



## Horse Heaven Wind Farm

# Potential Mitigation Changes - Applicant

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# W-1: Least Risk Fish Windows

Original	Changes Based on Applicant Discussions
<p>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).</p>	<p>Project construction and decommissioning within ephemeral and intermittent streams that <b>have active water flow</b> 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). <b>Ephemeral and intermittent streams would not be subject to least risk window restrictions while those streams are dry.</b><sup>1</sup></p> <p><sup>1</sup> Following discussion with the Applicant and consultation with WDFW, it was determined that these fish window restrictions were only intended to apply to in-water work in streams with flowing water.</p>



# Veg-9: Maintenance of Solar Array Fence

Original	Changes Based on Applicant Discussions
<p>During Project operation, the solar array fence would be maintained, including removal of vegetation material that may become entwined in the fence.</p>	<p>During Project operation, the solar array fence would be maintained, including removal of vegetation material that may become entwined in the fence.</p> <p>Monthly fence surveys would be conducted during periods where the wildfire danger rating, as determined by DNR, is assessed as “low.” When the wildfire danger rating is assessed as “moderate” or higher, weekly surveys would be required.<sup>1</sup></p> <p><sup>1</sup> Establishes a more specific protocol and periodicity for fence clearing.</p>



# Spec-12: Townsend's Ground Squirrel

Original	Changes Based on Applicant Discussions
<p>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...</p>	<p>The Applicant would conduct surveys for Townsend's ground squirrel colonies within the Lease Boundary in areas of the Project disturbance footprint <del>(including ZOI)</del><sup>1</sup> to inform final design...</p> <p><sup>1</sup> Surveys within ZOI (0.5-mile buffer around Lease Boundary) would require Applicant to have access to areas outside of site control. Mitigation measure should remain effective with survey range limited to the Lease Boundary.</p>



# Vis-3: Turbine Cleaning

Original	Changes Based on Applicant Discussions
<p>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.</p>	<p>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. <b>When a sufficient number of nacelles and/or towers are noticeably not clean, the deployment of a cleaning crew would be required.</b><sup>1</sup></p> <p><sup>1</sup> Applicant has stated that the deployment of a cleaning crew is seldom performed for individual towers one at a time. This modification allows for some consolidation of cleaning efforts while also providing EFSEC leeway in determining whether or not a tower or nacelle is “clean.”</p>



# Vis-5: Opaque Fencing

## Original

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.

## Changes Based on Applicant Discussions

Install opaque fencing to directly screen views of the solar arrays where sited within 0.5 miles of **KOPs linear viewpoints** (including the alignment of I-82 ~~and other linear KOPs~~<sup>1</sup>) or residences. To allow the proposed fencing to blend into the setting, color-treat the fencing to minimize color contrast with the existing landscape.

<sup>1</sup> Clarifies that this measure applies to all linear and residential viewpoints, not just those specifically identified as KOPs within the Visual Simulations.



# SF-1: Shadow Flicker Minimization

Original	Changes Based on Applicant Discussions
<p>The Applicant would attempt to avoid, minimize, and mitigate shadow flicker at non-participating residences. Shadow flicker can usually be addressed by planting trees, shading windows, operational programming, or other mitigation measures. As a last resort, the control system of the wind turbine could be programmed to stop the blades during the brief periods when conditions result in a perceptible shadow flicker.</p>	<p>The Applicant would attempt to avoid, minimize, and mitigate shadow flicker at non-participating residences. Shadow flicker can usually be addressed by planting trees, shading windows, operational programming, or other mitigation measures. As a last resort, the control system of the wind turbine could be programmed to <del>stop the blades</del> <b>cease operation</b> during the brief periods when conditions result in a perceptible shadow flicker. <b>Conditions that would result in perceptible shadow flicker at non-participating residences are expected to be infrequent, only occurring during limited periods with the correct angle of the sun, wind speeds, and unobstructed, clear sky conditions.</b><sup>1</sup></p> <p><sup>1</sup> Stopping/locking the turbine blades for extended periods or during high winds can damage the turbines. Ceasing operation of the turbine motors will allow the blades to spin freely in the wind, but at a lower rate than if the motor was engaged, reducing shadow flicker.</p>



# R-1: Recreational Activity Coordination

Original	Changes Based on Applicant Discussions
<p>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).</p>	<p>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). <b>The Applicant would identify measures for EFSEC's approval prior to the start of construction. EFSEC would be responsible for determining if the Applicant has sufficiently coordinated with all relevant entities the promote recreational activities within the vicinity of the Lease Boundary.</b><sup>1</sup></p> <p><sup>1</sup> Applicant was concerned that this measure was unbounded. Proposed change clarifies that there will be a reasonable limit to Applicant actions necessary to accomplish this mitigation.</p>





# R-3: Recreation Safety Management Plan

Original	Changes Based on Applicant Discussions
<p>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, prior to construction and approved by EFSEC, 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, Project-created no fly zones for recreation activities, 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.</p>	<p>The Certificate Holder would <b>attempt to</b> 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, prior to construction and approved by EFSEC, to continue access to recreation activities in the <b>Project area Lease Boundary</b> while keeping recreation enthusiasts safe. This plan should identify potential hazards within the <b>Project Area-Lease Boundary</b> (e.g., construction on or near common bicycle paths, Project-created no fly zones for recreation activities, etc.) and provide opportunities to identify or improve other similar recreation use areas to offset <b>(see R-1)</b> 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. <b>EFSEC would be responsible for determining if the Applicant has sufficiently coordinated with all entities that promote recreational activities within the Lease Boundary.</b><sup>1</sup></p> <p><sup>1</sup> Applicant was concerned that this measure was unbounded. Proposed change clarifies that there will be a reasonable limit to Applicant actions necessary to accomplish this mitigation.</p>