Decision 22866-D01-2021



Jenner 2 GP Inc. and Jenner 3 GP Inc.

Jenner 2 and Jenner 3 Wind Power Projects

November 26, 2021

Alberta Utilities Commission

Decision 22866-D01-2021 Jenner 2 GP Inc. and Jenner 3 GP Inc. Jenner 2 and Jenner 3 Wind Power Projects Proceeding 22866 Applications 22866-A001 to 22866-A005

November 26, 2021

Published by the: Alberta Utilities Commission Eau Claire Tower 1400, 600 Third Avenue S.W. Calgary, Alberta T2P 0G5

Telephone:310-4AUC (310-4282) in Alberta
1-833-511-4AUC (1-833-511-4282) outside AlbertaEmail:info@auc.ab.caWebsite:www.auc.ab.ca

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.

	Decision 22866-D01-2021
Jenner 2 GP Inc. and Jenner 3 GP Inc.	Proceeding 22866
Jenner 2 and Jenner 3 Wind Power Projects	Applications 22866-A001 to 22866-A005

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves applications from Jenner 2 Limited Partnership, on behalf of its general partner Jenner 2 GP Inc., and Jenner 3 Limited Partnership, on behalf of its general partner Jenner 3 GP Inc., to construct and operate the Jenner Wind Power Project 2 and Jenner Wind Power Project 3 power plants, and to connect the power plants to the Alberta Interconnected Electric System.

2 Applications and proceeding processing history

2. On August 8, 2017, Jenner Wind Limited Partnership, on behalf of its general partner Jenner Wind GP Inc., applied to construct and operate a 180-megawatt (MW) wind power plant, designated as the Jenner Wind Power Plant Expansion. The project would have been located approximately three and a half kilometres east of the town of Jenner, adjacent to the previously approved Jenner Wind Power Plant, and would consist of 53 turbines, each rated at 3.4 MW, and a mix of underground and overhead collector cables. On January 31, 2018, the proceeding was placed in abeyance at the request of the applicant to allow it time to consult with stakeholders who had submitted statements of intent to participate.

3. On March 13, 2020, Jenner Wind LP, through its two subsidiaries Jenner 2 Limited Partnership and Jenner 3 Limited Partnership (collectively referred to as Jenner), filed an amendment to the Jenner Wind Power Plant Expansion project application that would create two discrete projects: the Jenner Wind Power Project 2 (Jenner 2 project) and the Jenner Wind Power Project 3 (Jenner 3 project). The Jenner 2 project would have consisted of 17 turbines with a total capability of 71.4 MW and the Jenner 3 project would have consisted of 26 turbines with a total capability of 109.2 MW.

4. On June 3, 2020, the Commission ruled that it was not satisfied that approval of the projects, as applied for, was in the public interest at the time. The Commission found that the projects posed substantial, unacceptable environmental risks that were not adequately mitigated by the proposed mitigation and monitoring plans. In support of its finding, the Commission relied on all evidence on the record including the renewable energy referral reports by Alberta Environment and Parks (AEP) that concluded the projects posed an overall high residual risk to wildlife and wildlife habitat. The Commission therefore put the applications into abeyance to give Jenner an opportunity to explore ways to avoid or further reduce the potential and residual effects of the projects on wildlife and wildlife habitat.

3 The amended applications

5. On April 9, 2021, Jenner amended its applications.¹ The amended applications proposed higher capability turbines but fewer overall turbines, resulting in the same total power generation capability. Specifically:

- a) The Jenner 2 project would consist of 13 turbines, each with a nameplate capability of 5.49 MW, for a total capacity of 71.4 MW.
- b) The Jenner 3 project would consist of 20 turbines, each with a nameplate capability of 5.56 MW, for a total capacity of 109.2 MW.

6. The amended applications were filed pursuant to sections 11, 14, 15 and 18 of the *Hydro and Electric Energy Act* as applications 22866-A001 to 22866-A005. The amended applications and their appendices were filed on the Commission's eFiling System on April 9, 2021, as exhibits 22866-X0103 through 22866-X0133.

7. Both projects use Enercon E160 turbines with a hub height of 114 metres and a rotor diameter of 160 metres. In response to an information request, Jenner clarified that the nameplate capacity of the turbine is 5.56 MW but the individual output of each turbine would be controlled via a Wind Farm Management System to ensure the output to the Alberta Interconnected Electric System would not exceed the applied for capability.² Both projects include an underground collector system that would connect "behind the fence" to the previously approved Halsbury 306S Substation.

8. The projects are located in Special Area No. 2, northeast of the hamlet of Jenner. All turbines, including turbine work areas, are located on cultivated lands. A 45-metre portion of an access road for the Jenner 2 project would be located on native grassland pasture as would a road upgrade with an underground collector line of approximately 1,090 metres in length. The Jenner 3 project includes approximately 7,850 metres of parallel underground collector lines on native grassland that would be installed by ploughing. Specifically the projects would be located on the following sections:

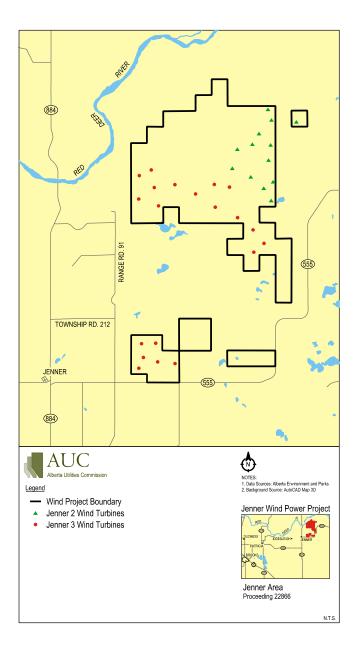
Sections	Township	Range	Meridian
5, 6, 7, 8, 17, 20, 22, 27, 28, 29, 31, 32, 33, 34	21	8	W4M
1, 12, 36	21	9	W4M
3, 4, 5, 6, 9, 10, 11, 14, 15, 16	22	8	W4M
1	22	9	W4M

¹ The amended application for the Jenner 2 project was submitted as Exhibit 22866-X0111 and the amended application for Jenner 3 project was submitted as Exhibit 22866-X0131.

² Exhibit 22866-X0144, Response to AUC Information Requests Round 2, PDF page 17, July 5, 2021.

9. Figure 1 depicts the proposed turbine layout for the projects.

Figure 1: Jenner 2 project and Jenner 3 project locations



- 10. Jenner's amended applications included the following:
 - Descriptions of its participant involvement programs, which detailed consultation with stakeholders within 800 metres of the projects and notification to stakeholders within 2,000 metres of the projects as well as other interested stakeholders who requested notification.
 - Noise impact assessments, which concluded that the projects would comply with permissible sound levels set out in Rule 012: *Noise Control.*

- A shadow flicker report³ which concluded that the most impacted residence (R9) could potentially experience up to 25 hours of shadow flicker per year under the "worst case" modelling, and that the most impacted residence under "corrected-case" modelling (R7) could experience up to eight hours per year. Corrected-case modelling accounts for the times when the sun is not shining, when the turbines are not operating, or when the orientation of the turbines are not perpendicular to the sun.
- An environmental effects assessment, conducted by McCallum Environmental Ltd., for both projects combined, which included an environmental protection plan for each project.
- Renewable energy referral report amendment letters by AEP, both dated March 8, 2021, indicating that the projects' risk to wildlife and wildlife habitat had been reduced from high risk rankings, as described in the original referral reports, to moderate risk rankings.
- *Historical Resources Act* approval for the Jenner 2 project, and *Historical Resources Act* approval with conditions for the Jenner 3 project.⁴
- Electrical single-line diagrams and a engineering study report conducted by Power Grid Specialists Corporation.
- Functional specification documents for the power plant connections prepared by the Alberta Electric System Operator.

11. On June 9, 2021, Jenner provided Transport Canada's aeronautical assessment, dated April 7, 2021, for both projects. That assessment requested that certain turbines be marked and lighted in accordance with Transport Canada Standard 621 - Obstruction Marking and Lighting.

4 Statements of intent to participate and standing

12. The Commission issued notice of application for the original Jenner Wind Power Plant Expansion application on September 26, 2017. In response to the notice, the Commission received five statements of intent to participate from eight individuals and one organization. In a ruling dated December 20, 2017, the Commission granted standing to three different married couples who each filed a statement of intent to participate on behalf of themselves and their families.⁵ In response, Jenner requested that the proceeding be placed in abeyance. The Commission granted that request.

13. The Commission issued another notice of applications on March 25, 2020 in response to the amended applications that Jenner filed on March 13, 2020. The Commission received statements of intent to participate from three individuals, including one person who had been denied standing in the Commission's December 2017 ruling on standing.

³ The shadow flicker analysis accounts for the proposed the Jenner 2 project and Jenner 3 project applied for in this proceeding and the previously approved Jenner Wind Power Project.

⁴ Exhibit 22866-X0129, Attachment 6 - JWPP3 HRA Approval, April 9, 2021.

⁵ Exhibit 22866-X0058, AUC Ruling on Standing, December 20, 2017.

14. On May 14, 2021, the Commission issued a notice of applications for the amended applications for the Jenner 2 and Jenner 3 projects filed on April 9, 2021. The notice requested those who had previously filed a submission in response to the December 2017 or the March 2020 notice of applications, to file a new submission relating to one or both of the amended projects if they wished to participate in this proceeding. The notice also stated that the Commission may make its decision without further notice or process if no written submissions were received. The May 14, 2021, notice was also provided to three Indigenous groups: Blood Tribe, Piikani Nation and Siksika Nation. The Commission did not receive any submissions in response to the notice.

15. On July 5, 2021, in response to an information request by the Commission, Jenner indicated that some stakeholders might still have concerns about the projects. The Commission issued a letter on July 9, 2021, requiring parties who wished to participate in the proceeding to file a response by July 23, 2021, even if they had been granted standing in December 2017. The Commission did not receive any responses to its letter, however, Commission staff were able to speak with one individual who was granted standing, along with her parents, in December 2017. She verbally stated to Commission staff that she and her parents did not require a hearing and would not participate if a hearing was held.

16. The Commission issued a second ruling on standing on September 17, 2021, that denied standing to all parties who had filed statements of intent to participate in 2020, and determined that a hearing of the applications was not required by any of the individuals who were granted standing in 2017.⁶

5 Discussion

17. Prior to the April 2021 amendments being filed, McCallum Environmental Ltd. was retained by Jenner to complete environmental studies, an environmental evaluation report and environmental protection plan for the projects. The environmental evaluation outlined project components and activities, described baseline environmental conditions, and identified potential effects, mitigation measures, and assessed predicted residual effects of the projects.

18. The AEP renewable energy referral reports for the projects submitted together with the March 2020 amendments and dated February 11, 2020⁷ and February 25, 2020⁸ originally assessed both projects as having an overall high risk to wildlife and wildlife habitat. Issues identified by AEP included the projects' siting on native grassland and the high occurrence of species at risk, including numerous sensitive grassland-dependent species and the proposed installation of overhead collector lines.

19. In response to the Commission placing the proceeding in abeyance due to the high risk to wildlife and wildlife features, Jenner updated both its projects to reduce the potential effects on wildlife and wildlife habitat. Jenner then submitted the projects update reports to AEP to reassess the overall risk to wildlife and wildlife habitat.

⁶ Exhibit 22866-X0148, Ruling on Standing, September 17, 2021.

⁷ Exhibit 22866-X0008.01, Attachment 7 - Alberta Environment and Parks Consultation, March 13, 2020.

⁸ Exhibit 22866-X0082, Attachment 5 - AEP Consultation JWPP3, March 13, 2020.

20. On March 8, 2021, AEP issued separate referral report amendment letters for the projects. AEP stated that it assessed the respective project updates to determine if its assessment of the risk to wildlife and wildlife habitat had changed as a result of the project changes. AEP indicated that the revised project layout generally met the intent of AEP policy and the *Wildlife Directive for Alberta Wind Projects*, and it acknowledged that Jenner had made efforts to align the project with AEP policy to minimize impacts to sensitive wildlife habitat, including native grassland.

21. AEP noted that the project update included the removal of turbines and associated infrastructure that was previously proposed on native grassland habitat. As a result, the projects would no longer have turbines sited on native grassland. Additionally, several changes to the project layout had been made to reduce the effects on native grassland, including additional mitigation commitments made by Jenner. This included a commitment to conduct all construction activities on native grassland outside of the restricted activity period of April 1 to July 15. Further, Jenner committed to installing all collector lines underground. AEP stated that although the updated projects would align with the directive, the overall risk to avian mortality would remain high as a result of the high abundance of breeding raptors, grassland breeding songbirds, and species at risk in the general project area.

22. Additional sensitive amphibian surveys conducted in 2020 identified several wetlands as breeding locations for plains spadefoot toad, a species at risk. AEP indicated that Jenner committed to plough-in collector lines through these wetlands during dry ground conditions or to use directional drilling. Jenner also committed to a number of mitigation measures to address the potential risk to amphibians that aligned with the directive.

23. AEP noted that all project infrastructure, including turbines, access roads, and collector lines, had been removed from within the setbacks of all identified raptor species nests. The risk to sharp-tailed grouse had also been reduced due to the removal of project infrastructure from within a sharp-tailed grouse lek setback that was previously identified for the Jenner 2 project.

24. As a result of the changes to the project layout outlined in the project update for both projects, AEP concluded that significant changes to the project had been made to reduce and limit project impacts to wildlife and wildlife habitat. AEP stated that the avoidance and mitigation strategies identified for the projects resulted in a reduction of risk to wildlife and wildlife habitat. AEP outlined the changes to the project risk ranking for both projects as follows:

- 1. The project risk to native grassland habitat has been reduced to a low risk.
- 2. The project risk to sensitive amphibian breeding habitat has been changed to a <u>moderate</u> <u>risk</u>.
- 3. The project risk to overall avian mortality remains a high risk.
- 4. The project risk to raptor nests remains a low risk.
- 5. The project risk to sharp-tailed grouse leks has been reduced to a low risk.
- 6. The overall project risk has been reduced to a moderate risk.

The overall Project risk to wildlife and wildlife habitat has been reduced from the <u>high risk</u> ranking, as described in the Referral Report, to a <u>moderate risk</u> ranking.⁹

⁹ Exhibit 22866-X0114 Attachment 4 - JWPP2 AEP Referral Amendment 2021 and Exhibit 22866-X0128, Attachment 4 - JWPP3 AEP Referral Amendment Letter 2021.

25. Jenner retained RWDI to complete a noise impact assessment (NIA) for the projects (as amended in April 2021).¹⁰ RWDI identified ten dwellings located within 1.5 kilometres of the project boundary as receptors. RWDI predicted cumulative sound levels at the noise receptors as a sum of the assumed ambient sound level, noise contribution from baseline facilities, and noise contribution from the proposed projects. RWDI then compared the predicted cumulative sound levels to the daytime permissible sound level (PSL) of 50 A-weighted decibels (dBA) and to the nighttime PSL of 40 dBA.

26. RWDI identified the previously approved Buffalo Atlee Wind Farms 1, 2 and 3, Jenner Wind Power Project,¹¹ Jenner Solar Project,¹² Halsbury 306S Substation and six multi-well batteries as the baseline facilities, and established sound power levels of the baseline facilities using a combination of field measurement data and RWDI's internal library of similar facilities. RWDI included 33 Enercon E160 wind turbines as sound sources for the proposed projects and used manufacturer data from Enercon to establish sound power levels of the project wind turbines.

27. The NIA predicted that the cumulative sound levels at the noise receptors would be lower than the daytime and nighttime PSLs. In response to an information request from the Commission, Jenner included the predicted sound levels from the Buffalo Atlee Wind Farm 4 in the predicted cumulative sound levels, and concluded that the projects would remain compliant with Rule 012.¹³

28. For all receptors, predicted noise contribution from the Jenner 2 project is no greater than 24.5 dBA and predicted noise contribution from the Jenner 3 project is no greater than 29.7 dBA, which are lower than the assumed nighttime ambient sound level of 35 dBA. As such, neither project is considered a major sound source at any receptor.

29. Receptor R4 has the maximum predicted cumulative nighttime sound level at 39.7 dBA with a PSL of 40 dBA. For Receptor R4, neither project is a major sound source; instead, a Buffalo Atlee Wind Farm 1 turbine is the closest and predominant sound source for Receptor R4.

30. In addition, RWDI analyzed predicted low frequency noise (LFN) from the projects, and concluded that there would be no project-related LFN issue at any receptor.

31. The *Historical Resources Act* approval for Jenner 3 noted the presence of four stone features of archaeological importance. The *Historical Resources Act* approval issued to Jenner requires three of the stone features to be flagged or fenced to ensure avoidance, and the fourth requires no further action as long as the site is avoided. A historic structure was also noted that must be avoided during all development activities.

¹⁰ Exhibit 22866-X0119, Attachment 8 - JWPP3 NIA 2021 Update.

¹¹ As approved in Power Plant Approval 26464-D02-2021, Proceeding 26464, Application 26464-A001, April 7, 2021.

 ¹² As approved in Power Plant Approval 26299-D02-2021, Proceeding 26299, Application 26299-A001, February 25, 2021

¹³ The Buffalo Atlee Wind Farm 4 has been approved in Proceeding 26434, which was deemed complete on June 14, 2021 and before Proceeding 22866 was deemed complete. The Commission requested that Jenner update its noise model to include noise contribution from the Buffalo Atlee Wind Farm 4 in the predicted cumulative sound levels.

32. In response to an information request, Jenner confirmed that the major substation equipment listed in Permit and Licence 26403-D03-2021 for the Halsbury 306S Substation included all equipment required to connect the Jenner 2 and 3 projects.¹⁴ In its amendment applications, it noted that the Alberta Electric System Operator does not intend to file a needs identification document for the projects as the projects are considered "behind the fence."

6 Findings

33. The Commission is considering the applications under sections 11, 14, 15, 18 and 19 of the *Hydro and Electric Energy Act*. These sections state that no person can construct, operate or connect a power plant or substation without the Commission's approval.

34. The Commission has reviewed the applications and has determined that the information requirements specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* have been met.

35. As stated in the September 17, 2021, ruling on standing, the Commission finds that Jenner's participant involvement program for the projects has satisfied the requirements of Rule 007. The Commission has also determined that no person who has rights that may be directly and adversely affected by the projects has requested that the Commission hold a hearing.

36. The Commission accepts that Jenner has received *Historical Resources Act* approval for the Jenner 2 project, and that it has also received *Historical Resources Act* approval with conditions for Jenner 3 project.

37. When assessing the environmental impacts of the projects, the Commission considered adherence to AEP's *Wildlife Directive for Alberta Wind Energy Projects* and other relevant AEP guidelines or standards, as well as AEP's revised assessment of the projects' environmental impacts.

38. As discussed above, in its original referral report, AEP assessed the overall risk to wildlife and wildlife habitat for both projects as high based on the project's overall siting within areas of high quality habitat, the use of overhead collector lines and infringement of wildlife setbacks. Additionally, AEP assessed that siting within areas of native grassland would result in an increased risk to breeding birds and potential mortality. Jenner subsequently made changes to its projects' layouts that resulted in a reduction in the number of turbines required for the project including the removal of all turbine locations previously proposed to be on native grassland. The updated layout therefore resulted in a reduction in the amount of disturbance to native grassland.

39. In both its original referral reports and the March 2021 referral report amendment letters AEP assessed the overall risk of avian mortality as high given the high abundance of breeding birds and species at risk in the project area. The Commission notes that Jenner has committed to using minimal disturbance construction techniques and has committed to installing all collector lines underground. Furthermore, Jenner has committed to scheduling construction activities

¹⁴ Exhibit 22866-X0144, Response to AUC Information Request Round 2, PDF page 16.

within areas of native grassland outside of the restricted activity period of April 1 to July 15, as described in the directive.

40. In light of the foregoing, the Commission finds that implementing mitigation measures and imposing conditions to minimize residual effects on native grassland and the potential for direct impacts to wildlife and wildlife habitat is of high importance in this instance. Accordingly, the following will be imposed as conditions of approval for both projects:

a. The approval holder shall not perform any construction activities within areas of tame and native grassland during the restricted activity period for breeding birds of April 1 to July 15 as described in the *Wildlife Directive for Alberta Wind Energy Projects*.

41. The Commission notes that sensitive amphibian surveys conducted in 2020 for the projects identified several wetlands that are breeding locations for amphibian species at risk. However, AEP stated that the proposed mitigation measures for wetland impacts was sufficient to reduce the risk to wetlands and sensitive amphibians and would align with the directive. Further, all project infrastructure has been removed from within the setbacks of all identified raptor species nests and sharp-tailed grouse lek setbacks.

42. The Commission notes AEP's conclusion that the revised layout for both projects generally meet the intent of the *Wildlife Directive for Alberta Wind Energy Projects* and that Jenner has made efforts to align with AEP policy to avoid or minimize impacts to sensitive wildlife habitat, including native grassland. In response to further consultation with AEP, Jenner made significant changes to each project's layout, infrastructure and operational aspects to further reduce and limit the environmental effects of the projects, including a commitment to place all collector lines underground. Having consideration for the above, the Commission is satisfied that the projects' potential effects on wildlife and wildlife habitat, including the risk associated with impacts to native grassland, will be adequately mitigated with diligent implementation of the commitments made by Jenner.

43. In reaching its determination, the Commission relies on AEP's decision in its March 8, 2021, amendment letters to revise the overall risk assessment for the projects from a high risk to a moderate risk ranking.

44. In Approval 25100-D02-2021,¹⁵ for the Buffalo Atlee Wind Farm 1, the Commission included a condition that directs BA1 Wind GP Corp. to conduct a post-construction CSL survey at Receptor R4 (i.e., R1 in the NIA for the Buffalo Atlee Wind Farm 1) which is expected to demonstrate compliance. The Commission accepts that no turbine for either Jenner project is expected to be a major sound source for this receptor.

45. The Commission finds that noise levels from the projects are expected to comply with Rule 012 requirements.

46. As the projects will connect "behind the fence" and no modifications to the equipment already approved for the Halsbury 306S Substation are required, the Commission finds that no needs identification document approval is required and approves the connection order request.

¹⁵ Approval 25100-D02-2021, Proceeding 25100, Application 25100-A001, June 28, 2021.

47. Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* requires approval holders to submit annual post-construction monitoring survey reports to AEP and the Commission. Therefore, the Commission imposes the following condition of approval on both the Jenner 2 project and Jenner 3 project:

b. The approval holder shall submit a post-construction monitoring survey report to AEP and the Commission within 13 months of the Jenner 2 [Jenner 3] wind project becoming operational, and on or before the same date every subsequent year for which AEP requires surveys, pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants.*

48. The Commission notes that the *Conservation and Reclamation Regulation* was amended to specifically address the reclamation of wind projects in Alberta. The effect of these amendments is that "renewable energy operations," which include wind projects, are now expressly subject to the reclamation obligations set out in Section 137 of the *Environmental Protection and Enhancement Act.* Operators of renewable energy projects are now required to obtain a reclamation certificate at the project's end of life. The reclamation process is administered by AEP pursuant to the *Conservation and Reclamation Directive for Renewable Energy Operations*, which provides more detailed information on conservation and reclamation planning and reclamation certificate requirements for renewable energy operators in Alberta.

49. Based on the foregoing, the Commission considers the projects to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

7 Decision

50. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves Application 22866-A001 and grants Jenner 2 GP Inc. the approval set out in Appendix 1 – Power Plant Approval 22866-D02-2021 – November 26, 2021, to construct and operate the Jenner 2 Wind Power Project.

51. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves Application 22866-A002 and grants Jenner 2 GP Inc., the approval set out in Appendix 2 – Connection Order 22866-D03-2021 – November 26, 2021, to connect the Jenner 2 Wind Power Project to the Halsbury 306S Substation.

52. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves Application 22866-A004 and grants Jenner 3 GP Inc. the approval set out in Appendix 1 – Power Plant Approval 22866-D04-2021 – November 26, 2021, to construct and operate the Jenner 3 Wind Power Project.

53. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves Application 22866-A005 and grants Jenner 3 GP Inc., the approval set out in Appendix 2 – Connection Order 22866-D05-2021 – November 26, 2021, to connect the Jenner 3 Wind Power Project to the Halsbury 306S Substation.

54. As no changes to the approved Halsbury 306S Substation are required, the Commission closes Application 22866-A003.

Dated on November 26, 2021.

Alberta Utilities Commission

(original signed by)

Neil Jamieson Panel Chair

(original signed by)

Vera Slawinski Commission Member