable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3**: Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** *Work with EFSEC on final Project layout and design.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: striped whipsnake and sagebrush lizard	Impacts on shrub and shrub-steppe habitat may result in loss of suitable reptile habitat. *Mortality of reptile species could occur during construction from heavy machinery and land clearing and grubbing.*	Low	Constant	Feasible	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-3**: Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-1:** *Implement striped whipsnake and sagebrush lizard specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	Construction of the Project may disturb American white pelicans moving over the Lease Boundary.	Negligible	Short Term	Unlikely	Limited	**Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Spec-2:** *Implement American white pelican specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Construction of the Project could disturb bald eagles, resulting in avoidance of the Project Site.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction. disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-1:** Tree Avoidance. **Spec-3:** *Implement eagle specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Construction may result in direct and indirect habitat loss and the destruction of burrows (active, inactive, and potential). Mortality may occur during vegetation and ground-disturbing works.	Medium	Constant (habitat loss) Short Term (disturbance, mortality)	Unavoidable (habitat loss) Probable (disturbance) Feasible (mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-4:** *Implement burrowing owl specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Construction of turbines and associated roads and power lines may result in the direct and indirect loss of habitat in core and range ferruginous hawk habitat. *Nesting success could be impacted by construction activities near the nest or activities change prey abundance.*	High	Constant (habitat loss) Short Term (disturbance)	Unavoidable (habitat loss) Probable (disturbance)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-5**: *Implement ferruginous hawk specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Construction of the Project could disturb golden eagles, resulting in avoidance of the Project site, though golden eagle nesting has not been reported within 10 miles of the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Spec-3:** *Implement eagle specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Construction may disturb birds flying over the Lease Boundary, resulting in bird flight paths being diverted around the area. *Construction may result in the loss of foraging habitat.*	Negligible	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Feasible (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Spec-6:** *Implement great blue heron, sandhill crane, and tundra swan specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Construction may result in direct and indirect (disturbance) habitat loss. Mortality may occur from interactions with machinery and destruction of nests.	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on Final Project layout and design. **Hab-8:** Mitigation options **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Construction of the Project is predicted to result in the direct loss of suitable foraging habitat for prairie falcon. Disturbance from construction activities may result in disturbance to prairie falcons.	Medium	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Spec-8**: *Implement prairie falcon specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Construction of the Project is predicted to result in the direct loss of suitable foraging habitat for ring-necked pheasant. Disturbance from construction activities may result in indirect habitat loss. *Access roads may result in collisions with ring-necked pheasants.*	Low	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-9:** *Implement ring-necked pheasant specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow sage thrasher	Construction may result in direct and indirect habitat loss. Mortality may occur from interactions with machinery and destruction of nests.	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Construction may result in the disturbance and loss of suitable foraging habitat and disruption of birds flying over the Lease Boundary.	Low	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Feasible (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Spec-6:** *Implement great blue heron, sandhill crane, and tundra swan specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Construction of the Project could disturb Vaux's swift in flight over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit white-tailed jackrabbit	Construction of the Project is predicted to result in the direct loss of suitable habitat for jackrabbit. Disturbance from construction activities may result in indirect habitat loss. *Access roads may result in collisions with jackrabbits, barriers to movement, and increased fragmentation.*	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3**: Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-10:** *Implement black and white-tailed jackrabbit specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Construction activities could disturb Townsend's big-eared bat foraging within the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-7:** Schedule construction during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** *Implement Townsend's big-eared bat specific mitigation.*	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Construction of the Project and associated access roads are predicted to result in the loss of suitable Townsend's ground squirrel habitat and destruction of colonies. *Mortality may occur during construction work near colonies and along access roads.*	Medium	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-12:** *Implement Townsend's ground squirrel specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Construction is predicted to result in direct loss of pronghorn antelope habitat. Activity associated with construction may result in indirect habitat loss. *Increased traffic on existing and new access roads may result in pronghorn antelope mortality.*	Medium	Constant (habitat loss) Short Term (construction disturbance)	Unavoidable (habitat loss) Probable (disturbance)	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-13:** *Implement pronghorn antelope specific mitigation.*	None identified
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	The Project's construction would require metal and concrete for turbine, solar array, BESS, substation, and building construction and fuel for construction equipment and vehicles and various raw materials for manufacturing. The Project's construction water requirements would amount to approximately 3% of the annual water produced by Kennewick. Impact magnitude would increase from low to medium if the City of Kennewick Utility Services Division of Public Works is required to make adjustments to their water management plans.	Low to Medium (i.e., will increase if the City of Kennewick Utility Services Division of Public Works is required to make adjustments to their water management plans)	Short Term	Unavoidable	Local to Regional (depending on sourcing of the materials)	**ENR-1:** Executed water supply agreement	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Similar to Turbine Option 1 and solar arrays	Low (decreased productivity) Medium (operational changes)	Temporary (brief access modifications) Short Term (seasonal restrictions)	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan **LSU-3:** Arrange for the removal of livestock	None identified
Land and Shoreline Use (Section 4.8)	Wineries and agritourism (Profitability)	Wineries and agri-tourism businesses Wine industry and wine tasting tourism could be impacted from changes in general environmental settings through potential changes in viewing opportunities from wineries that are in proximity to the Project.	Low	Short Term	Feasible	Local	No mitigation identified	None identified
Historic and Cultural Resources (Section 4.9)	Precontact Archaeological resources; DAHP-issued permit required prior to disturbance - OR - Avoidance requested and recommended	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	High	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Historic-period archaeological isolates and sites determined not eligible for the NRHP	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Negligible	Constant	Probable	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	*Adverse effects on resources through a loss or diminishment of integrity*	Negligible	Constant	Probable	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	*None identified*

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Historic and Cultural Resources (Section 4.9)	Unevaluated archaeological historic-period sites	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Medium	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Adverse effects on resources through a loss or diminishment of integrity	Low	Short term for impacts from noise, dust, and use of large equipment and heavy machinery Constant for impacts from turbine construction	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Physical impacts	High	Constant	Unlikely	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity.	High	Constant	Feasible	Local	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of an Inadvertent Discovery Plan	*None identified*
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Destruction of or damage to resources through ground disturbance and physical alteration; loss of access to resources; visual interference.	High	Short term for impacts from noise, dust, and use of large equipment and heavy machinery. Constant for impacts from construction of turbines and fencing and the acquisition of land.	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties.

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Activities would attract attention and would modify the existing landscape setting. Due to the additive effect of the different Project features, these impacts would affect a larger area.	Medium	Short Term	Probable	Regional	No mitigation identified	None identified
Visual Aspects, Light and Glare (Section 4.10)	Light	Activities would be completed mainly during daytime hours without the need for nighttime lighting.	Negligible	Temporary	Unlikely	Limited	No mitigation identified	None identified
Visual Aspects, Light and Glare (Section 4.10)	Glare	Activities could generate glare from construction equipment or solar panels.	Low	Temporary	Feasible	Confined	No mitigation identified	None identified
Noise and Vibration (Section 4.11)	Noise and Vibration (Noise from– Construction Equipment)	Most noise sensitive receptors would receive sound levels below 55 dBA during construction, with the potential to be up to 10 dBA over baseline. One noise sensitive receptor could receive sound levels at 55 dBA during construction of one turbine.	Medium	Temporary	Probable	Limited	**N1:** Avoid laydown and equipment storage/parking areas near NSRs **N2:** Limit the use of noise-generating equipment to daytime hours (7 a.m. to 10 p.m.) and loud equipment to working hours (7 a.m. to 6 p.m.) **N-3:** Monitor noise during nighttime operations construction (10 p.m. to 7 a.m.) with the potential to impact NSRs **N-4:** *Set up a 24-hourUpdate the Applicant's "noise hot line" complaint resolution procedure or similar and update the Applicant's noise complaint resolution procedure to include contacting and reporting details*	None identified
Noise and Vibration (Section 4.11)	Noise and Vibration (Noise from– Blasting)	Sound levels can reach up to 140 dBA at blast locations and 90 dBA at 500 feet.	Low	Temporary	Feasible	Limited	**N2:** Limit blasting to working hours (7 a.m. to 6 p.m.)	None identified
Recreation (Section 4.12)	Recreation – Use	Construction of the comprehensive Project would result in a high impact due to the restriction of access to public land and recreational activities that occur on public land within the Project's construction area. The impact would be long term for the duration of the life of the Project, unavoidable, and local.	High	Long Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails) **R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest **R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Indirect impacts related to visual resources and noise could occur at recreation sites.	High	Long Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest.	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Recreation (Section 4.12)	Recreation – Public Health and Safety	The Project's potential to affect the health and safety of recreationists using the area for paragliding, hang gliding, or biking would result in a medium impact.	Medium	Long Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Fire resulting from Project construction is unlikely, but wildfire risk in the area is considered high. For instance, combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during construction. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Fire resulting from Project construction is unlikely, but wildfire risk in the area is considered high. For instance, combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during construction. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Regional	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health and Safety (Hazardous Materials Release)	Hazardous materials, including diesel fuel, lubricating oils, hydraulic fluid, paints, and solvents would be used and stored on site. Spill kits would be maintained, minimizing the risk of a release if a spill were to occur.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified
Transportation (Section 4.14)	Vehicular Traffic	Traffic volumes would increase measurably during transportation of material and equipment for the construction of the turbines. The potential for traffic volumes and slower, oversized roads would likely decrease level of service for intersections near the Lease Boundary and highways/ freeways. The increase in traffic volumes and the size of construction material may decrease roadway safety at intersections near the Project or on railroad crossings.	Medium	Short Term	Unavoidable	Regional	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-6:** Supplemental analysis of additional routes, if proposed **TR-7:** Mitigation for intersections with safety concerns	None identified
Public Services and Utilities (Section 4.15)	Wastewater (Level of Service and Safety)	The amount of wastewater produced from the maximum number of temporary workers on site (467), while measurable, would not impact the ability of the local utility to treat the community's sewage.	Low	Short Term	Unavoidable	Local	No mitigation identified	None identified

Table ES-3a: Summary of Potential Impacts of Comprehensive Project during Construction of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Public Services and Utilities (Section 4.15)	Municipal Solid Waste (Level of Service)	Solid waste from the Project's construction would consist of various quantities of non-hazardous construction wastes. The landfills identified in the ASC maintain substantial capacity that would be sufficient to serve the Project and the region, simultaneously.	Low	Constant	Unavoidable	Local to Regional (depending on location of landfill)	**ENR-7:** Recycle all applicable components **PSU-1:** Use of a licensed waste disposal facility	None identified
Public Services and Utilities (Section 4.15)	Potable Water (Level of Service and Safety)	The impact on human health and wellbeing would result from a reduction in potable water in the surrounding community or the capability to manage wastewater and construction debris.	Negligible	Temporary (accident) Constant (storage)	Unlikely	Limited to Regional (depending on location of disposal facility)	No mitigation identified	None identified
Socioeconomics (Section 4.16)	Economic Environment (Housing Availability)	Phase 1 is anticipated to directly support an average monthly workforce of 300, and Phases 2a and 2b are anticipated to support an average monthly force of 267 and 271, respectively. The majority of construction workers would be sourced locally; however, the Project's construction would require the temporary and short-term relocation of non-local construction workers into the region. As reported in the 2019 American Community Survey 5-Year Estimate, rental vacancy rate in Benton County was 5.1%, with 1,660 units available for rent.	Negligible	Temporary to Short Term	Feasible	Regional	*No mitigation identified*	None identified
Socioeconomics (Section 4.16)	Environmental Justice (People of Color and Low-Income Populations)	Disproportionate impacts on people of color and low-income communities.	Negligible to Medium	Short Term	Feasible	Confined to Regional	*No mitigation identified*	None identified

Notes:
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.

Applicant = Horse Heaven Wind Farm, LLC; ASC = Application for Site Certification; BESS = battery energy storage system; BMP = best management practice; dBA = A-weighted decibels; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; mph = miles per hour; NRHP = National Register of Historic Places; NSR = noise sensitive receptor; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; PM_{10} = particulate matter less than or equal to 10 microns in diameter; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; Tribes = Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum Tribe; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Table ES-3b

Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

This Page Intentionally Left Blank

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Earth Resources (Section 4.2)	Geology (Landscape)	Impacts on the underlying basalt bedrock are not expected to include deep excavations that encounter geologic resources.	Negligible	Temporary	Feasible	Limited	No mitigation identified	None identified
Earth Resources (Section 4.2)	Soils (Landscape)	It is anticipated that no new ground disturbance would occur. Access roads and cleared areas could be susceptible to increased soil erosion from a lack of stabilizing vegetation or hard cover and prior disturbance of the local soil profile. Soil erosion, because of operations, would be limited to gravel-surfaced areas, including the apron constructed around each turbine.	Low	Temporary	Feasible	Limited	**A-1:** Limit traffic speeds **Veg-7:** Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Topography (Landscape)	Facility operation would not require further excavation of existing ground surfaces or additional grading. Furthermore, it is anticipated that ground improvement techniques used during the construction stage would mitigate soils susceptible to erosion by improving their engineering performance and reducing their potential for settlement.	Negligible	Temporary	Unlikely	Limited	No mitigation identified	None identified
Earth Resources (Section 4.2)	Earthquakes (Safety)	Prolonged earthquake ground shaking could cause minor damage to infrastructure if the intensity and duration of the shaking exceed code-based structural seismic design levels.	Low	Temporary	Feasible	Confined	No mitigation identified	None identified
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Veg-7:** Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Volcanic Activity (Safety)	Ashfall and ash accumulation have the potential to reduce the photovoltaic-generated power of the solar panel as well as damage the solar arrays' components	Low	Temporary	Unlikely	Confined	No mitigation identified	None identified

Notes:
Table continues below, notes apply to remainder of table
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; dBA = A-weighted decibels; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; FAA = Federal Aviation Administration; FTE = full-time equivalent KOP = key observation point; LEED = Leadership in Energy and Environmental Design; mph = miles per hour; O&M = operations and maintenance; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife; ZOI = zone of influence

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Air Quality (Section 4.3)	Air Quality (Quantity of Emissions, Compatibility with Applicable Rules, Regulations, and Plans, Potential Exposure to Sensitive Receptors)	Adverse impacts on air quality may result from operation and maintenance activities (primarily vehicular emissions).	Negligible	Short Term	Probable	Confined	**A-1:** Limit speeds to less than 15 mph on dirt roads.	None identified
Water Resources (Section 4.4)	Panel Washing	Project operations would require water to wash solar array panels, which would infiltrate the surrounding ground and could impact water resources.	Negligible	Temporary	Unlikely	Confined	**W-9:** Minimize Water Use. **W-10:** Panel Washing.	None identified
Water Resources (Section 4.4)	Surface Water Runoff from Impervious Surfaces	Project operations would increase impervious surfaces, which could lead to increased water runoff to water resources.	Low	Temporary	Unlikely	Local	No mitigation identified	None identified
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Project operations could result in the accidental release of hazardous substances that could impact water resources.	Negligible	Temporary	Unlikely	Limited	**W-5:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Impacts on Public Water Supply	Project operations would rely on water from public water supply for operations.	Low	Temporary	Feasible	Regional	**W-9:** Minimize Water Use. **W-10:** Panel Washing.	None identified
Vegetation (Section 4.5)	Vegetation Maintenance	During Project operation, vegetation may require maintenance, such as cutting or removal, for areas under the solar arrays, or along roadways.	Negligible	Long Term	Probable	Confined	No mitigation identified	None identified
Vegetation (Section 4.5)	Habitat Degradation	Project operations could result in habitat degradation from the introduction of hazardous substances, introduction and spread of noxious weeds and invasive plants, and deposition of dust.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Hab-4:** Pre-operational Technical Advisory Group	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Project operations could result in habitat fragmentation from edge effects and fire.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Veg-9:** Maintenance of Solar Array Fence **Hab-4:** Pre-operational Technical Advisory Group	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)[31]	Habitat loss	The Project would result in the direct loss of habitat through operation of the turbines and associated infrastructure. The Project may result in indirect habitat loss through degradation of habitat in ZOI created by disturbances (e.g., noise, light) from turbines and associated infrastructure.	Medium	Constant	Unavoidable	Local	**Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Veg-4:** As-built report and offset calculation.	None identified
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	The Project may result in mortality of aerial species (birds and bats) through collisions with turbines, strikes with power lines, windows, and weather towers. Other sources of mortality on wildlife, including non-aerial species, include vehicle collisions and changes in food availability.	Medium	Long Term	Probable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-6:** *Work with EFSEC on final Project layout and design.*	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	The operation of turbines, power lines, roadways, and other linear infrastructure could result in barriers to wildlife movement and fragment habitat. Barriers and fragmentation created during construction would predominantly remain through operation.	Medium	Long Term	Probable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-4:** *As-built report and offset calculation.*	None identified

[31] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: Striped whipsnake and sagebrush lizard	Impacts on shrub and shrub-steppe habitat may result in loss of suitable reptile habitat. Increased road networks within the Lease Boundary could increase the risk of mortality sagebrush lizard and striped whipsnake. Roadways may create barriers to reptile movement and further fragment reptile habitat.	Low	Constant	Feasible	Confined	**Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-1:** *Implement striped whipsnake and sagebrush lizard specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	American white pelicans have the potential for collision with turbines, and electrocution with overhead transmission lines. *American white pelicans could collide with solar arrays as literature suggests water-associated birds may attempt to land on solar arrays if they are mistaken for water (lake effect).*	Medium	Long Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-2***: Implement American white pelican specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Bald eagles are estimated to be the 17th most likely large bird to collide with the turbines, with an estimated exposure index of 0.01. Further, turbines could create barriers to bald eagle movement over the Lease Boundary.	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Spec-3:** *Implement eagle specific mitigation.*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Permanent habitat loss from turbine footprint and roads would persist throughout operation. *Operation of turbines could result in indirect burrowing owl habitat loss. Burrowing owls are not expected to collide with turbines but are susceptible to road-based mortality. Further, changes in prey distribution and abundance may change foraging.*	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-4:** *Implement burrowing owl specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Operation of the turbines could result in mortality due to collisions with turbines and power lines. Change in prey abundance may reduce hawk survivorship. *Operation may also reduce the re-occupancy of nesting territories due to disturbance.*	High	Constant	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-5:** *Implement ferruginous hawk specific mitigation.*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Golden eagles are estimated to be the 22nd most likely large bird to collide with the turbines. Further, turbines could create barriers to golden eagle movement over the Lease Boundary.	Medium	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-3:** *Implement eagle specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	The operation of wind turbines may result in great blue heron and sandhill crane mortality and disturbance.	Medium	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** *Implement great blue heron, sandhill crane, and tundra swan specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Direct and indirect habitat loss would persist throughout Project operation. Loggerhead shrike mortality may occur due to strikes with turbines.	Medium	Constant	Unavoidable	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-6**: Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Direct habitat loss would persist throughout Project operation. Operation of the turbines may disturb prairie falcons foraging within the Lease Boundary. Operation of the turbines may result in mortality of prairie falcons. *Changes in prey density may change habitat suitability and survivorship of prairie falcons.*	Medium	Constant	Unavoidable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-8:** *Implement prairie falcon specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Direct habitat loss would persist through Operation. Operation of the turbines may also result in indirect habitat loss. Ring-necked pheasant mortality may occur due to Project operation. *Access roads may result in collisions with ring-necked pheasants.*	Low	Long Term	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-9:** *Implement ring-necked pheasant specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow and sage thrasher	Direct and indirect habitat loss would persist throughout Project operation.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Operation of turbines may result in the continued loss and disturbance of foraging habitat. *Operation of Option 1 may result in tundra swan mortality through collision with turbines.*	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Veg-4:** As-built report and offset calculation. **Spec-6***: Implement great blue heron, sandhill crane, and tundra swan specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Vaux's swift migrating over the Lease Boundary are susceptible to strikes during migration.	Low	Long Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-7:** *Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	Operation of the turbines may result in indirect loss of jackrabbit habitat and mortality along access roads. Direct habitat loss is expected to persist throughout operation.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides **Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-10:** *Implement black and white-tailed jackrabbit specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Townsend's big-eared bat mortality may occur due to Project operation. *Operation may result in indirect loss of foraging habitat.*	Low	Long Term	Probable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program **Wild-4:** Avoid use of pesticides and rodenticides **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** *Implement Townsend's big-eared bat specific mitigation.*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Townsend's ground squirrel mortality may continue along access roads during operation. *Operation of the solar arrays may alter Townsend's ground squirrel behavior by providing shelter. Mortality may occur along access roads.*	Medium	Constant	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides **Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-12:** *Implement Townsend's ground squirrel specific mitigation.*	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Operation of the Project may result in direct and indirect habitat loss to pronghorn antelope. Pronghorn antelope mortality may occur along maintenance roads.	Medium	Constant	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-13:** *Implement pronghorn antelope specific mitigation.*	None identified
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	Project maintenance may require generator-specific lubricants and fluids produced outside the Project vicinity. O&M vehicles would need an ongoing supply of fuel purchased locally. Water for the Project's O&M facility and solar panel washing would be purchased from a local vendor and sourced from Kennewick. Aggregate for access road maintenance would be obtained locally.	Low to Medium	Long Term	Unavoidable	Local to Regional (depending on sourcing of the materials)	**ENR-1:** Executed water supply agreement **ENR-2:** Install high-efficiency electrical fixtures and appliances **ENR-3:** Install high-efficiency security lighting **ENR-4:** Install low-water-use flush toilets **ENR-5:** *Capture and recycle wash water*	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Impacts on agricultural activities from operation of the comprehensive Project would be similar to those presented for Turbine Option 1 and the solar arrays. However, when considering the impact of the comprehensive Project, the possibility for a conflict between the planned management of agricultural activities within the Lease Boundary and Project operations increases when compared with any individual component.	Low (decreased productivity) Medium (operational changes)	Long Term	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan	None identified
Land and Shoreline Use (Section 4.8)	Wineries and agritourism (Profitability)	Changes in landscape character through the introduction of turbines that could be seen from wineries and agritourism businesses would indirectly impact wine-tasting tourism.	Low	Long Term	Probable	Local	**VIS-1–- VIS-9** For details on these mitigation measures, refer to Section 4.10	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Adverse effects on resources through a loss or diminishment of integrity.	Low	Long term for impacts from noise and dust Constant for impacts from the turbine operation	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Adverse effects on resources through a loss or diminishment of integrity	Low	Long Term	Probable	Local	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of an Inadvertent Discovery Plan	None identified
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Noise, vibration, visual interferences, and restriction of access .	High	Long term for impacts from noise and dust Constant for impacts from turbine operation and security measures	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties and resources.
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	The wind turbines, and comprehensive Project, would dominate views from many KOP locations, and the landscape would appear strongly altered.	High	Long Term	Unavoidable	Regional	**VIS-1:** Relocate turbines located within the foreground distance. **VIS-2:** No advertising, cell antennas, commercial messages, or symbols placed on wind turbines. **VIS-3:** Maintain clean nacelles and towers.	Significant for Visual Aspects.

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Visual Aspects, Light and Glare (Section 4.10)	Shadow Flicker	Wind turbines would create shadow flicker that would impact Project participants.	Medium	Long Term	Probable	Confined	**SF-1:** The Applicant would attempt to avoid, minimize. and mitigate shadow flicker at nearby residences. **SF-2:** The Applicant would set up a complaint resolution procedure.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Light	Lighting for security purposes and to conform with FAA requirements would be visible outside the Lease Boundary but would have limited effect in terms of light trespass and sky glow degradation.	Low	Long Term	Unavoidable	Local	**LIG-1:** Use LEED-certified building exterior(s) and security lighting.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Glare	Solar panels at all modeled receptors and vehicular routes are predicted to not experience glare as a result of Project operations; glare would not exceed FAA notice criteria, and a formal filing is not necessary.	Low	Long Term	Unavoidable	Confined	No mitigation identified	None identified
Noise and Vibration (Section 4.11)	Noise and Vibration (Operational Noise)	Noise would be generated by the operation of wind turbines, inverters, transformers, and the corona effect.	Medium	Long Term	Unavoidable	Local	**N-5:** Establish a noise complaint resolution procedure similar construction **N-6:** *Maintain operation of the "noise hot line" for one year of Project operation*	None identified
Recreation (Section 4.12)	Recreation – Use	Operation of the comprehensive Project would result in a high impact due to the restriction of access to public land and recreational activities that occur on public land near the Project. The impact would be long term for the duration of the life of the Project, unavoidable, and local.	High	Long Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails) **R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest **R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Impacts on noise receptors would be limited, while visual impacts would occur regionally.	Low	Long Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Recreation (Section 4.12)	Recreation – Public Health and Safety	The Project's potential to affect the health and safety of recreationists using the area for paragliding and hang gliding would results in a medium impact during the life of the Project. Impacts on recreationists would occur beyond neighboring receptors.	Medium	Long Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	Significant for paragliding and hang gliding public health and safety
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Lithium-ion batteries used for the BESS may pose a risk of fire and explosion during operation because they may overheat, but the BESS would include a fire suppression system.	Medium	Temporary	Feasible	Limited	**PHS-1:** Turbines will be shut down for the duration of any fire located within the region of the Project.	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Indirect impacts if a fire were to occur during operation of the turbines and substation could include smoke or haze, and a potential reduction in emergency response services.	Low	Temporary	Unlikely	Regional	**PHS-1:** Turbines will be shut down for the duration of any fire located within the region of the Project.	None identified
Public Health and Safety (Section 4.13)	Release of Hazardous Materials	Project elements include small amounts of oil and batteries, but a release is unlikely to occur during operations.	Negligible	Temporary	Unlikely	Limited	No mitigation identified	None identified
Transportation (Section 4.14)	Vehicular Traffic	Operation of the solar arrays may require water trucks to deliver wash water to clean the panels. A decrease in level of service is not expected, nor is roadway safety expected to decrease.	Low	Long Term	Probable	Local	**TR-2:** Operation Lifesaver safety presentation and training	None identified
Public Services and Utilities (Section 4.15)	Wastewater (Level of Service and Safety)	Wastewater from the O&M facilities would be discharged to an on-site septic system. It is anticipated that the operations stage would use less than 5,000 gallons of water per day and that wastewater would be generated from kitchen and bathroom use.	Low	Long Term	Unavoidable	Local	**ENR-5:** Capture and recycle wash water	None identified
Public Services and Utilities (Section 4.15)	Municipal Solid Waste (Level of Service)	Operation of the Project is expected to generate approximately one or two dumpsters of waste per week at the O&M facilities.	Low	Constant	Unavoidable	Local to Regional (depending on location of landfill)	**PSU-1:** Use of a licensed waste disposal facility	None identified
Socioeconomics (Section 4.16)	Economic Environment (Housing Availability)	The Proposed Action would generate or support up to 58 FTEs. A team of 16 to 20 personnel would be employed to operate and maintain Project components. As reported in the 2019 American Community Survey 5-Year Estimate, rental vacancy rate in Benton County was 5.1%, with 1,660 units available for rent.	Negligible	Long Term	Feasible	Regional	No mitigation identified	None identified

Table ES-3b: Summary of Potential Impacts of Comprehensive Project during Operation of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Socioeconomics (Section 4.16)	Environmental Justice (People of Color and Low-Income Populations)	Disproportionate impacts on people of color and low-income communities.	Negligible to Medium	Long Term	Feasible	Confined	No mitigation identified	None identified

Notes:
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; dBA = A-weighted decibels; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; FAA = Federal Aviation Administration; FTE = full-time equivalent KOP = key observation point; LEED = Leadership in Energy and Environmental Design; mph = miles per hour; O&M = operations and maintenance; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife; ZOI = zone of influence

Table ES-3c

Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

This Page Intentionally Left Blank

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Earth Resources (Section 4.2)	Geology (Landscape)	The likelihood of a foundation removal encountering bedrock is low. If bedrock were to be impacted during the decommissioning stage, then it would likely have already been encountered during the construction stage.	Low	Temporary	Probable	Limited	No mitigation identified	None identified
Earth Resources (Section 4.2)	Soils (Landscape)	Decommissioning activities associated with the Project could impact and disturb the soil profile, due to excavating foundations and utilities, removing unsealed areas, restoring the original ground profile, and rehabilitating vegetation.	Low	Short Term	Unavoidable	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Topography (Landscape)	The Applicant would restore the original topographic profile in areas of previous development.	Low	Short Term	Probable	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Earthquakes (Safety)	Prolonged earthquake ground shaking could cause minor damage to infrastructure if the intensity and duration of the shaking exceed structural seismic design levels.	Negligible	Temporary	Feasible	Confined	No mitigation identified	None identified

Notes:
Table continues below, notes apply to remainder of table
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
EFSEC = Energy Facility Site Evaluation Council; mph = miles per hour; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; PM_{10} = particulate matter less than 10 microns in diameter

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Volcanic Activity (Safety)	Hazards from ashfall to decommissioning activities would include the following: ▪ Accumulation of ash on structures ▪ Clogging of electronics, machinery, and filters ▪ Suspension of abrasive fine particles in air and water ▪ Accumulation of ash on transportation routes and vegetation	Negligible	Temporary	Unlikely	Confined	No mitigation identified	None identified
Air Quality (Section 4.3)	Air Quality (Quantity of Emissions, Compatibility with Applicable Rules, Regulations, and Plans, Potential Exposure to Sensitive Receptors)	Adverse impacts on air quality may occur during decommissioning from $PM_{2.5}$, PM_{10}, and fugitive dust	Low	Short Term	Probable	Confined	**A-1:** Limit speeds to less than 15 mph on dirt roads.	None identified
Water Resources (Section 4.4)	Physical Disturbance	Project decommissioning would result in physical disturbance that could impact surface water and wetlands, runoff and absorption capacity, floodplains, and groundwater resources.	Low	Short Term	Unavoidable	Confined	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-6:** Wetland SWPPP.	None identified
Water Resources (Section 4.4)	Change in Water Quality	Project decommissioning would require temporary disturbance, which could impact water quality.	Low	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5:** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Water Resources (Section 4.4)	Change in Hydrology	Project decommissioning would require temporary disturbance to some ephemeral and intermittent streams but would restore the disturbance areas following decommissioning.	Low	Short Term	Unlikely	Limited	**W-3:** Check Dams.	None identified
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Project decommissioning could result in the introduction of hazardous substances to water resources.	Low	Temporary	Unlikely	Local	**W-5:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Impacts on Public Water Supply	Project decommissioning could result in impacts on public water supply.	Low	Temporary	Unlikely	Regional	**W-9:** Minimize Water Use.	None identified
Vegetation (Section 4.5)[32]	Loss of Extent of Priority Habitat – Temporary Disturbance	Decommissioning of the Project would require temporary disturbance areas to remove Project components, which would result in direct loss of WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Low	Short Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan	None identified

[32] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Vegetation (Section 4.5)	Loss of Extent Special Status Plant Species	Site clearing associated with decommissioning of the Project would result in direct loss of populations of special status plant species or their habitat.	Low	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Degradation	Project decommissioning could result in habitat degradation from the introduction of hazardous material, surface runoff, introduction or spread of invasive plant or noxious weeds, and the deposition of dust.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Project decommissioning could result in habitat fragmentation from fire.	Low	Long Term	Feasible	Local	**Veg-6:** Decommissioning Legislated Requirements **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Wildlife and Habitat (Section 4.6)	Habitat loss	The Project would result in temporary loss of habitat during decommissioning. No new permanent habitat loss is expected, and restoration activities are expected to replace and/or enhance habitat loss created during construction and operation.	Negligible	Short Term	Unavoidable	Local	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-1:** Tree Avoidance. **Veg-7:** Detailed Site Restoration Plan.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Sources of wildlife injuries and mortalities during decommissioning include collisions with equipment; removal of nuisance wildlife; destruction of nests, dens, and burrows; and habitat loss. The risk of mortalities would be limited to the duration of decommissioning.	Negligible	Short Term	Feasible	Confined	**Wild-1**: Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3**: Review USFWS eagle mortality consultation. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit activity disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Wild-8**: Establish buffers around raptor nests.	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Decommissioning would remove Project-related barriers to movement and reduce habitat fragmentation by removing infrastructure and revegetating disturbed areas.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: striped whipsnake and sagebrush lizard	Ground disturbance and machinery use during Project decommissioning could result in mortality of striped whipsnake and sagebrush lizard.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning **Veg-7:** Detailed Site Restoration Plan. **Spec-1:** Implement striped whipsnake and sagebrush lizard–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	Decommissioning of the Project may disturb American white pelicans moving over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Hab-4:** Develop TAC. **Spec-2**: Implement American white pelican–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Decommissioning of the Project could disturb bald eagles, resulting in avoidance of the Project site.	Negligible	Short Term	Feasible	Confined	**Wild-2:** Use wildlife-resistant trash containers. **Wild-3**: Review USFWS eagle mortality consultation. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Spec-3:** Implement eagle-specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Decommissioning may result in mortality from machinery operation over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-1**: Review 2-year raptor and bat monitoring program. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-7:** Schedule activity during daylight hours. **Wild-8**: Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-4**: Implement burrowing owl–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Decommissioning may result in mortality from machinery operation over the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-1**: Review 2-year raptor and bat monitoring program. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-8**: Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-5**: Ferruginous hawk–specific mitigation	None identified
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Decommissioning of the Project could disturb golden eagles, resulting in avoidance of the Project site, though golden eagle nesting has not been reported within 10 miles of the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-2:** Use wildlife-resistant trash containers. **Wild-3**: Review USFWS eagle mortality consultation. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Spec-3:** Implement eagle-specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Decommissioning activities may disturb birds flying over the Lease Boundary, resulting in bird flight paths being diverted around the area.	Negligible	Short Term	Feasible	Confined	**Wild-1**: Review 2-year raptor and bat monitoring program. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Hab-4:** Develop TAC. **Spec-6**: Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Decommissioning may disturb birds foraging and nesting within the Lease Boundary. Machinery could result in mortality of birds and destruction of nests.	Negligible	Short Term	Feasible	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Disturbance from decommissioning activities may result in disturbance to prairie falcons.	Negligible	Short Term	Unlikely	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-8**: Establish buffers around raptor nests. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-8**: Implement prairie falcon–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Disturbance from decommissioning activities may result in indirect habitat loss. Access roads may result in collisions with ring-necked pheasants.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning **Veg-7:** Detailed Site Restoration Plan. **Spec-9**: Implement ring-necked pheasant–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow and sage thrasher	Decommissioning may disturb birds foraging and nesting within the Lease Boundary. Machinery could result in mortality of birds and destruction of nests.	Negligible	Short Term	Feasible	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Decommissioning may disturb tundra swans flying over and foraging within the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-1**: Review 2-year raptor and bat monitoring program. **Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Hab-4:** Develop TAC. **Spec-6**: Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Decommissioning of the Project could disturb Vaux's swifts in flight over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	Disturbance from decommissioning activities may result in indirect habitat loss. Access roads may result in collisions with jackrabbits.	Negligible	Short Term	Feasible	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas **Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning **Veg-7:** Detailed Site Restoration Plan. **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Decommissioning activities could disturb Townsend's big-eared bat foraging within the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-7:** Schedule construction during daylight hours. **Hab-4:** Develop TAC. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Mortality may occur during decommissioning and along access roads.	Negligible	Short Term	Feasible	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-12:** Implement Townsend's ground squirrel–specific mitigation.	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Decommissioning is predicted to result in indirect habitat loss. Increased traffic on existing and new access roads may result in pronghorn antelope mortality.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	Energy consumption, predominantly in the form of gasoline, diesel fuel, and electricity, would be required to operate equipment such as cranes, trucks, tools, and vehicles used to dismantle and remove most Project facilities and reclaim disturbed areas. Backfilling void spaces created by the removal of foundations would require construction aggregate.	Low	Short Term	Unavoidable	Local	**ENR-6:** *Recycle all components of the Project*	None identified
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Similar to Turbine Option 1 and solar arrays	Low (decreased productivity) Medium (operational changes)	Temporary (brief access modifications) Short Term (seasonal restrictions)	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan **LSU-3:** *Arrange for the removal of livestock*	None identified
Land and Shoreline Use (Section 4.8)	Wineries and agritourism (Profitability)	Wineries and agri-tourism businesses Wine industry and wine tasting tourism could be impacted from changes in general environmental settings through potential changes in viewing opportunities from wineries that are in proximity to the Project.	Low	Short Term	Feasible	Local	No mitigation identified	None identified
Historic and Cultural Resources (Section 4.9)	Precontact Archaeological resources; DAHP-issued permit required prior to disturbance - OR - *Avoidance requested and recommended*	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	High	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Historic and Cultural Resources (Section 4.9)	Historic-period archaeological isolates and sites determined not eligible for the NRHP	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Negligible	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	Adverse effects on resources through a loss or diminishment of integrity.	Low	Short-term	Feasible	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	Physical impacts	Low	Constant	Unlikely	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unevaluated archaeological historic-period sites	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Medium	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Adverse effects on resources through a loss or diminishment of integrity	Low	Short term	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Physical impacts	High	Constant	Unlikely	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity.	High	Constant	Probable	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Destruction of or damage to resources through ground disturbance and physical alteration; loss of access to resources; visual interference.	High	Short term	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties and resources
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Activities would attract attention and would modify the existing landscape setting. Due to the additive effect of the different Project features, these impacts would affect a larger area.	Medium	Short Term	Probable	Regional	No mitigation identified	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Visual Aspects, Light and Glare (Section 4.10)	Light	Activities would be completed mainly during daytime hours without the need for nighttime lighting.	Negligible	Temporary	Unlikely	Limited	No mitigation identified	None identified
Visual Aspects, Light and Glare (Section 4.10)	Glare	Activities could generate glare from construction equipment or solar panels.	Low	Temporary	Feasible	Confined	No mitigation identified	None identified
Noise and Vibration (Section 4.11)	Noise and Vibration (Noise from Decommissioning Equipment)	Most noise sensitive receptors would receive sound levels below 55 dBA during construction, with the potential to be up to 10 dBA over baseline. One noise sensitive receptor could receive sound levels at 55 dBA during construction of one turbine.	Medium	Temporary	Probable	Limited	**N1:** Avoid laydown and equipment storage/parking areas near NSRs **N2:** Limit the use of noise-generating equipment to daytime hours (7 a.m. to 10 p.m.) and loud equipment to working hours (7 a.m. to 6 p.m.) **N-3:** Monitor noise during nighttime decommissioning operations (10 p.m. to 7 a.m.) with the potential to impact NSRs **N-4:** Update the Applicant's noise complaint resolution procedure to include contacting and reporting details	None identified
Recreation (Section 4.12)	Recreation – Use	Decommissioning of the comprehensive Project would result in a high impact due to the restriction of access to public land and recreational activities that occur on public land near the Project. The impact would be short term for the duration of decommissioning, unavoidable, and local.	High	Short Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails) **R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest **R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Indirect impacts related to visual resources and noise could occur at recreation sites. Impacts on noise receptors would occur locally, while visual impacts would occur at a regional spatial extent.	High	Short Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest	None identified
Recreation (Section 4.12)	Recreation – Public Health and Safety	The Project's potential to affect the health and safety of recreationists using the area for paragliding, hang gliding, or biking would result in a medium impact.	Medium	Short Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during decommissioning. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	If a fire were to occur during turbine decommissioning, indirect impacts could include smoke or haze, and a potential reduction in emergency response services.	Medium	Temporary	Feasible	Regional	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Release of Hazardous Materials	Project elements include small amounts of oil, which could be released during decommissioning.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified
Transportation (Section 4.14)	Vehicular Traffic	Decommissioning would require the removal and transportation of the dismantled pieces of the turbines, expected to be smaller than the pieces that arrived during the Construction Stage. The increase in traffic volumes is not expected to decrease level of service or cause a decline in roadway safety.	Low	Short Term	Unavoidable	Regional	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-3:** Traffic Analysis. **TR-4:** Railroad crossing and grade change survey. **TR-5:** Traffic and Safety Management Plan. **TR-6:** Supplemental analysis of additional routes, if proposed **TR-7:** Mitigation for intersections with safety concerns	None identified
Public Services and Utilities (Section 4.15)	Wastewater (Level of Service and Safety)	The amount of wastewater produced from the temporary workers on site, while measurable, would not impact the ability of the local utility to treat the community's sewage.	Low	Short Term	Unavoidable	Local	No mitigation identified	None identified
Public Services and Utilities (Section 4.15)	Municipal Solid Waste (Level of Service)	After dismantling of the facility, high-value components would be removed for scrap value. The remaining materials would be reduced to transportable size and removed from the site for disposal. Existing facilities would maintain capacity to receive the Project's non-recyclable waste and continue to serve their communities.	Low	Constant	Unavoidable	Local to Regional	**ENR-7**: Recycle all applicable components **PSU-1***: Use of a licensed waste disposal facility*	None identified

Table ES-3c: Summary of Potential Impacts of Comprehensive Project during Decommissioning of the Proposed Action

Section	Topic	Description of Impact[a]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[b]	Significant Unavoidable Adverse Impacts[c]
Socioeconomics (Section 4.16)	Economic Environment (Housing Availability)	The majority of construction workers would be sourced locally; however, the Project's construction would require temporary and short-term relocation of construction workers into the region.	Negligible	Temporary to Short Term	Feasible	Regional	**Socio-ec-1:** Updated housing analysis to confirm temporary or short-term availability	None identified
Socioeconomics (Section 4.16)	General Welfare and Social Conditions (Wellbeing)	Decommissioning of the Project would restore property tax revenues for Benton County and the Tax Area to pre-Project conditions as the Project's added value would be removed from the parcels that make up the Lease Boundary's valuation. For example, smaller collections would impact operational budgets for schools, school districts, and fire stations within Benton County and the Tax Area.	Medium	Short Term	Feasible	Regional	No mitigation identified	None identified
Socioeconomics (Section 4.16)	Environmental Justice (People of color and Low-Income Populations)	Disproportionate impacts on people of color and low-income communities.	Negligible to Medium	Temporary to Short Term	Feasible	Regional	No mitigation identified	None identified

Notes:
[a] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[b] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[c] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
EFSEC = Energy Facility Site Evaluation Council; mph = miles per hour; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; PM_{10} = particulate matter less than 10 microns in diameter

Table ES-4a

Summary of Potential Impacts by Component during Construction of the Proposed Action

This Page Intentionally Left Blank

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Earth Resources (Section 4.2)	Soils (Landscape)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	The disturbance to natural soil profiles could result in a temporary increase in localized soil erosion. These activities are likely to include site clearing, excavation, and backfilling. The construction and erection of turbine tower foundations would disturb soil resources as the contractor excavates unsuitable material from the Project area.	Low	Short term	Unavoidable	Confined	**Geo-1:** Avoid construction during wet periods **A-1:** Limit traffic speeds **Veg-7:** Detailed Site Restoration Plan **W-2:** Minimize work in heavy rain **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Topography (Landscape)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction activities that would impact topography include excavation, grading, and cut-and-fill-slope development. Limited grading and/or placement of additional fill may be needed to obtain necessary grades for access roads, building foundations, and leveling the ground. Surface disturbance from construction-related activities would impact topography around each turbine.	Low	Short term	Unavoidable	Confined	**Geo-1:** Avoid construction during wet periods **A-1:** Limit traffic speeds **LSU-4:** Restoration of temporary disturbance to preconstruction status	None identified

Notes:
Table continues below, notes apply to remainder of table
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; ASC = Application for Site Certification; BESS = battery energy storage system; BMP = best management practice; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; EIS = Environmental Impact Statement; NRHP = National Register of Historic Places; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; Tribes = Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum Tribe; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	The Project site includes areas susceptible to landslides and bluff failures. Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Geo-1:** Avoid construction during wet periods **Veg-7:** Detailed Site Restoration Plan **W-2:** Minimize work in heavy rain **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Water Resources (Section 4.4)	Physical Disturbance	Turbine Option 1 Turbine Option 2	Project construction would require temporary and permanent disturbance, which could impact surface water and wetlands, surface runoff/absorption, floodplains, and groundwater.	Low	Short Term (for temporary disturbance) Long Term (for permanent disturbance)	Unavoidable	Confined	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation. BMPs. **W-6:** Wetland SWPPP. **W-7:** Clear-span 100-Year Floodplain. **W-11:** Concrete Batch Plant to Avoid Streams	None identified
Water Resources (Section 4.4)	Physical Disturbance	Solar Arrays	Project construction would require temporary and permanent disturbance, which could impact surface water and wetlands, surface runoff/absorption, floodplains, and groundwater.	Low	Short Term	Unavoidable	Confined	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs. **W-6:** Wetland SWPPP. **W-7:** Clear-span 100-Year Floodplain.	None identified
Water Resources (Section 4.4)	Physical Disturbance	BESS Substations	Project construction would require temporary and permanent disturbance, which could impact surface water and wetlands, surface runoff/absorption, floodplains, and groundwater.	Low	Short Term (for temporary disturbance) Long Term (for permanent disturbance)	Unavoidable	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-6:** Wetland SWPPP.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Water Resources (Section 4.4)	Change in Water Quality	Turbine Option 1 Turbine Option 2	Project construction could result in a change to water quality of waterways that intersect or are located adjacent to Project construction activities.	Low	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Change in Water Quality	Solar Arrays	Project construction could result in a change to water quality of waterways adjacent to Project construction activities.	Negligible	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5:** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment. **W-11:** Concrete Batch Plant to Avoid Streams	None identified
Water Resources (Section 4.4)	Change in Hydrology – Temporary Disturbance	Turbine Option 1 Turbine Option 2	Temporary disturbance from Project construction within ephemeral and intermittent streams could result in changes to the hydrology of waterways.	Low	Short Term	Unlikely	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs.	None identified
Water Resources (Section 4.4)	Change in Hydrology – Permanent Disturbance	Turbine Option 1 Turbine Option 2	Project construction would require a culvert installation on one intermittent stream that could result in changes to the hydrology of the stream.	Low	Long Term	Unavoidable	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-4:** Culvert Installation BMPs.	None identified
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Turbine Option 1 Turbine Option 2	Project construction could result in the introduction of hazardous substances that could impact surface water and wetlands, floodplains, and groundwater.	Low	Temporary	Unlikely	Local	**W-7:** Employee Training. **W-8:** Spill Response Equipment.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Solar Arrays BESS Substations	Project construction could result in the introduction of hazardous substances that could impact surface water and wetlands, floodplains, and groundwater.	Negligible	Temporary	Unlikely	Limited	**W-3:** Concrete Wash-out Area. **W-5:** Employee Training **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Public Water Supply	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project construction activities would rely on water sourced from local public facilities, local private irrigators, and/or collector wells fed from regional aquifers.	Low	Temporary	Feasible	Regional	**W-9:** Minimize Water Use.	None identified
Vegetation (Section 4.5)[33]	Loss of Extent of Priority Habitat – Temporary Disturbance	Turbine Option 1 Turbine Option 2	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified

[33] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	East Solar Field	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Medium	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	Sellards Solar Field	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Low	Long Term	Feasible	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report and Offset Calculation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	County Well Solar Field BESS Substations	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Negligible	Long Term	Unlikely	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat - Permanent Disturbance	Turbine Option 1 Turbine Option 2	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Low	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat - Permanent Disturbance	East Solar Field	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Permanent Disturbance	County Well Solar Field Sellards Solar Field BESS Substations	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Negligible	Long Term	Unlikely	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Turbine Option 1 Turbine Option 2	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Low	Short Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Solar Arrays BESS Substations	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Negligible	Short Term	Unavoidable	Limited	**Veg-1**: Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Other Habitat – Permanent Disturbance	East Solar Field	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with other habitat.	Low	Long Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified
Vegetation (Section 4.5)	Loss of Extent of Other Habitat – Permanent Disturbance	Turbine Option 1 Turbine Option 2 County Well Solar Field Sellards Solar Field BESS Substations	Site clearing associated with permanent disturbance would result in direct loss of acreage associated with other habitat.	Negligible	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation	None identified
Vegetation (Section 4.5)	Loss of Extent of Special Status Plant Species	Turbine Option 1 Turbine Option 2	Site clearing associated with the construction of the Project would result in direct loss of populations of special status plant species or their habitat.	Medium	Constant	Feasible	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-3:** Special Status Plant Species Education **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Special Status Plant Species	East Solar Field	Site clearing associated with the construction of the Project would result in direct loss of populations of special status plant species or their habitat	Medium	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-3:** Special Status Plant Species Education **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Special Status Plant Species	Sellards Solar Field	Site clearing associated with construction of the Project would result in direct loss of populations of special status plant species or their habitat.	Low	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-3:** Special Status Plant Species Education **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Special Status Plant Species	County Well Solar Field BESS Substations	Site clearing associated with construction of the Project would result in direct loss of populations of special status plant species or their habitat.	Negligible	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-3:** Special Status Plant Species Education **Veg-4:** As-Built Report, Offset Calculation, and Monitoring of Revegetation **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Degradation	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction activities could result in habitat degradation from introduction of hazardous material, surface runoff, introduction and spread of invasive plants or noxious weeds, and deposition of dust.	Low	Long Term	Feasible	Local	**Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Turbine Option 1 Turbine Option 2 BESS	Construction activities could result in habitat fragmentation from fire.	Low	Long Term	Feasible	Local	**Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Habitat Fragmentation	Solar Arrays BESS Substations	Construction activities could result in habitat fragmentation from fire.	Low	Long Term	Unlikely	Local	**Hab-2:** Transmission Line **Hab-3:** Temporary laydown areas **Hab-4:** Pre-operational Technical Advisory Group **Hab-6:** Final Design	None identified
Wildlife and Habitat (Section 4.6)	Habitat Loss	Turbine Option 1 Turbine Option 2	The Project would result in the direct loss of habitat through construction of the Wind Energy Micrositing Corridor and associated transportation routes. The Project may also result in indirect habitat loss through increased noise, light, and human presence during construction.	Medium	Short Term for temporary disturbances (e.g., construction laydown areas) Constant for permanent footprint loss (e.g., turbine footprint)	Unavoidable	Local	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance.	None identified
Wildlife and Habitat (Section 4.6)	Habitat Loss	Solar Arrays	The Project would result in the direct loss of habitat, including modified habitat, through construction of the solar arrays and associated transportation routes. The Project may also result in indirect habitat loss through increased noise, light, and human presence during construction.	Medium	Short Term for temporary disturbances (e.g., construction laydown areas) and modified habitat under the solar fields. Constant for permanent footprint loss.	Unavoidable	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Habitat Loss	BESS Substations	The Project would result in the direct loss of habitat through construction of the BESS, substations, and associated transportation routes. The Project may also result in indirect habitat loss through increased noise, light, and human presence during construction.	Low	Short Term for temporary disturbances (e.g., construction laydown areas) Long Term for permanent footprint loss.	Unavoidable	Limited	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance.	None identified
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Turbine Option 1 Turbine Option 2	The Project may result in mortality of smaller animals (e.g., birds, herptiles, small mammals) during clearing and ground preparation works. Wildlife-vehicle collisions may occur during Project construction due to increased traffic.	Low	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Solar Arrays	The Project may result in mortality of smaller animals (e.g., birds, herptiles, small mammals) during clearing and ground preparation works. Wildlife-vehicle collisions may occur during Project construction due to increased traffic.	Low	Short Term	Feasible	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing to avoid nesting season and mitigation of nesting birds. **Hab-4:** Develop TAC.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	BESS Substations	The Project may result in mortality of smaller animals (e.g., birds, herptiles, small mammals) during clearing and ground preparation works. Wildlife-vehicle collisions may occur during Project construction due to increased traffic.	Negligible	Short Term	Feasible	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-4:** Develop TAC.	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Turbine Option 1 Turbine Option 2	Turbines, power lines, roadways, and other linear infrastructure could create barriers to wildlife movement and fragment habitat. Barriers and fragmentation created during construction would predominantly remain through operation.	Low	Long Term	Probable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Solar Arrays	Solar arrays may impact wildlife movement and fragment habitat by bisecting movement corridors. Solar arrays would be fenced, which is expected to create a barrier to movement of larger wildlife around the arrays.	Low	Long Term	Unavoidable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design.	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	BESS Substations	BESS and substations may create barriers to wildlife movement in the adjacent area.	Negligible	Long Term	Unavoidable	Limited	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: striped whipsnake and sagebrush lizard	Turbine Option 1 Turbine Option 2 Solar Array BESS Substations	Impacts on shrub and shrub-steppe habitat may result in loss of suitable reptile habitat. Mortality of reptile species could occur during construction from heavy machinery and land clearing and grubbing.	Low	Constant	Feasible	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-1:** Implement striped whipsnake and sagebrush lizard–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project may disturb American white pelicans moving over the Lease Boundary.	Negligible	Short Term	Unlikely	Limited	**Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Spec-2:** Implement American white pelican–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project could disturb bald eagles, resulting in avoidance of the Project Site.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction. disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-1:** Tree Avoidance. **Spec-3:** Implement eagle-specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction may result in direct and indirect habitat loss and the destruction of burrows (active, inactive, and potential). Mortality may occur during vegetation and ground-disturbing works.	Medium	Constant (habitat loss) Short Term (disturbance, mortality)	Unavoidable (Habitat loss) Probable (disturbance) Feasible (mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-4:** Implement burrowing owl–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Turbine Option 1 Turbine Option 2 BESS Substations	Construction of turbines and associated roads and power lines may result in the direct and indirect loss of habitat in core and range ferruginous hawk habitat. Nesting success could be impacted by construction activities near the nest or activities change prey abundance.	High	Constant (habitat loss) Short Term (disturbance)	Unavoidable (habitat loss) Probable (disturbance)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-5:** Implement ferruginous hawk–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Solar Arrays	Three historic nesting locations would be directly impacted at the East Solar Field.	Medium	Constant	Unavoidable	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-5:** Implement ferruginous hawk–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project could disturb golden eagles, resulting in avoidance of the Project site, though golden eagle nesting has not been reported within 10 miles of the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Spec-3:** Implement eagle-specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction may disturb birds flying over the Lease Boundary, resulting in bird flight paths being diverted around the area. Construction may result in the loss of foraging habitat.	Negligible	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Feasible (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction may result in direct and indirect (disturbance) habitat loss. Mortality may occur from interactions with machinery and destruction of nests.	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on Final Project layout and design. **Hab-8:** Mitigation options **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project is predicted to result in the direct loss of suitable foraging habitat for prairie falcon. Disturbance from construction activities may result in disturbance to prairie falcons.	Medium	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree avoidance. **Spec-8:** Implement prairie falcon–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project is predicted to result in the direct loss of suitable foraging habitat for ring-necked pheasant. Disturbance from construction activities may result in indirect habitat loss. Access roads may result in collisions with ring-necked pheasants.	Low	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-9:** Implement ring-necked pheasant–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow sage thrasher	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction may result in direct and indirect habitat loss. Mortality may occur from interactions with machinery and destruction of nests.	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule construction during daylight hours. **Wild-9:** Time vegetation clearing outside of nesting season and provide mitigation for nesting birds. **Hab-2:** Minimize transmission line crossings. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction may result in the disturbance and loss of suitable foraging habitat and disruption of birds flying over the Lease Boundary.	Low	Long Term (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Feasible (disturbance, mortality)	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project could disturb Vaux's swift in flight over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species**:** black-tailed jackrabbit white-tailed jackrabbit	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project is predicted to result in the direct loss of suitable habitat for jackrabbit. Disturbance from construction activities may result in indirect habitat loss. Access roads may result in collisions with jackrabbits, barriers to movement, and increased fragmentation.	Low	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6**: Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3**: Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction activities could disturb Townsend's big-eared bat foraging within the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-4**: Avoid use of pesticides and rodenticides. **Wild-7:** Schedule construction during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction of the Project and associated access roads are predicted to result in the loss of suitable Townsend's ground squirrel habitat and destruction of colonies. Mortality may occur during construction work near colonies and along access roads.	Medium	Constant (habitat loss) Short Term (construction disturbance, construction mortality)	Unavoidable (habitat loss) Probable (disturbance, mortality)	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-12:** Implement Townsend's ground squirrel–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Construction is predicted to result in direct loss of pronghorn antelope habitat. Activity associated with construction may result in indirect habitat loss. Increased traffic on existing and new access roads may result in pronghorn antelope mortality	Medium	Constant (habitat loss) Short Term (construction disturbance)	Unavoidable (habitat loss) Probable (disturbance)	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-3:** Temporary laydown areas **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	The installation of a turbine would require steel for support structures, fuel for construction equipment and vehicles, and concrete for foundations. The manufacturing of concrete within the Project vicinity would require water sourced locally.	Low	Short Term (for the entire component)	Unavoidable	Local to Regional (depending on sourcing of the materials)	**ENR-1:** Executed water supply agreement	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Turbine Option 1 Turbine Option 2 BESS Substations	It may be necessary to remove cattle from areas where blasting or heavy equipment operations take place. Project construction could delay agricultural activities for short durations on adjacent properties. Reduced access to fields within the Lease Boundary could impact existing dryland agricultural management programs. Limited but measurable acreage would be taken out of wheat production.	Negligible (farm plan modifications) Low (decreased productivity)	Temporary (brief access modifications) Short Term (seasonal restrictions)	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan **LSU-3:** Arrange for the removal of livestock	None identified
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Solar Arrays	It may be necessary to remove cattle from areas where heavy equipment operations take place. Project construction could delay agricultural activities for short durations on adjacent properties. Reduced access to fields within the Lease Boundary could impact existing dryland agricultural management programs. Temporarily and permanently impacted dryland agricultural acreage from solar array construction would equate to approximately 0.3% of the state's annual wheat production.	Low	Temporary (brief access modifications) Short Term (seasonal restrictions)	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan **LSU-3:** Arrange for the removal of livestock	None identified
Historic and Cultural Resources (Section 4.9)	Precontact Archaeological resources; DAHP-issued permit required prior to disturbance - OR - Avoidance requested and recommended	Turbine Option 1 Turbine Option 2	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	High	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Historic-period archaeological isolates and sites determined not eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Negligible	Constant	Probable	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity	Negligible	Constant	Probable	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unevaluated archaeological historic-period sites	Turbine Option 1 Turbine Option 2 Solar Arrays	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Medium	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity	Low	Short term for impacts from noise, dust, and use of large equipment and heavy machinery Constant for impacts from turbine construction	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Physical impacts	High	Constant	Unlikely	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity.	High	Constant	Feasible	Local	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; loss of access to resources; visual interference.	High	Short term for impacts from noise, dust, and use of large equipment and heavy machinery. Constant for impacts from construction of turbines and fencing and the acquisition of land.	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties.

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Turbine Option 1 Turbine Option 2	Activities would attract attention and would modify the localized existing landscape setting.	Medium	Short Term	Probable	Local	No mitigation identified	None identified
Recreation (Section 4.12)	Recreation – Use	Turbine Option 1 Turbine Option 2	Construction of the turbines would limit recreational activities that occur on public land in areas near construction, as well as impede cyclists' use of established routes during the transportation of equipment and materials.	Medium	Short Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails).	None identified
Recreation (Section 4.12)	Recreation – Use	Solar Arrays	Construction of the Sellards Solar Field would restrict access to a parcel of DNR-administered land within the Lease Boundary resulting in a high impact.	High	Long Term	Unavoidable	Limited	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails).	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Turbine Option 1 Turbine Option 2 Solar Arrays	Indirect impacts related to visual resources and noise could occur at recreation sites.	High	Long Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest.	None identified
Recreation (Section 4.12)	Recreation – Public Health and Safety	Turbine Option 1 Turbine Option 2 Solar Arrays	The Project's potential to affect the health and safety of recreationists using the area for paragliding, hang gliding, or biking would result in a medium impact.	Medium	Long Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationists safe.	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Turbine Option 1 Turbine Option 2	Fire resulting from Project construction is unlikely, but wildfire risk in the area is considered high. For instance, combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during construction. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Solar Arrays BESS Substations	Fire resulting from solar array, substation, and BESS construction is unlikely, but wildfire risk in the area is considered high.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Turbine Option 1 Turbine Option 2	Fire resulting from Project construction is unlikely, but wildfire risk in the area is considered high. For instance, combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during construction. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Regional	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Solar Arrays BESS Substations	If a fire were to occur during construction of the solar arrays, substation, or BESS, indirect impacts could include smoke or haze, and a potential reduction in emergency response services.	Medium	Temporary	Unlikely	Regional	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health and Safety (Hazardous Materials Release)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Hazardous materials, including diesel fuel, lubricating oils, hydraulic fluid, paints, and solvents would be used and stored on site. Spill kits would be maintained, minimizing the risk of a release if a spill were to occur.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified
Transportation (Section 4.14)	Vehicular Traffic	Turbine Option 1 Turbine Option 2	Traffic volumes would increase measurably during transportation of material and equipment for the construction of the turbines. The potential for traffic volumes and slower, oversized roads would likely decrease level of service for intersections near the Lease Boundary and highways/ freeways. The increase in traffic volumes and the size of construction material may decrease roadway safety at intersections near the Project or on railroad crossings.	Medium	Short Term	Unavoidable	Regional	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-6:** Supplemental analysis of additional routes, if proposed **TR-7:** Mitigation for intersections with safety concerns	None identified

Table ES-4a: Summary of Potential Impacts by Component during Construction of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Transportation (Section 4.14)	Vehicular Traffic	Solar Arrays	Traffic volumes would increase measurably during transportation of material and equipment during the construction of the solar arrays and would likely decrease level of service for intersections near the Lease Boundary. The increase in traffic volumes may decrease roadway safety at intersections near the Project or on railroad crossings.	Medium	Short Term	Unavoidable	Local	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-6:** Supplemental analysis of additional routes, if proposed **TR-7:** Mitigation for intersections with safety concerns	None identified
Transportation (Section 4.14)	Vehicular Traffic	BESS Substations	Traffic volumes may increase, but a decrease in level of service is not expected, nor is there the potential for roadway safety to decrease.	Low	Temporary	Probable	Local	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training.	None identified
Public Services and Utilities (Section 4.15)	Municipal Solid Waste (Level of Service)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Solid waste from the Project's construction would consist of various quantities of non-hazardous construction wastes. The landfills identified in the ASC maintain substantial capacity that would be sufficient to serve the Project and the region, simultaneously.	Low	Constant	Unavoidable	Local to Regional (depending on location of landfill)	**ENR-7:** Recycle all applicable components **PSU-1:** Use of a licensed waste disposal facility	None identified
Socioeconomics (Section 4.16)	Environmental Justice (People of Color and Low-Income Populations)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Disproportionate impacts on people of color and low-income communities.	Negligible to Medium	Short Term	Feasible	Confined to Regional	No mitigation identified	None identified

Notes:
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; ASC = Application for Site Certification; BESS = battery energy storage system; BMP = best management practice; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; EIS = Environmental Impact Statement; NRHP = National Register of Historic Places; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; Tribes = Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum Tribe; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Table ES-4b

Summary of Potential Impacts by Component during Operation of the Proposed Action

This Page Intentionally Left Blank

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Earth Resources (Section 4.2)	Soils (Landscape)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	It is anticipated that no new ground disturbance would occur. Access roads and cleared areas could be susceptible to increased soil erosion from a lack of stabilizing vegetation or hard cover and prior disturbance of the local soil profile. Soil erosion, because of operations, would be limited to gravel-surfaced areas, including the apron constructed around each turbine.	Low	Temporary	Feasible	Limited	**A-1:** Limit traffic speeds **Veg-7:** Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Veg-7:** Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Water Resources (Section 4.4)	Panel Washing	Solar Arrays	Project operations would require water to wash solar array panels, which would infiltrate the surrounding ground and could impact water resources.	Negligible	Temporary	Unlikely	Confined	**W-9:** Minimize Water Use. **W-10:** Panel Washing.	None identified
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Turbine Option 1 Turbine Option 2	Project operations could result in the accidental release of hazardous substances that could impact water resources.	Negligible	Temporary	Unlikely	Limited	**W-5:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Impacts on Public Water Supply	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project operations would rely on water from public water supply for operations.	Low	Temporary	Feasible	Regional	**W-9:** Minimize Water Use. **W-10:** Panel Washing.	None identified

Notes:
Tables continues below, notes apply to remainder of table
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; FAA = Federal Aviation Administration; FTE = full-time equivalent; KOP = key observation point; LEED = Leadership in Energy and Environmental Design; O&M = operations and maintenance; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife Service; ZOI = zone of influence

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Habitat Degradation	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project operations could result in habitat degradation from the introduction of hazardous substances, introduction and spread of noxious weeds and invasive plants, and deposition of dust.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Hab-4:** Pre-operational Technical Advisory Group	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Turbine Option 1 Turbine Option 2	Project operations could result in habitat fragmentation from edge effects and fire.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Hab-4:** Pre-operational Technical Advisory Group	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Solar Arrays BESS	Project operations could result in habitat fragmentation from edge effects and fire.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Veg-9:** Maintenance of Solar Array Fence **Hab-4:** Pre-operational Technical Advisory Group	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Substations	Project operations could result in habitat fragmentation from edge effects and fire.	Low	Long Term	Unlikely	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Veg-9:** Maintenance of Solar Array Fence **Hab-4:** Pre-operational Technical Advisory Group	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)[34]	Habitat loss	Turbine Option 1 Turbine Option 2	The Project would result in the direct loss of habitat through operation of the turbines and associated infrastructure. The Project may result in indirect habitat loss through degradation of habitat in ZOI created by disturbances (e.g., noise, light) from turbines and associated infrastructure.	Medium	Constant	Unavoidable	Local	**Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Veg-4:** As-built report and offset calculation.	None identified
Wildlife and Habitat (Section 4.6)	Habitat loss	Solar Arrays	The Project would result in the direct loss of habitat through operation of the solar arrays and associated infrastructure. The Project may result in indirect habitat loss through degradation of habitat in ZOI created by disturbances from solar arrays and associated infrastructure.	Medium	Constant	Unavoidable	Confined	**Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Veg-4:** As-built report and offset calculation.	None identified
Wildlife and Habitat (Section 4.6)	Habitat Loss	BESS Substations	The Project would result in the direct loss of habitat through operation of the BESS and substations. The operation of the BESS and substations may also result in indirect habitat loss through degradation of habitat in the 0.5-mile ZOI created by disturbances from these features.	Negligible	Long Term	Unavoidable	Limited	**Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-1:** Tree Avoidance. **Veg-4:** As-built report and offset calculation.	None identified

[34] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Turbine Option 1 Turbine Option 2	The Project may result in mortality of aerial species (birds and bats) through collisions with turbines, strikes with power lines, windows, and weather towers. Other sources of mortality on wildlife, including non-aerial species, include vehicle collisions and changes in food availability.	Medium	Long Term	Probable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-6:** Work with EFSEC on final Project layout and design.	None identified
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Solar Arrays	Bird species, particularly water-associated species, may collide with solar arrays. Mortality of other species, such as herptile, could occur depending on conditions under the solar facilities.	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	BESS Substations	Wildlife mortality may occur due to collisions with infrastructure, including BESS and substations.	Negligible	Long Term	Unlikely	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC.	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Turbine Option 1 Turbine Option 2	The operation of turbines, power lines, roadways, and other linear infrastructure could result in barriers to wildlife movement and fragment habitat. Barriers and fragmentation created during construction would predominantly remain through operation.	Low	Long Term	Probable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-4:** As-built report and offset calculation	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Solar Arrays	The east solar field is situated on a movement corridor and may impact wildlife movement. Fencing around solar arrays is expected to create barriers for larger mammals. Herptiles, small mammals, and small birds are expected to be able to continue to access vegetation around the arrays through the fencing.	Low	Long Term	Probable	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-4:** As-built report and offset calculation	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	BESS Substations	BESS and substations may create barriers to wildlife movement in the adjacent area.	Low	Long Term	Feasible	Limited	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Veg-4:** As-built report and offset calculation	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Striped whipsnake and sagebrush lizard	Turbine Option 1 Turbine Option 2 Solar Array BESS Substations	Impacts on shrub and shrub-steppe habitat may result in loss of suitable reptile habitat. Increased road networks within the Lease Boundary could increase the risk of mortality sagebrush lizard and striped whipsnake. Roadways may create barriers to reptile movement and further fragment reptile habitat.	Low	Constant	Feasible	Confined	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-1:** Implement striped whipsnake and sagebrush lizard–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	Turbine Option 1 Turbine Option 2 Solar Arrays	American white pelicans have the potential for collision with turbines, and electrocution with overhead transmission lines. American white pelicans could collide with solar arrays as literature suggests water-associated birds may attempt to land on solar arrays if they are mistaken for water (lake effect).	Medium	Long Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-2:** Implement American white pelican–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	BESS Substations	Interactions with BESS and substations are not expected.	Negligible	Long Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-2:** Implement American white pelican–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Turbine Option 1 Turbine Option 2	Bald eagles are estimated to be the 17th most likely large bird to collide with the turbines, with an estimated exposure index of 0.01. Further, turbines could create barriers to bald eagle movement over the Lease Boundary.	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Spec-3:** Implement eagle-specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Solar Arrays BESS Substations	Solar arrays, BESS, substations, and other ground-based disturbances could reduce foraging habitat for bald eagles, though the Lease Boundary is not expected to provide key or important bald eagle habitat.	Negligible	Long Term	Feasible	Limited	**Wild-2**: Use wildlife-resistant trash containers. **Wild-3**: Review USFWS eagle mortality consultation. **Wild-4**: Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Spec-3:** Implement eagle-specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Turbine Option 1 Turbine Option 2	Permanent habitat loss from turbine footprint and roads would persist throughout operation. Operation of turbines could result in indirect burrowing owl habitat loss. Burrowing owls are not expected to collide with turbines but are susceptible to road-based mortality. Further, changes in prey distribution and abundance may change foraging.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-4:** Implement burrowing owl–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Solar Arrays BESS Substations	Areas under solar arrays may continue to provide habitat for burrowing owls, depending on conditions under the arrays. Habitat altered by the BESS and substations would be lost throughout operation. Increased traffic on roads used to access solar arrays, BESS, and substructures may result in burrowing owl mortality.	Medium	Constant	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-4:** Implement burrowing owl–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Turbine Option 1 Turbine Option 2	Operation of the turbines could result in mortality due to collisions with turbines and power lines. Change in prey abundance may reduce hawk survivorship. Operation may also reduce the re-occupancy of nesting territories due to disturbance.	High	Constant	Unavoidable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-5:** Implement ferruginous hawk–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Solar Arrays	Solar arrays may change prey structures, resulting in impacts on adult and young survivorship.	Medium	Constant	Unavoidable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-5:** Implement ferruginous hawk–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	BESS Substations	Operation of the BESS and substations may result in loss of potential foraging habitat for ferruginous hawk.	Negligible	Constant	Unavoidable	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-5:** Implement ferruginous hawk–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Turbine Option 1 Turbine Option 2	Golden eagles are estimated to be the 22nd most likely large bird to collide with the turbines. Further, turbines could create barriers to golden eagle movement over the Lease Boundary.	Medium	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-3:** Implement eagle-specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Solar Arrays BESS Substations	Solar arrays, BESS, substations, and other ground-based disturbances could reduce foraging habitat for golden eagles, though the Lease Boundary is not expected to provide key or important golden eagle habitat.	Negligible	Long Term	Unavoidable	Confined	**Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-3:** Implement eagle-specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Turbine Option 1 Turbine Option 2	The operation of wind turbines may result in great blue heron and sandhill crane mortality and disturbance.	Medium	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Solar Arrays BESS Substations	Habitat loss during construction to accommodate the solar arrays, BESS, and substations would continue through operation.	Negligible	Long Term	Unavoidable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Turbine Option 1 Turbine Option 2	Direct and indirect habitat loss would persist throughout Project operation. Loggerhead shrike mortality may occur due to strikes with turbines.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Solar Arrays	Direct and indirect habitat loss would persist throughout Project operation.	Low	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	BESS Substations	Direct and indirect habitat loss would persist throughout Project operation.	Negligible	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Turbine Option 1 Turbine Option 2	Direct habitat loss would persist throughout Project operation. Operation of the turbines may disturb prairie falcons foraging within the Lease Boundary. Operation of the turbines may result in mortality of prairie falcons. Changes in prey density may change habitat suitability and survivorship of prairie falcons.	Medium	Constant	Unavoidable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-8:** Implement prairie falcon–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Solar Arrays	Solar arrays may change prey dynamics within the Lease Boundary (e.g., sheltering under arrays), thereby reducing habitat suitability and survivorship of prairie falcons.	Low	Constant	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-8:** Implement prairie falcon–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	BESS Substations	Direct habitat loss at the BESS and substations would persist throughout operation.	Negligible	Constant	Unavoidable	Limited	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-8:** Implement prairie falcon–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Turbine Option 1 Turbine Option 2	Direct habitat loss would persist through Operation. Operation of the turbines may also result in indirect habitat loss. Ring-necked pheasant mortality may occur due to Project operation. Access roads may result in collisions with ring-necked pheasants.	Low	Long Term	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-9:** Implement ring-necked pheasant–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Solar Arrays BESS Substations	Direct habitat loss would persist throughout operation. Access roads may result in collisions with ring-necked pheasants.	Negligible	Long Term	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-8:** Mitigation options **Spec-9:** Implement ring-necked pheasant–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow and sage thrasher	Turbine Option 1 Turbine Option 2 Solar Arrays	Direct and indirect habitat loss would persist throughout Project operation.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow and sage thrasher	BESS Substations	Direct and indirect habitat loss would persist throughout Project operation.	Negligible	Long Term	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Turbine Option 1	Operation of turbines may result in the continued loss and disturbance of foraging habitat. Operation of Option 1 may result in tundra swan mortality through collision with turbines.	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Veg-4:** As-built report and offset calculation. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Turbine Option 2	Operation of turbines may result in the continued loss and disturbance of foraging habitat. Turbine Option 2 is predicted to have an exposure index of 0.	Negligible	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Solar Arrays	Operation of the solar array may result in continued loss of foraging habitat. Tundra swans may be killed if attempting to land on solar arrays.	Low	Long Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	BESS Substations	Operation of the BESS and substations may result in continued loss of foraging habitat.	Negligible	Long Term	Unavoidable	Limited	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-1:** Avoid corridors. **Hab-2:** Minimize transmission line crossings. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Turbine Option 1 Turbine Option 2	Vaux's swift migrating over the Lease Boundary are susceptible to strikes during migration.	Low	Long Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Solar Arrays BESS Substations	No effects on Vaux's swift from these facilities are expected.	Negligible	Long Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	Turbine Option 1 Turbine Option 2	Operation of the turbines may result in indirect loss of jackrabbit habitat and mortality along access roads. Direct habitat loss is expected to persist throughout operation.	Medium	Constant	Unavoidable	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	Solar Arrays	Solar arrays could provide shelter for jackrabbits reducing predation. Mortality may along access roads may occur.	Low	Constant	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	BESS Substations	Operation of the turbines may result in direct loss of jackrabbit habitat and mortality along access roads.	Negligible	Long Term	Unavoidable	Limited	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Turbine Option 1 Turbine Option 2	Townsend's big-eared bat mortality may occur due to Project operation. Operation may result in indirect loss of foraging habitat.	Low	Long Term	Probable	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Solar Arrays	Townsend's big-eared bat may collide with solar arrays during operation.	Low	Long Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	BESS Substations	Interaction with BESS and substations are not predicted.	Negligible	Long Term	Unlikely	Limited	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Turbine Option 1 Turbine Option 2 Solar Arrays	Townsend's ground squirrel mortality may continue along access roads during operation. Operation of the solar arrays may alter Townsend's ground squirrel behavior by providing shelter. Mortality may occur along access roads.	Medium	Constant	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-12:** Implement Townsend's ground squirrel–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	BESS Substations	Direct habitat loss would persist through operation. Mortality may occur along access roads during operation of BESS and substations.	Negligible	Constant	Feasible	Limited	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-12:** Implement Townsend's ground squirrel–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Turbine Option 1 Turbine Option 2	Operation of the Project may result in direct and indirect habitat loss to pronghorn antelope. Pronghorn antelope mortality may occur along maintenance roads.	Medium	Constant	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Solar Arrays	Pronghorn antelope would be precluded from solar arrays during operation due to fencing. Pronghorn antelope mortality may occur along maintenance roads.	Medium	Constant	Unavoidable	Confined	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation. **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	BESS Substations	Pronghorn antelope would be precluded from BESS and substations. Pronghorn antelope mortality may occur along maintenance roads.	Negligible	Long Term	Unavoidable	Limited	**Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-6:** Work with EFSEC on final Project layout and design. **Hab-8:** Mitigation options **Veg-4:** As-built report and offset calculation **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Turbine maintenance may require generator-specific lubricants and fluids produced outside the Project vicinity. O&M vehicles would need an ongoing supply of fuel purchased locally. Water for the Project's O&M facility would be purchased from a local vendor and sourced from Kennewick. Aggregate for access road maintenance would be obtained locally.	Low	Long Term	Unavoidable	Local to Regional (depending on sourcing of the materials)	**ENR-1:** Executed water supply agreement **ENR-2:** Install high-efficiency electrical fixtures and appliances **ENR-3:** Install high-efficiency security lighting **ENR-4:** Install low-water-use flush toilets **ENR-5:** Capture and recycle wash water	None identified
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Turbine Option 1 Turbine Option 2 BESS Substations	Although livestock would be able to graze up to turbines and associated structures, limited but measurable acreage would remain out of agricultural production.	Negligible	Long Term	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan	None identified
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Solar Arrays	Exclusionary fencing would be installed around the solar arrays. Exclusionary fencing would prevent the solar array project areas from being used for agricultural activities throughout the Project's operations stage. The loss of available farmland would result in a reduction in dryland wheat production and, potentially, a loss in grazing areas for livestock.	Low	Long Term	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan **LSU-2:** The Applicant would prepare a dryland farming management plan	None identified
Land and Shoreline Use (Section 4.8)	Wineries and agritourism (Profitability)	Turbine Option 1 Turbine Option 2	Changes in landscape character through the introduction of turbines that could be seen from wineries and agritourism businesses would indirectly impact wine-tasting tourism.	Low	Long Term	Probable	Local	**VIS-1–VIS-9** For details on these mitigation measures, refer to Section 4.10	None identified
Land and Shoreline Use (Section 4.8)	Wineries and agritourism (Profitability)	Solar Arrays BESS Substations	The conversion of existing agricultural lands to energy infrastructure would result in visual contrast and changes in the landscape setting. Due to the location of the solar arrays, BESS, and substations, the changes may not be visible from the wineries and agritourism businesses.	Negligible	Long Term	Unlikely	Local	**VIS-1–VIS-9** For details on these mitigation measures, refer to Section 4.10	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity.	Low	Long term for impacts from noise and dust Constant for impacts from the turbine operation	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity	Low	Long Term	Probable	Local	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	*None identified*
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Noise, vibration, visual interferences, and restriction of access.	High	Long term for impacts from noise and dust Constant for impacts from turbine operation and security measures	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties and resources.
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Turbine Option 1 Turbine Option 2	The wind turbines, and comprehensive Project, would dominate views from many KOP locations, and the landscape would appear strongly altered.	High	Long Term	Unavoidable	Regional	**VIS-1:** Relocate turbines located within the foreground distance. **VIS-2:** No advertising, cell antennas, commercial messages, or symbols placed on wind turbines. **VIS-3:** Maintain clean nacelles and towers.	Significant for Visual Aspects.
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Solar Arrays (all options) Substations Transmission Lines	The solar arrays (all options), substations, and transmission lines would attract attention and would modify the existing landscape setting.	Medium	Long Term	Unavoidable	Regional	**VIS-4:** Avoid complete removal of vegetation beneath solar arrays. **VIS-5:** Install color-treated, opaque fencing to screen views of the solar arrays. **VIS-8**: Choose the type of transmission structure to best match the adjacent transmission lines.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	County Well Solar Array	The County Well solar array siting area would dominate views from KOP 12 and the local landscape would appear strongly altered where there are limited existing landscape modifications.	High[e]	Long Term	Unavoidable	Local	**VIS-4:** Avoid complete removal of vegetation beneath solar arrays. **VIS-5:** Install color-treated, opaque fencing to screen views of the solar arrays.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Transmission Lines	The transmission lines would dominate views from KOP 15 and the landscape would appear strongly altered in this localized area where there are limited existing landscape modifications.	High	Long Term	Unavoidable	Local	**VIS-7**: Maximize the span length across highways and other linear viewing locations. **VIS-8**: Choose the type of transmission structure to best match the adjacent transmission lines.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	BESS	The BESS would attract attention from some KOP locations and would modify the localized existing landscape setting.	Medium	Long Term	Unavoidable	Local	**VIS-6:** Design BESS to blend with the adjacent agricultural character.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Shadow Flicker	Turbine Option 1 Turbine Option 2	Wind turbines would create shadow flicker that would impact Project participants.	Medium	Long Term	Probable	Confined	**SF-1:** The Applicant would attempt to avoid, minimize. and mitigate shadow flicker at nearby residences. **SF-2:** The Applicant would set up a complaint resolution procedure.	None identified
Visual Aspects, Light and Glare (Section 4.10)	Light	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations Transmission Lines	Lighting for security purposes and to conform with FAA requirements would be visible outside the Lease Boundary but would have limited effect in terms of light trespass and sky glow degradation.	Low	Long Term	Unavoidable	Local	**LIG-1:** Use LEED-certified building exterior(s) and security lighting.	None identified
Recreation (Section 4.12)	Recreation – Use	Turbine Option 1 Turbine Option 2	Turbines would limit recreational activities (i.e., paragliding) that occur on public land near areas of operation.	Low	Long Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails)	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Recreation (Section 4.12)	Recreation – Use	Solar Arrays	Operation of the Sellards Solar Field would restrict access to a parcel of DNR-administered land within the Lease Boundary.	High	Long Term	Unavoidable	Limited	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails)	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Turbine Option 1 Turbine Option 2 Solar Arrays	Impacts on noise receptors would be limited, while visual impacts would occur regionally.	Low	Long Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest	None identified
Recreation (Section 4.12)	Recreation – Public Health and Safety	Turbine Option 1 Turbine Option 2 Solar Arrays	The Project's potential to affect the health and safety of recreationists using the area for paragliding and hang gliding would results in a medium impact during the life of the Project. Impacts on recreationists would occur beyond neighboring receptors.	Medium	Long Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationalists safe	Significant for paragliding and hang gliding public health and safety
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Turbine Option 1 Turbine Option 2	Spontaneous fire or explosions from operating wind turbines are rare but could occur during Project operations.	Low	Temporary	Unlikely	Limited	**PHS-1:** Turbines will be shut down for the duration of any fire located within the region of the Project.	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Substations	Substation transformers have a minimal risk of fire or explosion during construction.	Medium	Temporary	Feasible	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	BESS	Lithium-ion batteries used for the BESS may pose a risk of fire and explosion during operation because they may overheat, but the BESS would include a fire suppression system.	Medium	Temporary	Feasible	Limited	**PHS-1:** Turbines will be shut down for the duration of any fire located within the region of the Project.	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Turbine Option 1 Turbine Option 2 BESS Substations	Indirect impacts if a fire were to occur during operation of the turbines and substation could include smoke or haze, and a potential reduction in emergency response services.	Low	Temporary	Unlikely	Regional	**PHS-1:** Turbines will be shut down for the duration of any fire located within the region of the Project.	None identified

Table ES-4b: Summary of Potential Impacts by Component during Operation of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Public Services and Utilities (Section 4.15)	Wastewater	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Wastewater from the O&M facilities would be discharged to an on-site septic system. It is anticipated that the operations stage would use less than 5,000 gallons of water per day and that wastewater would be generated from kitchen and bathroom use.	Low	Long Term	Unavoidable	Local	**ENR-5:** Capture and recycle wash water	None identified
Public Services and Utilities (Section 4.15)	Municipal Solid Waste	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Operation of the Project is expected to generate approximately one or two dumpsters of waste per week at the O&M facilities.	Low	Constant	Unavoidable	Local to Regional (depending on location of landfill)	**PSU-1:** Use of a licensed waste disposal facility	None identified

Notes:
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; FAA = Federal Aviation Administration; FTE = full-time equivalent; KOP = key observation point; LEED = Leadership in Energy and Environmental Design; O&M = operations and maintenance; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife Service; ZOI = zone of influence

Table ES-4c

Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

This Page Intentionally Left Blank

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Earth Resources (Section 4.2)	Soils (Landscape)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning activities associated with the Project could impact and disturb the soil profile, due to excavating foundations and utilities, removing unsealed areas, restoring the original ground profile, and rehabilitating vegetation.	Low	Short Term	Unavoidable	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Topography (Landscape)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	The Applicant would restore the original topographic profile in areas of previous development.	Low	Short Term	Probable	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified
Earth Resources (Section 4.2)	Landslide Hazards and Ground Instability (Safety)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Existing ground instability, high rainfall rates, and strong earthquake shaking could cause landslides.	Low	Temporary	Unlikely	Limited	**Geo-1:** Avoid construction during wet periods **W-2:** Minimize work in heavy rain **Veg-7**: Detailed Site Restoration Plan **LSU-4:** Restoration of temporary disturbance to preconstruction status **LSU-5:** Detailed Site Restoration Plan	None identified

Notes:
Table continues below, notes apply to remainder of table
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Water Resources (Section 4.4)	Physical Disturbance	Turbine Option 1 Turbine Option 2 Solar Arrays	Project decommissioning would result in physical disturbance that could impact surface water and wetlands, runoff and absorption capacity, floodplains, and groundwater resources.	Low	Short Term	Unavoidable	Confined	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-6:** Wetland SWPPP.	None identified
Water Resources (Section 4.4)	Physical Disturbance	BESS Substations	Project decommissioning would result in physical disturbance that could impact surface water and wetlands, runoff and absorption capacity, floodplains, and groundwater resources.	Low	Short Term	Unavoidable	Limited	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-6:** Wetland SWPPP.	None identified
Water Resources (Section 4.4)	Change in Water Quality	Turbine Option 1 Turbine Option 2	Project decommissioning would require temporary disturbance, which could impact water quality.	Low	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5:** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Change in Water Quality	Solar Arrays	Project decommissioning would require temporary disturbance areas to access and remove Project components located near ephemeral and intermittent streams and could result in changes to water quality.	Negligible	Temporary	Unlikely	Local	**W-1:** Least Risk Fish Windows. **W-2:** Minimize Work in Heavy Rain. **W-3:** Check Dams. **W-5:** Employee Training. **W-6:** Wetland SWPPP. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Change in Hydrology	Turbine Option 1 Turbine Option 2	Project decommissioning would require temporary disturbance to some ephemeral and intermittent streams but would restore the disturbance areas following decommissioning.	Low	Short Term	Unlikely	Limited	**W-3:** Check Dams.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Turbine Option 1 Turbine Option 2	Project decommissioning could result in the introduction of hazardous substances to water resources.	Low	Temporary	Unlikely	Local	**W-5:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Introduction of Hazardous Substances	Solar Arrays BESS Substations	Project decommissioning could result in the introduction of hazardous substances to water resources.	Negligible	Temporary	Unlikely	Limited	**W-5:** Employee Training. **W-8:** Spill Response Equipment.	None identified
Water Resources (Section 4.4)	Impacts on Public Water Supply	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project decommissioning could result in impacts on public water supply.	Low	Temporary	Unlikely	Regional	**W-9:** Minimize Water Use.	None identified
Vegetation (Section 4.5)[35]	Loss of Extent of Priority Habitat – Temporary Disturbance	Turbine Option 1 Turbine Option 2	Decommissioning of the Project would require temporary disturbance areas to remove Project components, which would result in direct loss of WDFW Priority Habitat.	High	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified

[35] Blue highlight identifies Impacts of Medium and High magnitude.

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	East Solar Field	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Medium	Long Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	County Well Solar Field BESS Substations	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Negligible	Short Term	Unlikely	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent of Priority Habitat – Temporary Disturbance	Sellards Solar Field	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with WDFW Priority Habitat.	Low	Long Term	Feasible	Limited	**Veg-1:** Tree Avoidance **Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Turbine Option 1 Turbine Option 2	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Low	Short Term	Unavoidable	Confined	**Veg-1:** Tree Avoidance **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan	None identified
Vegetation (Section 4.5)	Loss of Extent Other Habitat – Temporary Disturbance	Solar Arrays BESS Substations	Site clearing associated with temporary disturbance would result in direct loss of acreage associated with other habitat.	Negligible	Short Term	Unavoidable	Limited	**Veg-1:** Tree Avoidance **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Loss of Extent Special Status Plant Species	Turbine Option 1 Turbine Option 2 East Solar Field	Site clearing associated with decommissioning of the Project would result in direct loss of populations of special status plant species or their habitat.	Low	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Loss of Extent Special Status Plant Species	County Well Solar Field Sellards Solar Field BESS Substations	Site clearing associated with decommissioning of the Project would result in direct loss of populations of special status plant species or their habitat.	Negligible	Constant	Unlikely	Local	**Veg-2:** Pre-Disturbance Surveys for Special Status Plant Species **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Vegetation (Section 4.5)	Habitat Degradation	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project decommissioning could result in habitat degradation from the introduction of hazardous material, surface runoff, introduction or spread of invasive plant or noxious weeds, and the deposition of dust.	Low	Long Term	Feasible	Local	**Veg-5:** Operation and Decommissioning Dust Control Plan **Veg-6:** Decommissioning Legislated Requirements **Veg-7:** Detailed Site Restoration Plan **Veg-8:** Decommissioning Noxious Weed Management Plan **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Turbine Option 1 Turbine Option 2	Project decommissioning could result in habitat fragmentation from fire.	Low	Long Term	Feasible	Local	**Veg-6:** Decommissioning Legislated Requirements **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Vegetation (Section 4.5)	Habitat Fragmentation	Solar Arrays BESS Substations	Project decommissioning could result in habitat fragmentation from fire.	Low	Long Term	Unlikely	Local	**Veg-6:** Decommissioning Legislated Requirements **Hab-7:** Road Decommissioning **Hab-8:** Compensation Habitat Loss and Alteration	None identified
Wildlife and Habitat (Section 4.6)	Habitat loss	Turbine Option 1 Turbine Option 2	The Project would result in temporary loss of habitat during decommissioning. No new permanent habitat loss is expected, and restoration activities are expected to replace and/or enhance habitat loss created during construction and operation.	Negligible	Short Term	Unavoidable	Local	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-1:** Tree Avoidance. **Veg-7:** Detailed Site Restoration Plan.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Habitat loss	Solar Arrays	The Project would result in temporary loss of habitat during decommissioning. No new permanent habitat loss is expected, and restoration activities are expected to replace and/or enhance habitat loss created during construction and operation.	Negligible	Short Term	Unavoidable	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-1:** Tree Avoidance. **Veg-7:** Detailed Site Restoration Plan.	None identified
Wildlife and Habitat (Section 4.6)	Habitat loss	BESS Substations	The Project would result in temporary loss of habitat during decommissioning. No new permanent habitat loss is expected, and restoration activities are expected to replace and/or enhance habitat loss created during construction and operation.	Negligible	Short Term	Unavoidable	Limited	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-1:** Tree Avoidance. **Veg-7:** Detailed Site Restoration Plan.	None identified
Wildlife and Habitat (Section 4.6)	Mortality of non-special status species	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Sources of wildlife injuries and mortalities during decommissioning include collisions with equipment; removal of nuisance wildlife; destruction of nests, dens, and burrows; and habitat loss. The risk of mortalities would be limited to the duration of decommissioning.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit activity disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Wild-8:** Establish buffers around raptor nests.	None identified
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	Turbine Option 1 Turbine Option 2 Solar Arrays	Decommissioning would remove Project-related barriers to movement and reduce habitat fragmentation by removing infrastructure and revegetating disturbed areas.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Barriers to movement and fragmentation	BESS Substations	Decommissioning would remove Project-related barriers to movement and reduce habitat fragmentation by removing infrastructure and revegetating disturbed areas.	Negligible	Short Term	Feasible	Limited	**Wild-5:** Limit activity disturbance by identifying sensitive areas. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: striped whipsnake and sagebrush lizard	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Ground disturbance and machinery use during Project decommissioning could result in mortality of striped whipsnake and sagebrush lizard.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-1:** Implement striped whipsnake and sagebrush lizard–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: American white pelican	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning of the Project may disturb American white pelicans moving over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Hab-4:** Develop TAC. **Spec-2:** Implement American white pelican–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: bald eagle	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning of the Project could disturb bald eagles, resulting in avoidance of the Project site.	Negligible	Short Term	Feasible	Confined	**Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Spec-3:** Implement eagle-specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: burrowing owl	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning may result in mortality from machinery operation over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule activity during daylight hours. **Wild-8:** Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-4:** Implement burrowing owl–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: ferruginous hawk	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning may result in mortality from machinery operation over the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-5:** Ferruginous hawk–specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: golden eagle	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning of the Project could disturb golden eagles, resulting in avoidance of the Project site, though golden eagle nesting has not been reported within 10 miles of the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-2:** Use wildlife-resistant trash containers. **Wild-3:** Review USFWS eagle mortality consultation. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit construction disturbance by identifying sensitive areas. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Spec-3:** Implement eagle-specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: great blue heron and sandhill crane	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning activities may disturb birds flying over the Lease Boundary, resulting in bird flight paths being diverted around the area.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Hab-4:** Develop TAC. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: loggerhead shrike	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning may disturb birds foraging and nesting within the Lease Boundary. Machinery could result in mortality of birds and destruction of nests.	Negligible	Short Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Decommissioning revegetation plan **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: prairie falcon	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Disturbance from decommissioning activities may result in disturbance to prairie falcons.	Negligible	Short Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-8:** Establish buffers around raptor nests. **Veg-1:** Tree Avoidance. **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-8:** Implement prairie falcon specific–mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: ring-necked pheasant	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Disturbance from decommissioning activities may result in indirect habitat loss. Access roads may result in collisions with ring-necked pheasants.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning **Veg-7:** Decommissioning revegetation plan **Spec-9:** Implement ring-necked pheasant–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: sagebrush sparrow and sage thrasher	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning may disturb birds foraging and nesting within the Lease Boundary. Machinery could result in mortality of birds and destruction of nests.	Negligible	Short Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Wild-7:** Schedule activities during daylight hours. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: tundra swan	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning may disturb tundra swans flying over and foraging within the Lease Boundary.	Negligible	Short Term	Feasible	Confined	**Wild-1:** Review 2-year raptor and bat monitoring program. **Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Hab-4:** Develop TAC. **Spec-6:** Implement great blue heron, sandhill crane, and tundra swan–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Vaux's swift	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning of the Project could disturb Vaux's swifts in flight over the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Hab-4:** Develop TAC. **Spec-7:** Implement loggerhead shrike, sagebrush sparrow, sage thrasher, and Vaux's swift–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: black-tailed jackrabbit and white-tailed jackrabbit	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Disturbance from decommissioning activities may result in indirect habitat loss. Access roads may result in collisions with jackrabbits.	Negligible	Short Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities. **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-10:** Implement black and white-tailed jackrabbit–specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's big-eared bat	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning activities could disturb Townsend's big-eared bat foraging within the Lease Boundary.	Negligible	Short Term	Unlikely	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-7:** Schedule construction during daylight hours. **Hab-4:** Develop TAC. **Spec-11:** Implement Townsend's big-eared bat–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: Townsend's ground squirrel	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Mortality may occur during decommissioning and along access roads.	Negligible	Short Term	Feasible	Confined	**Wild-4:** Avoid use of pesticides and rodenticides. **Wild-5:** Limit disturbance by identifying sensitive areas **Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-12:** Implement Townsend's ground squirrel–specific mitigation.	None identified
Wildlife and Habitat (Section 4.6)	Special status species: pronghorn antelope	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning is predicted to result in indirect habitat loss. Increased traffic on existing and new access roads may result in pronghorn antelope mortality.	Negligible	Short Term	Feasible	Confined	**Wild-5:** Limit disturbance by identifying sensitive areas. **Wild-6:** Maintain database of road mortalities **Hab-4:** Develop TAC. **Hab-5:** Manage ZOI. **Hab-7:** Roadway decommissioning. **Veg-7:** Detailed Site Restoration Plan. **Spec-13:** Implement pronghorn antelope–specific mitigation.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Energy (Section 4.7)	Consumption of Raw Materials and Commodities	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Energy consumption, predominantly in the form of gasoline, diesel fuel, and electricity, would be required to operate equipment such as cranes, trucks, tools, and vehicles used to dismantle and remove most Project facilities and reclaim disturbed areas. Backfilling void spaces created by the removal of foundations would require construction aggregate.	Low	Short Term	Unavoidable	Local	**ENR-6:** Recycle all components of the Project	None identified
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Turbine Option 1 Turbine Option 2 BESS Substations	Similar to the construction stage	Negligible (farm plan modifications) Low (decreased productivity)	Temporary (brief access modifications) Short Term (seasonal restrictions	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan. **LSU-2:** The Applicant would prepare a dryland farming management plan. **LSU-3:** Arrange for the removal of livestock. **LSU-4:** Confirm that site restoration activities are in alignment with the Applicant's decommissioning plan. **LSU-5:** Requirements for requesting an alternative land use as part of decommissioning.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Land and Shoreline Use (Section 4.8)	Agriculture (Productivity)	Solar Arrays	Impacts would be less than those described for the construction stage as dryland wheat production located within the solar array project area would have previously been taken out of management.	Low	Temporary (brief access modifications) Short Term (seasonal restrictions)	Unavoidable	Limited (small area) Regional (decreased productivity)	**LSU-1:** The Applicant would prepare a livestock management plan. **LSU-2:** The Applicant would prepare a dryland farming management plan. **LSU-3:** Arrange for the removal of livestock. **LSU-4**: Confirm that site restoration activities are in alignment with the Applicant's decommissioning plan. **LSU-5:** Requirements for requesting an alternative land use as part of decommissioning.	None identified
Historic and Cultural Resources (Section 4.9)	Precontact Archaeological resources; DAHP-issued permit required prior to disturbance - OR - Avoidance requested and recommended	Turbine Option 1 Turbine Option 2	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	High	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Historic-period archaeological isolates and sites determined not eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Negligible	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity.	Low	Short-term	Feasible	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural resources determined not eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Physical impacts	Low	Constant	Unlikely	Local	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Historic and Cultural Resources (Section 4.9)	Unevaluated archaeological historic-period sites	Turbine Option 1 Turbine Option 2 Solar Arrays	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity	Medium	Constant	Unlikely	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Adverse effects on resources through a loss or diminishment of integrity	Low	Short term	Feasible	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Architectural Resources determined eligible for the NRHP	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Physical impacts	High	Constant	Unlikely	Regional	**CR-2:** Archaeological and Architectural Resources Mitigation	None identified
Historic and Cultural Resources (Section 4.9)	Unidentified historic and cultural resources	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; adverse effects on resources through a loss or diminishment of integrity.	High	Constant	Probable	Confined	**CR-2:** Archaeological and Architectural Resources Mitigation to include the implementation of a Cultural Resource Avoidance Plan	None identified
Historic and Cultural Resources (Section 4.9)	Traditional Cultural Properties	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Destruction of or damage to resources through ground disturbance and physical alteration; loss of access to resources; visual interference.	High	Short term	Unavoidable	Regional	**CR-1:** Traditional Cultural Properties Mitigation	Significant for partial or complete loss of traditional cultural properties and resources
Visual Aspects, Light and Glare (Section 4.10)	Visual Aspect	Turbine Option 1 Turbine Option 2	Activities would attract attention and would modify the localized existing landscape setting.	Medium	Short Term	Probable	Local	No mitigation identified	None identified
Recreation (Section 4.12)	Recreation – Use	Turbine Option 1 Turbine Option 2	Decommissioning would result in impacts on recreationists who use the Project's study area for recreational activities. Paragliders, hang gliders, and cyclists would be affected by the decommissioning of the Project.	Low	Short Term	Unavoidable	Local	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails). **R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationists safe.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Recreation (Section 4.12)	Recreation – Use	Solar Arrays	Decommissioning of the Sellards Solar Field would restrict access to a parcel of DNR-administered land within the Lease Boundary, resulting in a high impact.	High	Short Term	Unavoidable	Limited	**R-1:** Work with DNR and Benton County to identify new recreational activities and/or improve existing recreational activities within Lease Boundary (e.g., multi-use trails).	None identified
Recreation (Section 4.12)	Recreation – Recreational Experience	Turbine Option 1 Turbine Option 2 Solar Arrays	Indirect impacts related to visual resources and noise could occur at recreation sites. Impacts on noise receptors would occur locally, while visual impacts would occur at a regional spatial extent.	High	Short Term	Unavoidable	Regional	**R-2:** Provide informational boards, as approved by DNR and EFSEC, at viewpoints associated with scenic areas of interest.	None identified
Recreation (Section 4.12)	Recreation – Public Health and Safety	Turbine Option 1 Turbine Option 2 Solar Arrays	The Project's potential to affect the health and safety of recreationists using the area for paragliding, hang gliding, or biking would result in a medium impact.	Medium	Short Term	Unavoidable	Regional	**R-3:** Work with the local and regional clubs to provide and maintain a plan to keep recreationists safe	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Turbine Option 1 Turbine Option 2	Combustible materials and lubricants are contained in the nacelle of the turbines. Diesel-powered generators may be used during decommissioning. Use of these materials could pose a fire risk.	Medium	Temporary	Feasible	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Fire (Worker Health and Safety)	Solar Arrays BESS Substations	Fire resulting from decommissioning BESS, solar arrays, and substations is unlikely, but wildfire risk in the area is considered high.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Turbine Option 1 Turbine Option 2	If a fire were to occur during turbine decommissioning, indirect impacts could include smoke or haze, and a potential reduction in emergency response services.	Medium	Temporary	Feasible	Regional	No mitigation identified	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Public Health and Safety (Section 4.13)	Public Health (Smoke and Haze)	Solar Arrays BESS Substations	If a fire were to occur during decommissioning of the solar arrays, substations, or BESS, indirect impacts could include smoke or haze, and a potential reduction in emergency response services.	Medium	Temporary	Unlikely	Regional	No mitigation identified	None identified
Public Health and Safety (Section 4.13)	Release of Hazardous Materials	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Project elements include small amounts of oil, which could be released during decommissioning.	Medium	Temporary	Unlikely	Limited	No mitigation identified	None identified
Transportation (Section 4.14)	Vehicular Traffic	Turbine Option 1 Turbine Option 2 Solar Arrays	Decommissioning would require the removal and transportation of the dismantled pieces of the turbines, expected to be smaller than the pieces that arrived during the Construction Stage. The increase in traffic volumes is not expected to decrease level of service or cause a decline in roadway safety.	Low	Short Term	Unavoidable	Regional	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-3:** Traffic Analysis. **TR-4:** Railroad crossing and grade change survey. **TR-5:** Traffic and Safety Management Plan. **TR-6:** Supplemental analysis of additional routes, if proposed **TR-7:** Mitigation for intersections with safety concerns	None identified
Transportation (Section 4.14)	Vehicular Traffic	BESS Substations	Decommissioning would require the removal and transportation of the BESS and substations. The increase in traffic volumes is not expected to decrease level of service or cause a decline in roadway safety.	Low	Temporary	Probable	Local	**TR-1:** Daily transport communication, including emergency numbers. **TR-2:** Operation Lifesaver safety presentation and training. **TR-3:** Traffic Analysis. **TR-4:** Railroad crossing and grade change survey. **TR-5:** Traffic and Safety Management Plan.	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Public Services and Utilities (Section 4.15)	Municipal Solid Waste (Level of Service)	Turbine Option 1 Turbine Option 2 Solar BESS Substations	After dismantling of the facility, high-value components would be removed for scrap value. The remaining materials would be reduced to transportable size and removed from the site for disposal. Existing facilities would maintain capacity to receive the Project's non-recyclable waste and continue to serve their communities.	Low	Constant	Unavoidable	Local to Regional	**ENR-7:** Recycle all applicable components. **PSU-1:** Use of a licensed waste disposal facility.	None identified
Socioeconomics (Section 4.16)	Economic Environment (Housing Availability)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	The majority of construction workers would be sourced locally; however, the Project's construction would require temporary and short-term relocation of construction workers into the region.	Negligible	Temporary to Short Term	Feasible	Regional	**Socio-ec-1:** Updated housing analysis to confirm temporary or short-term availability	None identified
Socioeconomics (Section 4.16)	General Welfare and Social Conditions (Wellbeing)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Decommissioning of the Project would restore property tax revenues for Benton County and the Tax Area to pre-Project conditions as the Project's added value would be removed from the parcels that make up the Lease Boundary's valuation. For example, smaller collections would impact operational budgets for schools, school districts, and fire stations within Benton County and the Tax Area.	Medium	Short Term	Feasible	Regional	No mitigation identified	None identified

Table ES-4c: Summary of Potential Impacts by Component during Decommissioning of the Proposed Action

Section	Topic	Component[a]	Description of Impact[b]	Magnitude of Impact ▪ Negligible ▪ Low ▪ Medium ▪ High	Duration of Impact ▪ Temporary ▪ Short Term ▪ Long Term ▪ Constant	Likelihood of Impact ▪ Unlikely ▪ Feasible ▪ Probable ▪ Unavoidable	Spatial Extent or Setting of Impact ▪ Limited ▪ Confined ▪ Local ▪ Regional	Mitigation[c]	Significant Unavoidable Adverse Impacts[d]
Socioeconomics (Section 4.16)	Environmental Justice (People of color and Low-Income Populations)	Turbine Option 1 Turbine Option 2 Solar Arrays BESS Substations	Disproportionate impacts on people of color and low-income communities.	Negligible to Medium	Temporary to Short Term	Feasible	Regional	No mitigation identified	None identified

Notes:
[a] Components were combined in the same cell if they received the same impact ratings for the identified topic.
[b] Design features, best management practices, and other actions proposed by the Applicant to avoid or minimize environmental impacts were assumed to be part of the Proposed Action and were taken into account when identifying the impacts.
[c] Mitigation measures listed here are additional actions that EFSEC could impose to further reduce the impacts. See Section 4.1 for details.
[d] Significant unavoidable impacts are those that would remain even after all identified additional mitigation measures have been required by EFSEC.
Applicant = Horse Heaven Wind Farm, LLC; BESS = battery energy storage system; DNR = Washington State Department of Natural Resources; EFSEC = Washington Energy Facility Site Evaluation Council; SWPPP = stormwater pollution prevention plan; TAC = Technical Advisory Committee; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington Department of Fish and Wildlife; ZOI = zone of influence