



Horse Heaven Wind Farm

Final Environmental Impact Statement

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Draft Environmental Impact Statement (DEIS)

- Issued December 19, 2022
- 45-day Public Comment Period
- Public Hearing held February 1, 2023
 - 74 speakers
- 2,497 comments received
 - 1,217 comments deemed substantive
 - All comments will receive a response
 - Revisions integrated throughout FEIS from comment responses





Post-DEIS Discussions

- Yakama Nation (YN)
 - Monthly meetings
 - Confidential wildlife and cultural data
 - Referenced indirectly or redacted within the publicly-available FEIS
 - Included alongside the FEIS under separate cover for Council
- WSDOT
 - Coordination on Traffic Impact Analysis



Post-DEIS Data Collection



• Traffic Impact Analysis

- Project-Generated Trips
- Peak Hour Traffic Volumes
- Oversized Truck Haul Routes
- Traffic Safety Analysis



• Raptor Nest Survey

- Updated results from 2017-2019 and 2022 surveys
- Tracking of nest status
- Identification of new nests



• Visual Analysis

- 3 new Key Observation Points added
- New visual simulations created, updated existing
- Addressed visual impacts to motorist, residents, and cultural resources

Post-Adjudication Applicant Project Reductions

- Data Request 9 Response (August 9, 20230)
 - Reduce East Solar Array from 2,037 acres to 639 acres (1,398-acre reduction)
 - Shift three turbines away from Webber and Sheep Canyons (Turbine Option 1)
 - Remove 13 proposed turbines (Turbine Option 1)
 - Remove 3 proposed turbines (Turbine Option 2)
 - Remove duplicate transmission line and substation infrastructure
 - Includes conversion of approximately 4 miles of transmission lines to buried collector lines
 - Reduce the East BESS to from 150 MW to 100 MW; no reduction in footprint

Post-Adjudication Applicant Project Reductions (Cont.)

- September 26, 2023 Memo
 - Remove an additional 9 proposed turbines (Turbine Option 1)
 - Referenced within FEIS, but not included in impact analysis due to time constraints
 - Will be available to the Council for consideration



Post-Adjudication Applicant Project Additions

- Data Request 9 Response (August 9, 2023)
 - Addition of an offsite laydown yard for turbine blades
 - Approximately 23 acres in size; outside of previously surveyed area
 - Addition of up to 5 radar sensor towers to support an Aircraft Detection Lighting System (ADLS)
 - New requirement under House Bill 1173
 - 7,705 feet of new roads and 10,091 feet of new electrical infrastructure
 - One tower will be located outside of previously surveyed area



Non-project
example of
ADLS Tower

Post-Adjudication Applicant Project Additions (Cont.)

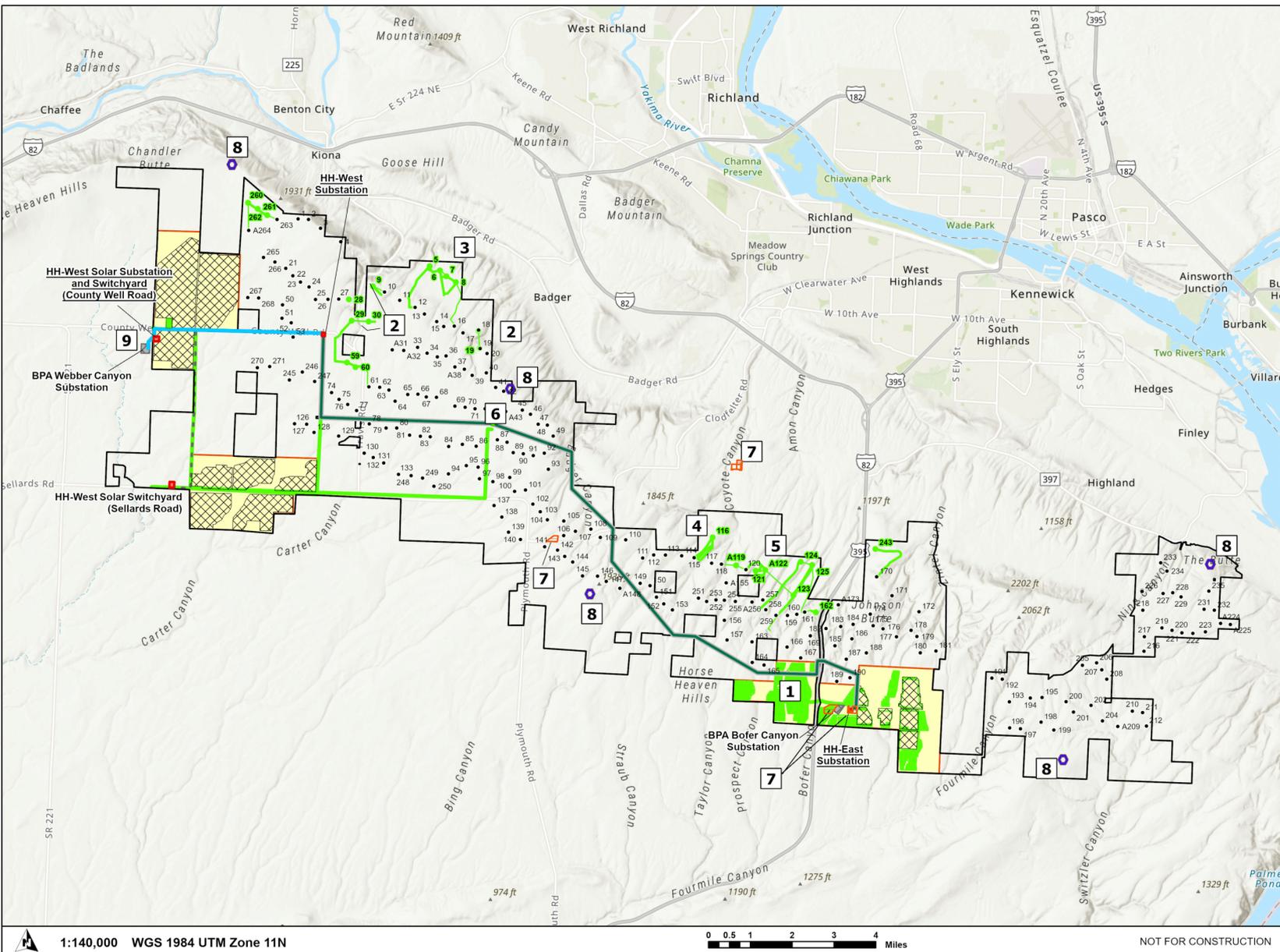
- Upgrade and extend the County Well Road transmission line
 - 4 miles will be upgraded from 230 kV to 500 kV
 - 1,130 feet of transmission line and one new support structure outside of previously surveyed area
- Increase West BESS from 150 MW to 200 MW; increase footprint from 6 acres to 10 acres



Horse Heaven Wind Project



**Figure 2.3-1
Turbine Layout Option 1**
BENTON COUNTY, WA



- Project Lease Boundary
- Option 1 Turbine Layout
- 230-kV Intertie Transmission Line
- County Well Road 500-kV Transmission Line
- Project Substation
- BPA Substation
- Solar Array
- Solar Siting Area
- Laydown Yard
- ⊙ Radar Tower
- ⊙ Features Removed from Current Design
- ⊙ Features Converted from Transmission Line to Buried Collector Line



Reference Map



FEIS Organization and Key Chapters

Executive Summary

Chapter 1 – Project Background

Chapter 2 – Proposed Action and Alternatives

Chapter 3 – Affected Environment

Chapter 4 – Impacts and Mitigation Measures

Chapter 5 – Cumulative Impacts

Chapter 10 – Summary Comments and Responses
on the Draft EIS

Chapter 3 (Affected Environment) FEIS Changes

Air	Inclusion of representative background air quality data used for dispersion modeling study.
Water	Removed unavailable sources from list of potential water sources.
Vegetation	Inclusion of independent calculations for habitat impacts from the comprehensive Project.
Wildlife	Inclusion of raptor nest survey results from 2022 and 2023.
Land Use	Addition of description of regional viticultural areas and wine industry.
Visual	Addition of 3 Key Observation Points with accompanying visual simulations.
Noise	Addition of discussion of low-frequency noise and infrasound.
Transportation	Removal of SR 221 from consideration as an oversize and overweight load route.
Socioeconomics	Addition of racial identity distribution among school districts within the Project vicinity.

Chapter 4 (Impacts & Mitigation) FEIS Changes

Global	Addition of rationale for all proposed mitigation.
Earth	Addition of discussion of raw material impacts from BESS manufacturing.
	Expansion of Geo-1 mitigation to further reduce soil compaction.
Air	Addition of dispersion modeling analysis, including the proposed use of a concrete batch plant.
	Addition of substations and laydown yards to Table 4.3-3 (Summary of Air Quality Emissions).
Vegetation	Increase in the habitat offset ratio for modified rabbitbrush shrubland habitat.
	Addition of Veg-9 mitigation requiring removal of any vegetative growth on Project fencing.
Wildlife	Expansion of Wild-1 mitigation regarding the TAC, monitoring plans, and adaptive management.
	Spec-5 now creates a 2-mile avoidance buffer around all ferruginous hawk nests with active habitat.
Land Use	Addition of impact assessments for wineries and agri-tourism.
Historic & Cultural	Substantial rewrites throughout based on discussions with DAHP and Affected Tribes.
	Reduction of significance determination for precontact archaeological isolates.
Visual	Removal of Vis-4 mitigation requiring color-treated solar collectors and support structures.
Transportation	Addition of TR-6 & TR-7 mitigation to ensure continued mitigation coordination with WSDOT and EFSEC

Significant Adverse Environmental Impacts

- A “significant” impact, per SEPA and this EIS, is one that would:
 - Have a reasonable likelihood of **more than a moderate adverse impact** on environmental quality, or;
 - Have a **severe adverse impact** on environmental quality, even if its chance of occurrence is not great. (WAC 197-11-794)
- Significance is determined after the assumed application of all relevant Applicant commitments and EFSEC-staff recommended mitigation.
- Three SEPA environmental resources with identified significant impacts: **Visual Aesthetics, Recreation, and Historic and Cultural.**



Significant Unavoidable Adverse Impacts – Visual Aspect (Operation Phase)

- Recommended Visual Mitigation
 - Relocate turbines to avoid siting within the foreground distance zone (0 to 0.5 miles) of non-participating residences.
 - Avoid advertising or cell antennas on turbines
 - Maintain clean nacelles and towers to avoid any dirt accumulation or staining.
- Post-mitigation and Applicant commitments, the turbines would still dominate views from many Key Observation Points and the landscape would appear strongly altered.





Significant Unavoidable Adverse Impacts – Paragliding/Hang Gliding Safety (Operation Phase)

- Recommended Recreation Mitigation
 - Coordinate with recreation groups to develop and maintain an adaptive safety management plan to continue access while keeping recreation enthusiasts safe.
 - Perform outreach to recreating groups to share the safety management plan.
 - Provide opportunities to identify or improve similar recreation use areas to offset any recreation access lost from the Project.
- Post-mitigation and Applicant commitments, the turbines and solar arrays would still limit recreation availability for paragliders and hang gliders throughout the Project area and present a safety risk for those activities.

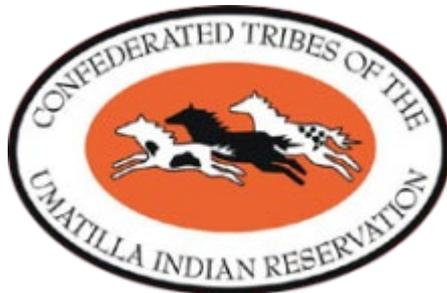




Significant Unavoidable Adverse Impacts – Traditional Cultural Properties (Construction, Operation, and Decommissioning Phases)

• Recommended Cultural Mitigation

- Ongoing engagement with affected Tribes to identify appropriate mitigation measures that could include: the demarcation of culturally sensitive areas to be avoided, implementation of environmental enhancement measures (i.e. vegetative screening), protection of certain aspects of the environmental setting as identified by affected Tribes, or other methods deemed effective by affected Tribes.
- Post-mitigation and Applicant commitments, all project components are anticipated to still result in significant impacts to TCPs as a result of ground disturbance, physical alteration, loss of access, and visual interference.



Questions?

