

ALBERTA ENVIRONMENT AND PARKS (AEP) WIND ENERGY EXTERNAL CHECKLIST B

The Alberta Utilities Commission (AUC) Rule 007 (<http://www.auc.ab.ca/acts-regulations-and-auc-rules/rules/Pages/Rule007.aspx>) outlines the operating conditions and application requirements for wind energy developments. As part of Rule 007 there is a requirement for the company to review the application with Alberta Environment and Parks to ensure that impacts on wildlife have been considered. This would be inclusive of the proposed project siting, mitigation and construction/operation plan of wind energy projects to minimize the effects on wildlife and wildlife habitat. In order to ensure alignment with Alberta Environment and Parks requirements, *Wildlife Directives for Alberta Wind Energy Projects* (herein referred to as the Directives) have been developed for applicants to use. It is the responsibility of the applicant to ensure that all necessary wildlife information is included as part of the AUC application in alignment with the Directives, as outlined in this checklist. This does not preclude the opportunity for the proponent to contact the responsible AEP-Wildlife Biologist.

This checklist is applicable to the Buildable Area AUC application as described within AUC Rule 007. For all other wind applications please refer to AEP Wind Energy External Checklist A.

For the Buildable Area applications, two AEP referral letters are required, one in each of the two phases of a Buildable Area application. This checklist outlines the information that is required in a complete application package in relation to AEP-Wildlife requirements at each phase of the Buildable Area Application.

AEP-Wildlife will not review project documents unless all the documentation outlined in this checklist is submitted. For more information of AEP-Wildlife expectations of industry please refer to the *Wildlife Directives for Alberta Wind Energy Projects*.

PHASE 1 DOCUMENTS REQUIRED FOR AEP REVIEW

- Results of the Stage 1 Avoidance of Areas of Wildlife Concerns
- Wildlife Survey Report: A comprehensive report detailing wildlife survey methods, results and interpretation of the results and mortality risk
- Map illustrating the constrained and unconstrained areas as described in AUC Rule 007 BA2. This should outline required wildlife setbacks.

PHASE 1 AEP WIND ENERGY PROCESS CHECKS

Completed	Checklist Requirement and Description																				
<p>Yes No</p>	<p>1. The wind project has been sited to avoid:</p> <ul style="list-style-type: none"> a. Native grasslands b. Old growth forest stands c. Named waterbodies d. Valley breaks e. Valleys of large permanent water courses <p>If the project is sited within one or more of these zones please confirm that all required standard mitigation procedures are adhered to, as outlined in the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the AEP–Wildlife Biologist.</p>																				
<p>Yes No</p>	<p>2. The wind project has been appropriately sited to avoid the following Wildlife Sensitivity Layers:</p> <ul style="list-style-type: none"> a. Greater Sage Grouse Range b. Trumpeter Swan Waterbodies and Watercourses c. Caribou Zones d. Mountain Sheep and Goat Zones e. Piping Plover Waterbodies <p>If the project is sited within one or more of these zones please confirm that all required standard mitigation procedures are adhered to, as outlined in the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the AEP–Wildlife Biologist.</p>																				
<p>Yes No</p>	<p>3. The wind project has been sited to avoid:</p> <ul style="list-style-type: none"> a. Key Wildlife and Biodiversity Zones b. Grizzly Bear Zone c. The Special Access Zones <p>If the project is sited within one or more of these zones please confirm that all required standard mitigation procedures are adhered to, as outlined in the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the AEP–Wildlife Biologist.</p>																				
<p>Yes No</p>	<p>4. Completed the following predevelopment wildlife surveys as per <i>Standard 100.2.2 of the Wildlife Directive for Alberta Wind Energy Projects</i>:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">Yes</td> <td style="width: 10%;">No</td> <td style="width: 10%;">N/A</td> <td>a. spring bird migration surveys</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>b. fall bird migration surveys</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>c. raptor nest surveys</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>d. breeding bird surveys</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>e. acoustic bat monitoring surveys</td> </tr> </table> <p>Data must be considered current as per <i>Standard 100.2.4</i>. Surveys must follow the survey protocols outlined by AEP and described within the Directives.</p>	Yes	No	N/A	a. spring bird migration surveys	Yes	No	N/A	b. fall bird migration surveys	Yes	No	N/A	c. raptor nest surveys	Yes	No	N/A	d. breeding bird surveys	Yes	No	N/A	e. acoustic bat monitoring surveys
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Yes	No	<p>5. Completed the required predevelopment site specific surveys as per Standard 100.2.2 of the Wildlife Directive for Alberta Wind Energy Projects.</p> <table border="0"> <tr> <td style="padding-right: 10px;">Yes</td> <td style="padding-right: 10px;">No</td> <td style="padding-right: 10px;">N/A</td> <td>a. Burrowing Owl Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>b. Eastern Short-horned Lizard Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>c. Endangered and Threatened Plants Ranges</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>d. Ord's Kangaroo Rat Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>e. Sensitive Snake Species Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>f. Sharp-tailed Grouse Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>g. Swift Fox Range</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>h. Colonial Nesting Birds (within 1000 m of FWMIS point data)</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> <td>i. Grizzly Bear Core and Support Zones</td> </tr> </table> <p>Data must be considered current as per <i>Standards 100.2.3.</i> and <i>100.2.4.</i> Surveys must follow the survey protocols outlined by AEP and described within the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the AEP-Wildlife.</p>	Yes	No	N/A	a. Burrowing Owl Range	Yes	No	N/A	b. Eastern Short-horned Lizard Range	Yes	No	N/A	c. Endangered and Threatened Plants Ranges	Yes	No	N/A	d. Ord's Kangaroo Rat Range	Yes	No	N/A	e. Sensitive Snake Species Range	Yes	No	N/A	f. Sharp-tailed Grouse Range	Yes	No	N/A	g. Swift Fox Range	Yes	No	N/A	h. Colonial Nesting Birds (within 1000 m of FWMIS point data)	Yes	No	N/A	i. Grizzly Bear Core and Support Zones
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Yes	No	<p>6. A comprehensive report detailing methods, results and interpretation of the results and mortality risk must be included as part of the AUC application and submission for review by AEP-Wildlife as detailed in <i>Standard 100.2.12.</i></p>																																				
Yes	No	<p>7. All wetlands and waterbody setbacks are adhered to. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the local AEP-Wildlife Biologist.</p>																																				

PHASE 2 DOCUMENTS REQUIRED FOR AEP REVIEW

- Updated Wildlife Survey Report from Phase 1
- Documentation of avoidance and mitigation strategies for the life of the project (construction through to decommissioning)
- UTM locations of turbines and map of project infrastructure.
- Post Construction Monitoring Plan
- Post Construction Mitigation Plan

PHASE 2 AEP WIND ENERGY PROCESS CHECKS

Completed	Checklist Requirement and Description
Yes No	<p>1. Completed the required predevelopment site specific surveys as per <i>Standard 100.2.2</i> of the <i>Wildlife Directive for Alberta Wind Energy Projects</i>.</p> <p>Yes No N/A a. Burrowing Owl Range Yes No N/A b. Eastern Short-horned Lizard Range Yes No N/A c. Endangered and Threatened Plants Ranges Yes No N/A d. Ord’s Kangaroo Rat Range Yes No N/A e. Sensitive Snake Species Range Yes No N/A f. Sharp-tailed Grouse Range Yes No N/A g. Swift Fox Range Yes No N/A h. Colonial Nesting Birds (within 1000 m of FWMIS point data) Yes No N/A i. Grizzly Bear Core and Support Zones</p> <p>Data must be considered current as per <i>Standards 100.2.3.</i> and <i>100.2.4.</i> Surveys must follow the survey protocols outlined by AEP and described within the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the AEP-Wildlife.</p>
Yes No	<p>2. Based on the results of the pre-development wildlife surveys (<i>Standard 100.2.2</i>) and updated surveys (<i>Standard 100.2.4</i>), all mitigation identified in Stage 2 and Stage 3 have been adhered to. This includes all setbacks, and timing restrictions. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the local AEP–Wildlife Biologist.</p>
Yes No	<p>3. Construction and Operation plans have been developed and will be submitted. The plans must adhere to all applicable wildlife construction and operating standards, outlined in the Directives. A map of the proposed project infrastructure is to be included. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the local AEP–Wildlife Biologist.</p>
Yes No	<p>4. Post Construction Monitoring Plan (PCMP) is completed. The PCMP must meet the criteria outlined in <i>Standard 100.4.4</i> of the Directives. If deviations are proposed please provide justification and proposed alternative mitigation strategies for review by the local AEP–Wildlife Biologist.</p>
Yes No	<p>5. The Post Construction Mitigation Plan is completed and outlines mitigation that will be implemented if post construction monitoring results are determined to exceed acceptable limits. If alternative mitigation strategies are proposed from the <i>Standard 100.4.11</i>, please provide justification and proposed alternative mitigation strategies for review by the local AEP–Wildlife Biologist.</p>

FINAL STATEMENT OF COMPLIANCE

Upon completion of the checklist, the applicant or applicant’s representative must fill out the following and submit as part of their application.

Once all the required documents are received the submission will be reviewed by the local area AEP-Wildlife Biologist. A final referral letter will be completed by the AEP-Wildlife Biologist.

I, _____, as an authorized representative of, _____ ensure that this application meets the AEP requirements as detailed in the *Wildlife Directives for Alberta Wind Energy Projects*. Deviations from the Directives (if any) are outlined in the attached report and include proposed mitigation and any formal discussions or agreements with AEP-Wildlife.

Signature

Date