

Horse Heaven Wind Farm - FEIS
Data Request No. 7
March 22, 2023

Data Request 7 Item ID	ASC Section	Item	Question or Information request	Applicant Response
FEIS-Air-1	2.17.3, 2.23.2.7, 3.3.2.2, 5.1	Concrete Batch Plant, Diesel Generator Emissions and Air Quality Impacts	<p>Several sections of the Applicant Site Certification (ASC) continue to reference the possible use of a concrete batch plant and standby diesel generators to support startup. The concrete batch plant would also need a source of electrical power which is not explained but may include diesel generator(s). The emissions and air quality impacts associated with this equipment have not been characterized by the Applicant.</p> <p>EFSEC can only include a concrete batch plant (including possible diesel electric generator(s)) and/or diesel generators to facilitate startup/commissioning in the Site Certificate if the air quality impacts are evaluated and addressed in the EIS. Alternatively, the Applicant can proceed with Site Certificate review that does not include these project components but would require an amendment to the EFSEC Site Certificate if the Applicant wishes to incorporate them into the Project at a later date. If the Applicant chooses the latter path, please so indicate and provide written acknowledgement that an amendment to the ASC and the EIS will be required to include these sources in the Site Certificate at a later date.</p> <p>If the Applicant wishes for the Site Certificate to include these components, please provide the following additional information so that air quality impacts can be properly evaluated in the EIS:</p> <ul style="list-style-type: none"> - Complete inventory of equipment, including expected emissions associated with the concrete batch plant including a description of air pollution controls or other mitigation measures to reduce particulate matter emissions. Provide supporting calculations including all underlying assumptions including maximum material throughput, emission factors, hours per day and per year. - Indicate the expected location(s) of operation of the batch plant - If the batch plant will include the use of a diesel generator, provide operating schedule, expected emissions including supporting calculations, and description of air pollution controls, if any. - If diesel generators will be used for startup support, specify the location of use and provide operating schedule, expected emissions including supporting calculations, and description of air pollution control for each engine, if any. - For the above sources, provide a dispersion modeling analysis of expected maximum air quality impacts associated with the operation of these sources. Use dispersion modeling to compare the expected impacts of construction sources with ambient air quality standards (including consideration of background air quality). Dispersion modeling (with AEMOD or other appropriate model) should include consideration for all sources that will be operating concurrently during the construction period for each applicable averaging time. Provide all supporting computer input and output files for dispersion modeling including: <ul style="list-style-type: none"> - Source UTM coordinates, source configuration, stack or release emissions parameters, fence line receptors, identified sensitive receptors, receptor grid spacing, meteorological data, and model options selected. EFSEC recommends that the Applicant submit a modeling protocol for approval prior to performance of dispersion modeling. 	

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FEIS-Water-1	2.17.3, 2.23.2.7, 3.3.2.2, 5.1	Concrete Batch Plant	<p>Several sections of the ASC refer to the possible use of a concrete batch plant. The Applicant indicated they wish to retain the possibility of using a single plant in multiple locations through the construction period. The concrete batch plant would require a source of water and mitigation measures to prevent sediment-laden water from interacting with surface water. This information on the impacts of a concrete batch plant on water resources is not characterized by the Applicant in the ASC. Details would be required to evaluate the impacts in the EIS. Alternatively, the Applicant can proceed with Site Certificate review that does not include these project components but would require an amendment to the EFSEC Site Certificate if the Applicant wishes to incorporate them into the Project at a later date. If the Applicant chooses the latter path, please so indicate and provide written acknowledgement that an amendment to the ASC and the EIS will be required to include these sources in the Site Certificate at a later date.</p> <p>If the Applicant wishes for the Site Certificate to include the concrete batch plant, please provide the following additional information so that water impacts can be properly evaluated in the EIS:</p> <ul style="list-style-type: none"> - Provide the location(s) of the proposed concrete batch plant. - Describe sources of runoff and method of collection and disposal of water. - Provide proposed measures to reduce or control surface water runoff and changes to drainage patterns from the concrete batch plant. - How much water would the concrete batch plant require for the duration of construction? 	
FEIS-Vegetation-1	Appendix L, pg 20	<p>Option 1 Conservation Easement</p> <p>The Applicant states that, "Option 1 may include a conservation easement on habitat that will provide functions and values for native vegetation and wildlife with an emphasis on mitigating those functions and values being impacted by the Project. The actual mitigation acres may be adjusted to account for these functions and values."</p>	<p>The Applicant did not provide a functional assessment of the habitats prior to disturbance. Please provide what the functional assessment would consist of and whether the disturbed areas would be assessed following the same criteria prior to disturbance so that the offsets can be compared to the disturbed areas in terms of function.</p>	
FEIS-Vegetation-2	Appendix L, pg 20	<p>Option 1 Conservation Easement</p> <p>The Applicant states "Sufficient acreage of like-kind habitat may be available within the Project Lease Boundary to mitigate for Project impacts and achieve no loss of habitat functions and values."</p>	<p>Acreage within the Project Lease Boundary is currently under Lease by the Applicant. Provide the threats to development besides from the Project. In addition, how does avoiding shrub-steppe in some portions of the Lease Boundary but impacting shrub-seppe (or other habitat) in other portions of the Lease Boundary result in no net loss of habitat functions and values? This is an example of avoidance mitigation not offsetting. If there is no on-site restoration and you are merely avoiding some of the shrub-steppe, there is still a net loss, and no offsetting has been achieved.</p> <p>Same question for Option 1 – What is the justification for the fee to not include the cost to conduct restoration efforts including monitoring? Just putting land into an easement will still result in net loss of habitat function and value from the areas impacted.</p>	
FEIS-Vegetation-3	Appendix L, pg 21 and Figure 3	Proposed Easement Area to Fulfill Mitigation Option 1	<p>The proposed easement area is located in an area that existing conditions are dominated by shrub-steppe. The threat to development was wind turbines from the Project; however, the Applicant avoided turbines in this segment. This is an example of avoidance. How will functions and values of the shrub-steppe on this site be improved such that it compensates the loss of 779 acres of habitat from the Project (based on Table 5 in Appendix L)? How will habitat function and value be measured? If no restoration efforts take place, please explain how there is no net loss.</p>	

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			Based on the discussions with WDFW, was this area agreed on as an easement for offsetting?	
FEIS-Habitat-1	Appendix L, pg 17-18	Set back from active nests. Text reads "Around all active nests, WDFW recommends avoiding human access and ground-based activities within 820 feet of the nest between March 1st and May 30th, and preventing prolonged activities lasting greater than 0.5 hour within 3,280 feet of a nest between March 1 and August 15 (WDFW 2005). The Project would implement those avoidance and minimization criteria as necessary, depending on nest location and status and distance from Project infrastructure."	The text suggests that the Applicant will maintain infrastructure 3,280 feet from a FEHA nest; however, the preceding section says that the active nest is located 2,795 feet from Turbine 116 and the closest nest is 1,115 feet from Project infrastructure.	
FEIS-Habitat-2	Appendix L, pg 17-18	Setbacks from nests	The text in this commitment is consistent with WDFW 2005 but does not consider information on FEHA range provided by WDFW in recent meetings with the Applicant. How has the Applicant addressed the potential loss of FEHA foraging habitat?	
FEIS-Habitat-3	Appendix L, pg 20	During construction, WDFW-recommended seasonal buffers (per Larsen et al. 2004) for ferruginous hawk nests would be observed to avoid disturbing nesting ferruginous hawks.	Is this measure consistent with the commitment above to apply guidance from WDFW 2005?	
FEIS-Habitat-4	Appendix L, PDF pg 20	Consistent with recommended mitigation measure Spec-4 in the Draft Environmental Impact Statement (EFSEC 2022), during construction, WDFW-recommended seasonal buffers (per Larsen et al. 2004) for burrowing owl nests would be observed to avoid disturbing nesting burrowing owls, if present. If impacts to potentially suitable habitat cannot be avoided during final design, the Applicant will consult with WDFW regarding the need for burrowing owl surveys prior to construction, including surveys to determine habitat suitability for burrowing owls, and surveys for breeding owls if suitable habitat is present.	What would be considered suitable habitat? Burrowing owls can use a variety of anthropogenic features for nesting. Would active nests be protected through operation?	
FEIS-Habitat-5	Appendix L, PDF pg 21	The Project will avoid the application of pesticide and rodenticides during the construction and operation.	In the preceding section, the Applicant said they would try to avoid the use of pesticides and rodenticides. Can the Applicant commit to not using these?	
FEIS-Habitat-6	Appendix L, PDF pg 24	Mitigation siting criteria is intended to offset any loss of function	How was the extent of loss of function calculated?	
FEIS-Habitat-7	Appendix L, PDF pg 24	Removal of foraging habitat within core use areas (~3.2 kilometers/ ~2 miles) and home ranges (~10 kilometers/~6.2 miles) of occupied ferruginous hawk nests will be addressed by completing mitigation similarly within a core use area or home range on an occupied nest.	Is this in addition to the mitigation provided in Table 4? Provide some details on how the criteria established for ferruginous hawk would be measured/established prior to selecting a mitigation site (e.g. additional field surveys, available background information).	

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FEIS-Habitat-8	Appendix L, PDF pg 24	Mitigation Siting Criteria 3 - Landscape Habitat Connectivity	The criteria listed make sense; however, will there be any weighting to a particular criterion (e.g. will locating mitigation within an area mapped by WHCWG and ALI be weighted higher than the other two criteria)?	
FEIS-Habitat-9	Appendix L, PDF pg 25	Option 1 - The actual mitigation acres may be adjusted to account for these functions and values. For example, fewer acres of mitigation land may be required if that land is higher functioning (e.g., provides higher quality habitat, supports WDFW priority species) relative to the Project site or provides a beneficial expansion of high-value habitat (e.g., adjacent to existing or assumed future protected land).	How would this be calculated and would EFSEC be provided the supporting data and rationale for approval?	
FEIS-Habitat-10	Appendix L, PDF pg 25	The mitigation areas may be onsite (i.e., within the Project Lease Boundary). For example, areas of sagebrush shrub-steppe and grassland initially proposed for Turbine locations have been avoided in the current layout, including areas of sagebrush shrub-steppe habitat subtype that were avoided due to their designation as WDFW PHS locations and critical areas (e.g., see Figures 3.4-1 and 3.4-4 of the EFSEC ASC).	<p>Avoiding areas is not the same as mitigation. This measure has already been considered under "avoidance".</p> <p>The function of sagebrush shrub-steppe and grassland in the Lease Boundary that will not be directly impacted may be reduced due to disturbance. Provide an explanation of how indirect habitat loss would be considered if mitigation areas are onsite. For example, would the areas be required to be a certain distance from Project components?</p> <p>One of the criteria established in Appendix L is that the area selected be at risk of development. Are there risks of development in these areas beyond the Project?</p>	
FEIS-Habitat-11	Appendix L, PDF pg 26	Proposed easement	Has WDFW been consulted on the location of this easement?	
FEIS-Habitat-12	Appendix L, PDF pg 28	Table 5	Would agricultural lands be restored to shrub-steppe?	
FEIS-Habitat-13	Appendix L, PDF pg 28	Mitigation Siting Criteria 2 - Ferruginous Hawk Nesting and Foraging Habitat	Criteria 2 outlined on pdf pg 24 requires that the area have had supported an active nest in the last 3 years. Pg 28 indicates that the nest in the easement was last active in 1986. Confirm how the area supports Criteria 2.	
FEIS-Habitat-14	Appendix L, PDF pg 29	Ferruginous hawk platforms	Was this mitigation option discussed with WDFW? Are nesting locations a limiting factor for ferruginous hawk in the region? From the Applicant's nest data, there appear to be several locations available for hawks to nest that are currently unoccupied.	
FEIS-Habitat-15	Appendix L, PDF pg 29	Ferruginous hawk platforms	The Project is predicted to impact ferruginous hawk but reducing foraging habitat and increasing the risk of mortality through collisions with turbines. How does the voluntary mitigation measure in Section 7.5.1 address these project-related effects?	
FEIS-Habitat-16	Appendix L, PDF pg 29	Ferruginous hawk platforms	How does the construction of nesting platforms address the limiting conditions identified for ferruginous hawk (Hayes and Watson 2021): habitat loss, habitat fragmentation, degradation of habitat (foraging), reduction in prey base, collisions with wind power, and climate change?	
FEIS-Habitat-17	Appendix L, PDF pg 29	Ferruginous hawk platforms	According to Hayes and Watson (2021) WDFW has installed at least 9 platforms in Benton County and 29 platforms overall in Washington, two of which have been used. How would the Applicant adapt their management plan if the platforms are not occupied by ferruginous hawk or become used by species, such as corvids, that can compete with ferruginous hawks?	

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FEIS-Habitat-18	Appendix L, PDF pg 29	Fee simple contribution	Was WDFW or EFSEC consulted on this mitigation? How is this amount calculated in the mitigation measures options? Does the Friends of Badger Mountain have to show proof of how the funds were spent?	
FEIS-Cultural-1		Additional documentation	<p>Provide the following for additional review:</p> <ul style="list-style-type: none"> • Potential locations of on-site concrete batch plant • Cultural Resource Monitoring Plan (if available) • Inadvertent Discovery Plan (if available) • Redacted Traditional Use Study by the CTUIR (if available) • DAHP excavation permits (if available) • Curation agreements (if available) • References: <ul style="list-style-type: none"> ○ Litzkow, Jamie. 2020c. <i>Cultural Resources Survey on Bureau of Land Management Land in the Horse Heaven Hills Native Plant Interpretation Project, Benton County, Washington</i>. Bureau of Land Management Spokane District. 	
FEIS-Cultural-2		Additional communication	<p>Provide communications with Tribes or agencies, particularly post-application correspondence. The following would be especially helpful:</p> <ul style="list-style-type: none"> • 7/7/21 letter from Dave Kobus (Scout) to Casey Barney (Yakama Nation), confirming request for formal consultation through government-to-government process overseen by EFSEC • Forwarded letter to EFSEC on 10/22/21: Adding Insult to Injury - Climate Commitment Act Negotiations Final (Snoqualmie Indian Tribe and NCAI) • Forwarded letter to EFSEC on 10/22/21: DAHP-SHPO_Response to Randazzzo Memo_10-22-21 • SCOUT letter to Governor's office, EFSEC, and DAHP • Materials sent to Yakama Nation from SCOUT on 3/09/22 and 5/31/22 • 11/4/22 letter response to Yakama Nation from Darin Huseby • 11/8/22 letter to Yakama Nation from Michael Rucher 	
FEIS-Visual-1	4.2.3	New Key Observation Points (KOPs) and Simulations	<p>Based on public comments received, including those from Benton City and the Yakama Nation, additional KOPs and simulations have been requested. Specifically, an additional KOP/simulation has been requested to represent unobstructed views from Benton City, closer views from Interstate 82, and a viewpoint across the Wallula Gap. Potential locations for these new KOPs have been provided but suggest reviewing these locations with Benton City, Benton County, and the Yakama Nation to confirm they address their and the public's concerns.</p> <p>Potential additional Benton City KOP location (also would represent views from the adjacent Horse Heaven Hills Recreation Area): 46°14'35.11"N, 119°28'36.91"W. Review viewshed analysis to identify potential new KOPs further into Benton City where views would be more unobstructed.</p> <p>Potential additional I-82 KOP location: 46°4'33.03"N, 119°13'18.71"W</p> <p>Potential Wallula Gap KOP location: 46°2'38.46"N, 118°56'21.11"W</p>	
FEIS-Visual-2	Appendix G: Shadow Flicker Analysis Memo	Shadow Flicker, historical sunshine availability	<p>The WindPro shadow flicker analysis was partially based on historic sunshine availability for Spokane, Washington. While Spokane has a higher number of sunshine days than most other readily available cities in WA (roughly 190 days based on sources below and from the NOAA data referenced in Appendix G), sunshine at the Project site is significantly higher (between 220 and 240 days of sunshine, sources below). If a more representative data set is available for use, the WindPro shadow flicker analysis should be re-run using a more representative data set.</p>	

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			https://ingalls.weathertogether.net/2018/04/25/does-the-tri-cities-really-get-300-days-of-sunshine-a-year/ https://climate.washington.edu/cloudcover/	
FEIS-Visual-3	4.10.2.2, Shadow Flicker	Turbine (Option 1 and Option 2) layout and receptor locations in areas of maximum impact	Based on public comments, wind turbine and receptor locations were not clear to the public, therefore zoomed in figures to show the closest turbine(s) and shadow flicker impacts at Receptor ID locations of maximum impact have been requested. These areas should include the Receptor ID locations identified in Tables 4.10-10 and 4.10-12. The figures need to be zoomed in enough so that IDs can be labeled and identified clearly on the figure(s).	
FEIS-Noise-1	4.11.2.2	Turbine and noise receptor locations in areas of maximum impact.	Based on public comments, wind turbine and NSR locations were not clear to the public, therefore zoomed in figures to show the closest turbine(s) and noise impacts at the NSR and boundary locations of maximum impact have been requested. These areas should include those NSR locations identified in Tables 4.11-8 and 4.11-9. The figures need to be zoomed in enough so that NSR locations can be labeled and identified clearly on the figure(s).	
FEIS-Recreation-1	N/A	Downwind effects on recreation	What are the downwind effects (e.g., increase in turbulence, variability, etc.) on microclimates and how will these affect paragliding?	
FEIS-Transpo-1	2.25 -- 4.3.2.2	<p>“For socioeconomic and transportation impact analyses, the construction schedule, including phasing of specific elements of the Project, can alter the details of the analysis”... “The example provided in Table 2.15-1 and Section 2.15 of this ASC is for illustrative purposes only and does not represent all possible phasing approaches that may be considered.”</p> <p>--</p> <p>Updated ASC: “If Project construction were not phased and the Project were constructed in a consolidated schedule, the LOS conditions are expected to be generally the same as those described in Table 4.3-7 because the access roads for the two Phases are different”</p> <p>“Note that Locust Grove Road is planned for use during both Phases. If Project construction occurred on a consolidated schedule instead of a phased schedule, there would be minimal additional use of Locust Grove Road above that forecasted in Table 4.3-7.”</p>	<p>The example of the likely phasing scenario does not represent the worst-case scenario for traffic. Construction of two solar areas, instead of the three proposed, are considered in the phased approach. The ASC did not analyze State Route (SR) 14, or the SR 22 and I-82 Exit 82 interchange in the scope of the affected transportation system.</p> <p>The traffic analysis included in the ASC did not utilize actual traffic counts at affected intersections. Provide updated existing and forecasted LOS of the haul route using actual traffic counts.</p> <p>To ensure that transportation circulation, safety due to increased traffic, and LOS assumptions are accurate, provide not to exceed traffic volume estimates. Provide copies of all counts collected from online programs such as WSDOT GIS Viewer.</p> <p><i>-alternatively-</i></p> <p>Provide a statement that traffic estimates provided represent the worst-case scenario and will not exceed what was provided in the ASC.</p> <p>Provide a statement that SR 14 or the SR 22 and I-82 Exit 82 interchange will not be used by construction-related traffic.</p>	
FEIS-Transpo-2	2.22.6 --- App V	“All wind energy components, including tower sections, the nacelle and turbines, and blades would be shipped to either a western U.S. port or overland on the Interstate highway system. The U.S. ports are either the Port of Longview or Port of Vancouver, from which components	<p>WSDOT identifies any proposal where project-generated traffic would degrade a highway’s LOS to below the established LOS threshold as having a probable significant adverse impact to the state highway system.</p> <p>To ensure that transportation circulation, safety, and that LOS will not degrade beyond acceptable levels, provide a comprehensive traffic impact analysis (TIA) with an updated</p>	

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		<p>would be transported by specialized trucks along Interstate, state, county, and private roadways”.</p> <p>---</p> <p>“The customer’s provided a map with preliminary site plans and access points but was later reported that it was outdated. The proposed project was reviewed based on the information provided at the time of the review... Site access from known source locations was not conducted at this time”.</p> <p>“This report does not represent a complete list of all necessary improvements”.</p>	<p>transport study, performed by a licensed traffic engineer, including a LOS analysis, from all known source locations, including both the Port of Longview and Port of Vancouver to the Project.</p> <p>The minimum contents of a TIA report are listed in WSDOT’s Traffic Analysis Procedures Manual. To establish the appropriate scope and boundary limits of the TIA, consultation between WSDOT and those preparing the TIA is encouraged before beginning the study.</p> <p>To provide reviewers the ability to discern between rural and urban developed areas, reference federally approved urban boundaries.</p> <p>Provide copies of all counts collected and used in the analysis from online programs such as WSDOT GIS Map Viewer.</p> <p>Provide LOS calculation reports (PDFs) or the HCS7 files for verification of intersection lane geometry, turning movement volumes, and delay experienced by vehicles at intersections and at freeway segments.</p> <p>Ensure that all school zones and rail crossings that haul routes intersect are identified.</p> <p>Provide a review of intersection crash history for intersections associated with the haul route. Use five full calendar years (January 1st to December 31st) of historic crash data for safety analyses where available. Document the study period, reasoning behind the selection and any assumptions.</p> <p>Provide a draft safety management plan with an outline identifying the minimum best management practices and safety practices, including, but not limited to, contractor and employee training.</p> <p><i>-additionally-</i></p> <p>Provide a statement that no ports other than Port of Longview or Port of Vancouver will be used during the construction, operation, or decommissioning of the Project.</p> <p><i>-alternatively-</i></p> <p>If inland Ports are expected to be used during the construction, operation, or decommissioning of the Project, provide LOS analysis for waterways and any haul routes from inland ports to the Project.</p>	
<p>FEIS-Transpo-3</p>	<p>2.22.6 -- 4.2.3.3</p>	<p>“Rail transportation could be utilized as there are Burlington Northern-Santa Fe Railway facilities south of the Project in Washington state.”</p> <p>Vs.</p>	<p>Provide a LOS analysis for all rail transportation expected to be used. Ensure LOS analysis from rail yard to Project is provided in LOS analysis.</p> <p><i>-alternatively-</i></p> <p>Provide a statement that rail transportation will not be used during the construction of the Project and recognize that a supplemental analysis will be required if rail is used.</p>	

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		<p>“Although there is existing waterborne, rail, and air traffic within the area, these methods of transportation are not being proposed for use by the Project within the analysis area. Because the Project would not use waterborne or rail transportation during operations, and no Project activities would interfere with existing waterborne or rail transportation, no impact would occur within the analysis area”.</p>		
FEIS-Transpo-4	N/A	Use of ATVs and UTVs	Provide clarification as to whether the Applicant will use ATVs or UTVs during the construction, operation, or decommissioning of the Project.	