



**Buffalo Plains Wind Farm Inc.
Facility Application**

**AltaLink Management Ltd.
Facility Applications**

Buffalo Plains Wind Farm Connection Project

June 23, 2022

Alberta Utilities Commission

Decision 27167-D01-2022: Buffalo Plains Wind Farm Connection Project

Buffalo Plains Wind Farm Inc.
Facility Application
Application 27167-A001

AltaLink Management Ltd.
Facility Applications
Applications 27167-A002 to 27167-A004

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The Commission may, no later than 60 days of the date of this decision and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected decision on its website.

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves the facility applications from Buffalo Plains Wind Farm Inc. (BPW) and AltaLink Management Ltd. for the Buffalo Plains Wind Farm Connection Project. For the reasons included in this decision, the Commission finds that approval of the applications, and specifically the preferred route for the new transmission line, is in the public interest, having regard to the social and economic effects of the project and its effect on the environment.

2 Buffalo Plains Wind Farm Inc. facility application

2. BPW has approval¹ from the Commission to construct and operate a 514.6-megawatt wind power plant, designated as the Buffalo Plains Wind Farm, in the Lomond area. It also has approval to construct and operate the power plant substation, designated as Amber 611S Substation.²

3. To connect the wind project to the Alberta Interconnected Electric System, BPW requested system access from the Alberta Electric System Operator (AESO). In response to that request, the AESO filed a needs identification document (NID) application with the Commission proposing the construction of an approximately 15-kilometre transmission line to connect the Amber 611S Substation to existing Milo 356S Substation and the addition or modification of other equipment needed to ensure proper integration of the wind project with the electric system. On February 15, 2022, the Commission approved the NID application filed by the AESO and issued NID Approval 27129-D01-2022.³

4. BPW applied to the Commission for approval to construct and operate a 240-kilovolt (kV) transmission line, designated as Transmission Line 1097L, from its Amber 611S Substation to AltaLink's Milo 356S Substation. BPW proposed a preferred route and an alternate route which are shown as red and green lines, respectively, on the map in Figure 1.

¹ Power Plant Approval 26214-D02-2022, Proceeding 26214, Application 26214-A001, February 10, 2022.

² Substation Permit and Licence 26214-D03-2022, Proceeding 26214, Application 26214-A002, February 10, 2022.

³ Needs Identification Document Approval 27129-D01-2022, Proceeding 27129, Application 27129-A001, February 15, 2022.

Figure 1. Proposed preferred and alternate route for Transmission Line 1097L



5. BPW, as an electricity market participant under Section 24.31 of the *Transmission Regulation*, would jointly operate the proposed transmission line with AltaLink for approximately six months following construction completion. Afterwards, BPW would transfer the ownership and operation of the proposed line to AltaLink.

2.1 Findings

6. The Commission finds that the facility application filed by BPW under sections 14 and 15 of the *Hydro and Electric Energy Act* complies with the information requirements prescribed in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* and is consistent with need and the requirements identified in the AESO's functional specification.

7. BPW stated that the preferred and alternate routes were developed through an iterative process and stakeholders were notified and consulted at multiple stages of the route development process. The Commission is satisfied that BPW's participant involvement program for the proposed transmission line meets the requirements of Rule 007.

8. The Commission issued a notice of applications in accordance with Rule 001: *Rules of Practice* and received two submissions regarding BPW's application in response. BPW submitted a letter on April 8, 2022, requesting three weeks of additional time to consult with the parties who submitted statements of intent to participate (SIPs). The Commission granted four weeks and requested an update from BPW by May 9, 2022. On May 6 and 7, the parties withdrew their SIPs stating that BPW had resolved their concerns. On May 9, BPW filed an update, which stated that it discussed the concerns with the two interveners and that it had resolved their concerns. Based on the foregoing, the Commission is satisfied that BPW's participant involvement program met the objectives of effective consultation.

9. In making its determinations on BPW's proposed transmission line, the Commission has carefully weighed the social, economic and environmental effects of the preferred and alternate routes, and has taken into account the stated reasons for BPW's selection of the preferred route, in making its decision on the routing for Transmission Line 1097L.

10. BPW stated that there are no residences within 350 metres of either route; however, there are two residences within 800 metres of the alternate route whereas the preferred route only has one. In the absence of receiving SIPs from residents or landowners about potential adverse impacts, the Commission finds that the preferred route would have slightly less residential impacts compared to the alternate route.

11. The alternate route would be located along Range Road 211 for most of its length and be sited within undeveloped and developed road allowance whereas the preferred route is not located within a road allowance. However, BPW stated that stakeholders indicated their preference for the preferred route, which parallels an existing linear disturbance (Transmission Line 1036L/1005L). BPW has committed to work with landowners on structure placement and has agreed to keep Transmission Line 1097L structures as least 120 feet from Transmission Line 1036L/1005L structures. Further, Alberta Environment and Parks and Maskwa Environmental Consulting, who were retained by BPW, concluded that paralleling the existing disturbance was the least environmentally impactful of the proposed options. The Commission considers that following existing linear disturbances such as transmission lines, roads and highways is an effective approach to minimize the impacts of a proposed transmission line. The Commission finds that the preferred route is expected to have slightly less impacts because it follows an existing linear disturbance for most of its length.

12. The Commission notes that sharp-tailed grouse surveys were not conducted in accordance with the *Sensitive Species Inventory Guidelines* which specifies a maximum plot distance of 1,000 metres. BPW used a maximum plot distance of 2,000 metres. Further, BPW included plots conducted in 2019. In accordance with the *Wildlife Directive for Alberta Wind Energy Projects*, sharp-tailed grouse plots must be conducted within two years of the construction start date. Additionally, the project is located within the 500-metre setback of two identified sharp-tailed grouse leks. This creates an increased risk to sharp-tailed grouse leks because the transmission line will create a new visual disturbance and it could serve as a hunting perch, resulting in increased predation. Visual impacts to sharp-tailed grouse leks cannot be completely reduced through mitigations. It is not possible to reconduct sharp-tailed grouse surveys prior to the proposed construction commencement, expected to occur in November 2022, because the *Sensitive Species Inventory Guidelines* requires surveys be conducted between mid-March and mid-May. BPW has proposed a number of approaches to mitigate the potential effects to sharp-tailed grouse leks, for example, construction outside the restricted activity period, presence of qualified wildlife monitor, bird flight diverters within the 500-metre setback, and the Commission will add to those the following as a condition of approval for BPW.

- BPW must complete sharp-tailed grouse surveys in 2023 to identify potentially undetected leks, assess disturbance to known leks, and assess areas where raptor perch deterrents may reduce predation pressure near leks. Surveys must be conducted in accordance with the *Sensitive Species Inventory Guidelines* and results from the surveys and mitigation implementation must be submitted to the Commission by October 30, 2023.

13. The Commission finds that wetlands and amphibians were not fully assessed prior to submitting the application. However, BPW committed to conducting wetland and amphibian surveys in the summer of 2022. BPW also confirmed that, to the extent possible, the project's permanent structures and temporary disturbance areas, such as workspaces, would not be placed within the 100-metre setback of Class III to Class VI wetlands. Considering the quality of the habitat within the project area, the Commission imposes the following as a condition of approval:

- BPW shall engage a Qualified Wetland Science Practitioner (QWSP) to conduct a wetland survey for the entire length of the preferred route and shall submit a wetland survey report to the Commission before September 30, 2022. Amphibian surveys must be conducted at all applicable wetlands identified during the wetland survey in accordance with the *Sensitive Species Inventory Guidelines* and results must be included in the wetland survey report.

14. BPW confirmed that the project will adhere to Standard 100.3.2 of the *Wildlife Directive for Alberta Wind Energy Projects* in that construction activities in native grassland areas will be conducted outside of the grassland bird breeding season (April 1 to July 15). The Commission considers that potential environmental effects from the proposed project can be sufficiently mitigated by adhering to the mitigations proposed, which include constructing the transmission line during frozen conditions, or ensuring the presence of an environmental monitor during construction, if the transmission line is constructed on native grassland during non-frozen conditions.

15. During the raptor stick nest surveys conducted in 2019 and 2021, one nest was identified that was occupied by a ferruginous hawk pair in 2019 and was occupied by a common raven pair during 2021 follow-up surveys. BPW committed to revisit the nest site prior to construction to confirm the status and potential nesting species for the nest.

16. The Commission is satisfied that the project's potential effects on wildlife and wildlife habitat will be adequately mitigated with diligent implementation of the mitigation measures committed to by BPW and the conditions above. The Commission considers that the preferred route will have reduced impacts to native grassland, and less visual disturbance to identified sharp-tailed grouse leks because there is an existing linear disturbance adjacent to the preferred route.

17. For these reasons, the Commission finds BPW's proposed transmission line to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

3 AltaLink Management Ltd. facility applications

18. AltaLink applied for approval to alter existing facilities to accommodate the connection of Transmission Line 1097L. Specifically, it applied to modify the existing Milo 356S Substation by adding an additional 240-kV circuit breaker to accommodate Transmission Line 1097L as well as salvaging a single Transmission Line 1036L structure just outside the substation and replacing it with a single structure located within the substation fenceline to physically support both Transmission Line 1036L and Transmission Line 1097L. AltaLink also applied for a connection order to connect its Milo 356S Substation to BPW's Transmission Line 1097L, thereby connecting the Buffalo Plains Wind Farm to the Alberta Interconnected Electric System.

3.1 Findings

19. The Commission finds that the facility applications filed by AltaLink under sections 14, 15, 18, 19 and 21 of the *Hydro and Electric Energy Act*, comply with the information requirements prescribed in Rule 007 and that the proposed development is consistent with NID Approval 27129-D01-2022 and the requirements of the AESO's functional specification.

20. AltaLink conducted a participant involvement program that consisted of notification to stakeholders within 200 metres of the substation and proposed Transmission Line 1036L alteration. The Commission finds that AltaLink's participant involvement program meets the requirements of Rule 007. As well, no concerns were raised about AltaLink's applications in response to the AUC's notice.

21. AltaLink's environmental evaluation concluded that the predicted residual effects to the environment would be limited and not significant. Also, BPW's environmental consultant reviewed AltaLink's environmental documentation and concluded that it was in alignment with the mitigation provided in the BPW application. The Commission accepts that the environmental impacts from AltaLink's proposed development are expected to be negligible given that the project will occur within the existing substation site boundary.

22. For these reasons, the Commission finds AltaLink's proposed transmission development to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

4 Decision

23. The Commission approves Application 27167-A001, under sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, and grants Buffalo Plains Wind Farm Inc. the following approval set out in an appendix to this decision:

- Transmission Line Permit and Licence 27167-D02-2022, to construct and operate Transmission Line 1097L (Appendix 1).

24. The Commission approves applications 27167-A002 to 27167-A004, under sections 14, 15, 18, 19 and 21 of the *Hydro and Electric Energy Act*, and grants AltaLink Management Ltd. the following approvals set out in appendices to this decision:

- Substation Permit and Licence 27167-D03-2022, to alter the Milo 356S Substation (Appendix 2).
- Transmission Line Permit and Licence 27167-D04-2022, to alter Transmission Line 1036L (Appendix 3).
- Connection Order 27167-D05-2022, to connect Milo 356S Substation to Buffalo Plains Wind Farm Inc.'s Transmission Line 1097L (Appendix 4).

25. The appendices will be distributed separately.

Dated on June 23, 2022.

Alberta Utilities Commission

(original signed by)

Douglas A. Larder, QC
Vice-Chair