



Capital Power Generation Services Inc.

Whitla Wind Project

August 30, 2018

Alberta Utilities Commission

Decision 23049-D01-2018

Capital Power Generation Services Inc.

Whitla Wind Project

Proceeding 23049

Applications 23049-A001 and 23049-A002

August 30, 2018

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1 Decision summary

1. In this decision, the Alberta Utilities Commission must decide whether to approve applications by Capital Power Generation Services Inc. to construct and operate a power plant designated as the Whitla Wind Project. After consideration of the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the project is in the public interest having regard to its social, economic, and other effects, including its effect on the environment.

2 Introduction and background

2. Capital Power Generation Services Inc. (Capital Power) filed applications with the AUC seeking approval to construct and operate a 298.8-megawatt (MW) wind power plant and an associated collector substation, to be designated as the Shamrock 1018S Substation, in the County of Forty Mile No. 8 (County), approximately 44 kilometres southwest of Medicine Hat. The applications, filed pursuant to sections 11, 14 and 15 of the *Hydro and Electric Energy Act*, were registered on October 26, 2017, as applications 23049-A001 and 23049-A002.

3. Capital Power initially applied for 88 turbine locations, stating that it intended to construct 83 turbines, and that it had selected the Vestas V136 turbine for the project. Each turbine is rated at 3.6 MW with a hub height of 105 metres and a rotor diameter of 136 metres. Capital Power indicated that the project would be developed in two phases: Phase 1 would be comprised of 58 turbine locations (selecting and constructing only 56 locations) with a capability of 201.6 MW; Phase 2 would be comprised of 30 turbine locations (selecting and constructing only 27 locations) with a capability of 97.2 MW.

4. Capital Power stated that the project was being developed to participate in the first round of the Alberta Electric System Operator's (AESO) Renewable Electricity Program (REP), and subsequently confirmed that in December 2017, it was awarded a REP contract for Phase 1 of the project.¹

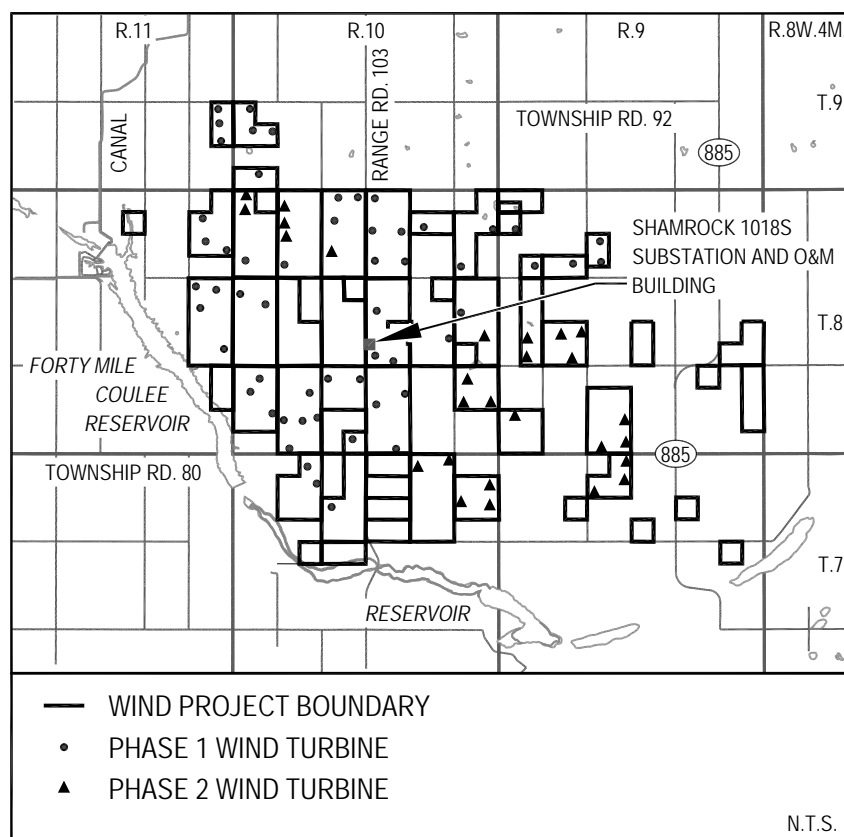
5. On December 18, 2017, Capital Power removed three alternate turbine locations from Phase 1 because of a high potential for non-migratory bat mortality at these locations.² It stated that the final determination on the remaining two alternate Phase 1 locations would be made after reviewing the geotechnical assessment of the project. On January 16, 2018, Capital Power informed the Commission that the two remaining alternate turbine locations were unlikely to be

¹ Exhibit 23049-X0065, PDF page 2.

² Exhibit 23049-X0052, Final Responses to AUC Round 1 IRs - Whitla Wind Project (12_18_20172), PDF page 3.

used.³ On March 6, 2018, Capital Power informed the Commission that it had eliminated the two remaining alternate turbine locations, and confirmed that all of the applied-for turbine locations were final.⁴ The final layout is shown on the following map:

Figure 1: Final project layout



6. The Commission issued a notice of application on November 6, 2017. The notice was mailed to stakeholders in the project area and published in the Bow Island Commentator. In response to the notice, the Commission received five statements of intent to participate: from 1576834 Alberta Ltd. (Benign Energy Canada II Inc.), Renewable Energy Systems Canada Inc., John Crooymans, Suncor Energy Inc. (Suncor), and Nathan Hofmann. Mr. Crooymans, Suncor, and Renewable Energy Systems Canada Inc. subsequently withdrew their interventions. On April 19, 2018, the Commission ruled that the remaining interveners did not have standing to trigger a hearing.⁵ The Commission's ruling on standing is attached as Appendix A to this decision.

7. Because no parties demonstrated rights that may be directly and adversely affected by its decision, the Commission did not hold an oral hearing to consider Capital Power's applications.

³ Exhibit 23049-X0068, Whitla Wind Project - Supplemental Information Response to IR 005 (01_16_2018).

⁴ Exhibit 23049-X0079, Whitla Wind Project - Elimination of Alternate Turbine Locations - March 6.

⁵ Exhibit 23049-X0094, AUC ruling on standing.

3 Legislative scheme

8. The Commission regulates the construction and operation of power plants in Alberta. The wind generation project proposed by the applicant is a “power plant” as that term is defined in Subsection 1(k) of the *Hydro and Electric Energy Act*. Section 11 of the *Hydro and Electric Energy Act* states that no person may construct or operate a power plant without prior approval from the Commission. In addition, sections 14 and 15 of the *Hydro and Electric Energy Act* direct that approval from the Commission is necessary prior to constructing or operating a substation or a transmission line.⁶

9. The applicant has applied to construct and operate the project pursuant to sections 11, 14 and 15 of the *Hydro and Electric Energy Act*.

10. When considering an application for a power plant and associated infrastructure, the Commission is guided by sections 2 and 3 of the *Hydro and Electric Energy Act*, and Section 17 of the *Alberta Utilities Commission Act*.

11. Section 2 lists the purposes of the *Hydro and Electric Energy Act*. Among others, those purposes are:

- To provide for the economic, orderly and efficient development and operation, in the public interest, of the generation of electric energy in Alberta.
- To secure the observance of safe and efficient practices in the public interest in the generation of electric energy in Alberta.
- To assist the government in controlling pollution and ensuring environment conservation in the generation of electric energy in Alberta.

12. Section 3 of the *Hydro and Electric Energy Act* requires the Commission to have regard for the purposes of the *Electric Utilities Act* when assessing whether a proposed power plant and associated infrastructure is in the public interest under Section 17 of the *Alberta Utilities Commission Act*.

13. The purposes of the *Electric Utilities Act* include the development of an efficient electric industry structure and the development of an electric generation sector guided by competitive market forces.⁷

14. In Alberta, the legislature expressed its clear intention that electric generation is to be developed through the mechanism of a competitive, deregulated electric generation market. Section 3 of the *Hydro and Electric Energy Act* directs that the Commission shall not have regard to whether the proposed power plant “...is an economic source of electric energy in Alberta or to whether there is a need for the electric energy to be produced by such a facility in meeting the requirements for electric energy in Alberta or outside of Alberta”. Accordingly, in

⁶ Defined in Section 1(1)(o)(iii) of the *Hydro and Electric Energy Act*, RSA 2000, c H-16, “transmission line” includes substations.

⁷ *Electric Utilities Act*, SA 2003, c E-5.1, Section 5.

considering an application before it, the Commission does not take into account the potential need and cost of a project.

15. Section 3 of the *Hydro and Electric Energy Act* also explicitly directs that the Commission shall not have regard to whether the proposed power plant "...is the subject of a renewable electricity support agreement under the *Renewable Electricity Act*". Accordingly, in considering an application before it, the Commission does not take into account whether the applicant has been awarded a contract under the AESO's REP process.

16. The Commission's public interest mandate is located within Section 17 of the *Alberta Utilities Commission Act*, which states:

Public interest

17(1) Where the Commission conducts a hearing or other proceeding on an application to construct or operate a hydro development, power plant or transmission line under the *Hydro and Electric Energy Act* or a gas utility pipeline under the *Gas Utilities Act*, it shall, in addition to any other matters it may or must consider in conducting the hearing or other proceeding, give consideration to whether construction or operation of the proposed hydro development, power plant, transmission line or gas utility pipeline is in the public interest, having regard to the social and economic effects of the development, plant, line or pipeline and the effects of the development, plant, line or pipeline on the environment.

17. The Commission has outlined its approach to fulfilling its mandate to assess the public interest in various decisions in the context of different types of applications. In EUB Decision 2001-111,⁸ the Commission outlined its approach to assessing whether the approval of a power plant is in the public interest as follows:

The determination of whether a project is in the public interest requires the Board [the Commission's predecessor] to assess and balance the negative and beneficial impacts of the specific project before it. Benefits to the public as well as negative impacts on the public must be acknowledged in this analysis. The existence of regulatory standards and guidelines and a proponent's adherence to these standards are important elements in deciding whether potential adverse impacts are acceptable. Where such thresholds do not exist, the Board must be satisfied that reasonable mitigative measures are in place to address the impacts. In many cases, the Board may also approve an application subject to specific conditions that are designed to enhance the effectiveness of mitigative plans. The conditions become an essential part of the approval, and breach of them may result in suspension or rescission of the approval.

In the Board's view, the public interest will be largely met if applications are shown to be in compliance with existing provincial health, environmental, and other regulatory standards in addition to the public benefits outweighing negative impacts.

18. The Commission remains of the view that the above approach to assessing whether a project is in the public interest is consistent with the purpose and intent of the statutory scheme.

⁸ EUB Decision 2001-111: *EPCOR Generation Inc. and EPCOR Power Development Corporation 490-MW Coal-Fired Power Plant*, Application No. 2001173, December 21, 2001, page 4.

19. Further, the Commission also considers that this approach provides an effective framework for the assessment of wind energy projects.

20. Pursuant to its authority under Section 76(1) of the *Alberta Utilities Commission Act*, the Commission has established Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments* and Rule 012: *Noise Control*. Rule 007 applies to applications for the construction and operation of power plants, substations and transmission lines governed by the *Hydro and Electric Energy Act*. The application must meet the informational and other requirements set out in Rule 007. Specifically, an applicant must provide technical and functional specifications, information on public consultation, environmental and land-use information including a noise impact assessment (NIA). The application must also meet the requirements set out in Rule 012.

21. In addition to the foregoing, an applicant must obtain all approvals required by other applicable provincial or federal legislation.

4 Joint process for the Forty Mile project applications

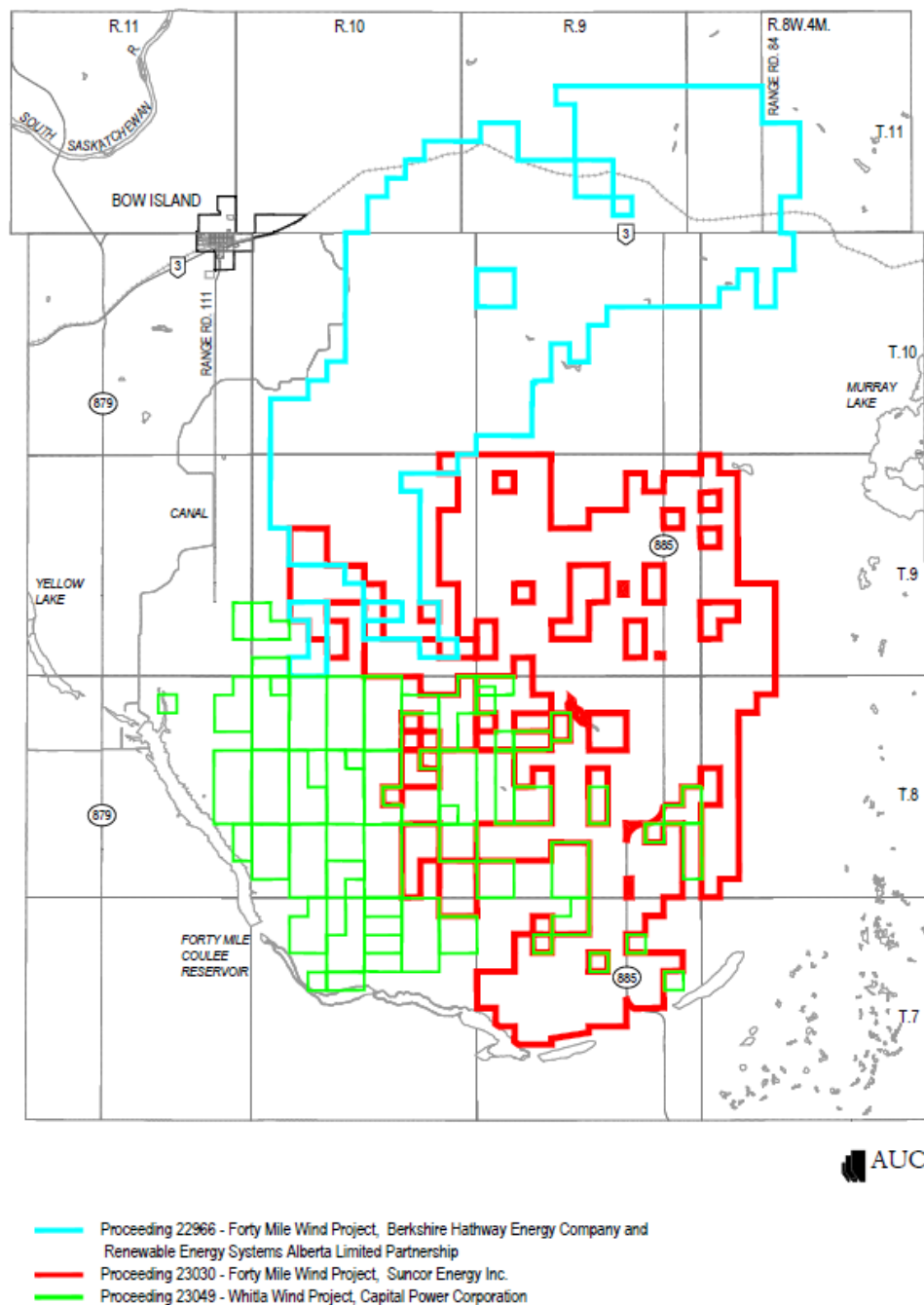
4.1 Background

22. Contemporaneous with Capital Power's application, the Commission received applications for two other wind energy projects in the County of Forty Mile No. 8, from Forty Mile Granlea Wind GP Inc. (which is registered as Suncor Energy Inc. and is also referred to in this decision as Suncor) and BHEC-RES Alberta GP Inc. (RES), that have proposed project areas overlapping with that of the Capital Power project. The Commission initiated a joint process, described below, to determine how best to consider the three projects. Due to similar application processing timelines of this project and the RES project and their proximity to each other, the Commission has released this decision concurrently with its decision on RES' application, Decision 22966-D01-2018, *BHEC-RES Alberta G. P. Inc., Forty Mile Wind Power Project*.

23. On November 29, 2018, the Commission issued a notice of technical meeting in response to the applications from Capital Power, RES and Suncor for wind energy projects in the County.⁹ As shown on the map below, the three projects are adjacent to each other and, in some cases, overlap.

⁹ Exhibit 23049-X0036, Notice of Technical Meeting.

Figure 2: Proposed projects in the County of Forty Mile No. 8



24. The purpose of the technical meeting was to determine the best process for considering the applications from Capital Power, RES and Suncor given the scale of the three projects, their overlapping nature, and the proximate filing dates. The Commission advised that the technical meeting would consider the following topics:

- How the Commission should consider the cumulative impacts from the three wind projects.

- The need for representative noise impact assessments that take into account all three proposed projects.
- Whether the noise impact assessments should employ common modelling parameters, common dwelling labels and common reporting formatting.
- Noise mitigation plans if cumulative sound levels at any noise receptors are predicted to exceed permissible sound levels.
- The need for environmental impact reporting that takes into account the impact of all three projects.
- Whether the environmental studies can use consistent and similar techniques, equipment and personnel for surveys of the three projects, particularly for the pre-construction acoustic bat activity surveys and for the post-construction bird and bat mortality surveys.
- Determination on final turbine locations and turbine models, including adequate spacing for migratory birds and bats between the turbines of different projects.
- Transmission proliferation and the potential for sharing transmission interconnections.
- Potential to combine the three proceedings.
- Timing for finalized applications.

25. In light of scheduling conflicts, the technical meeting was subsequently replaced by a written process. Capital Power, RES and Suncor each filed written submissions, responded to a round of information requests issued by the Commission, and filed reply submissions on the topics above.¹⁰

4.2 Views of Capital Power

26. In its written submissions,¹¹ Capital Power stated that a combined proceeding was not necessary to consider the cumulative impacts of the projects. In its view, the projects should be considered on their own merits, and a combined proceeding would result in undue delays and prejudice, as the projects were proposed by different entities and were in different stages of the application process.

27. Capital Power indicated that the existing Rule 007 and Rule 012 requirements were sufficient to address any potential cumulative impacts with respect to noise, and supported a queuing system for assessing noise impacts. Capital Power submitted that only its project and RES' project can be deemed complete because those projects have received sign-off from

¹⁰ Exhibit 22966-X0073, BHE RES AUC Technical meeting submissions (January 5, 2018); Exhibit 23030-X0069, Suncor letter to AUC regarding pre-filing materials in advance of technical meeting (January 5, 2018); Exhibit 23049-X0063, Written submissions of Capital Power (Whitla) LP re technical meeting (January 5, 2018); Exhibit 22966-X0091, BHEC-RES reply submission (February 2, 2018); Exhibit 23030-X0078, Suncor – 40 Mile - AUC IR response reply (February 2, 2018); Exhibit 23049-X0075, Reply argument of Capital Power – AUC technical session (February 2, 2018).

¹¹ Exhibit 23049-X0063, Written Submissions of Capital Power (Whitla) L.P. re Technical Meeting Scheduled for January 18, 2018.

Alberta Environment and Parks Wildlife Management (AEP WM), which is an application requirement under Rule 007. It proposed a queue system for considering cumulative noise impacts based on the filing date and the deemed complete status which would place RES at the start of the queue, followed by Capital Power. Upon review of the written submissions of the other wind developers, Capital Power stated that in addition to sign-off from AEP WM, a final turbine layout and an NIA of the final turbine layout were reasonable requirements for a project to be deemed administratively complete and to be placed within the queue.¹²

28. Capital Power submitted that the existing requirements in Rule 007 and AEP WM's Wildlife Directive establish a thorough regulatory review process to assess potential environmental impacts, and where appropriate, monitoring and mitigation can be developed to address any identified environmental effects. It indicated that conditions of approval could address any cumulative impacts associated with the project, should they be identified during post-construction monitoring. Capital Power stated that the potential impacts of wind generation on the environment are well understood and if the objectives of AEP WM's existing guidelines and directives are fulfilled and appropriate monitoring and mitigations are developed, residual environmental effects from wind projects, including cumulative effects, should be manageable and acceptable.¹³

4.3 Commission ruling on the technical process

29. On March 6, 2018, the Commission issued a ruling setting out the process that it would follow to review the Capital Power, Suncor and RES projects in the unique circumstances before it.¹⁴ In its ruling, the Commission determined that while a combined proceeding could streamline participation by interveners affected by multiple projects and have potential benefits in assessing the projects' cumulative effects, any such benefits are outweighed by the potential prejudice resulting from a combined process. The ruling is attached as Appendix B to this decision.

30. In its ruling, the Commission made the following key findings:

- The applications filed in proceedings 23049, 22966 and 23030 would be “deemed complete” when: (i) a final turbine layout has been submitted; and (ii) the Commission is satisfied that the applicant has provided all of the information required by Rule 007 for a wind power plant.
- The Commission requested AEP WM to provide comments and recommendations on the potential cumulative effects of the projects and mitigation measures that may be considered to address those effects.¹⁵

31. The Commission deemed Capital Power's application for the project to be complete as of March 6, 2018, approximately one month after the date it deemed the RES project to be complete, February 3, 2018.¹⁶ The Commission found, that, in these unique circumstances it would not be fair or reasonable to require Capital Power to provide additional updated

¹² Exhibit 23049-X0071, Capital Power Responses to AUC Joint Technical Meeting IRs (1-7), PDF page 4.

¹³ Exhibit 23049-X0063, Written Submissions of Capital Power (Whitla) L.P. re Technical Meeting Scheduled for January 18, 2018, PDF page 7.

¹⁴ Exhibit 23049-X0077, AUC Ruling on further process.

¹⁵ Exhibit 23049-X0077, AUC Ruling on further process, PDF page 8; Exhibit 23049-X0078, Request for Alberta Environment and Parks comments on cumulative effects.

¹⁶ Exhibit 23049-X0083, Ruling on application completeness and Information Request.

environmental and NIA information related to the RES project before deeming its application complete.

5 Application

5.1 Project description and siting

32. Capital Power requested approval from the Commission for 83 wind turbines constructed in two phases. Capital Power also requested approval of a project substation (Shamrock 1018S Substation), access roads, an underground electrical collector system, temporary workspaces and crane paths, and an operations and maintenance building. Capital Power selected the Vestas V136 – 3.6-MW wind turbine. The project is located on privately-owned lands in the locations listed in Appendix C.

33. Phase 1 of the project will be comprised of 56 turbines for a nameplate capacity of 201.6 MW. Capital Power anticipates a commercial operation date of December 1, 2019. Phase 2 of the project will be comprised of the remaining 27 turbines. It has a nameplate capacity of 97.2 MW with a targeted commercial operation date of October 31, 2020.

34. The Shamrock 1018S Substation is proposed to be located in the northwest quarter of Section 15, Township 8, Range 10, west of the Fourth Meridian. The substation will also be constructed in two phases. A control building will also be located inside the substation. Further, an operations and maintenance building will be located adjacent to the substation. The operations and maintenance building will contain an electrical room, work shop, supervisory control and data acquisition room, parts room, conference room, and office space. It is expected to occupy an area of 60 metres by 120 metres.

35. The combined Phase 1 and Phase 2 Shamrock 1018S Substation will occupy an area of approximately 130 metres by 100 metres and the operations and maintenance building will occupy an area of 60 metres by 120 metres. The major substation equipment will include:

Phase 1

- one 240-kilovolt (kV) step-up transformer rated at 224 megavolt amperes (MVA)
- one 240-kV circuit breaker
- nine 34.5-kV circuit breakers
- one control building containing protection, control, and telecommunication equipment
- two sets of 34.5-kV capacitor banks
- revenue metering
- all the above equipment will be surrounded by a chain-link fence

Phase 2

- one 240-kV step-up transformer rated at 111 MVA
- one 240-kV circuit breaker
- five 34.5-kV circuit breakers
- one control building containing protection, control, and telecommunication equipment
- two sets of 34.5-kV capacitor banks
- revenue metering
- all the above equipment will be surrounded by a chain-link fence

36. The Shamrock 1018S Substation will be connected to the Alberta Interconnected Electric System via an overhead transmission line to the existing Whitla 251S Substation located in the northwest quarter of Section 33, Township 7, Range 9, west of the Fourth Meridian. This transmission line and any proposed changes to the existing Whitla 251S Substation are the subject of a separate application.

37. Capital Power stated that each wind turbine contains a transformer within the nacelle which increases the voltage generated by the turbine to 34.5 kV, and an underground electrical collector system connects each turbine to the project substation. The collector system consists of five separate cables and will be buried to a minimum depth of approximately one metre. The three conductor wires are bundled together with the ground wire and fibre optic communication wire laid alongside the bundled wires. Capital Power stated that 148 kilometres of cable will be installed for the project by direct ploughing and trench excavation. It will also use directional drilling for collector lines intersecting Class 3 and higher wetlands that have been confirmed to be undisturbed in consultation with AEP WM.

38. Capital Power stated that permanent operational roads will be required to access and maintain the wind turbines over the life of the project. These roads will consist of a combination of all-weather gravelled access roads and seasonal lighter duty roads. Capital Power anticipates 48 kilometres of permanent operational roads which would be approximately 15 metres wide during construction and 7.5 metres wide during operation. Capital Power stated that these roads will be routed to minimize disturbance to agricultural practices, existing roads, undeveloped road allowances, and incorporate landowner input where possible. Approximately 77 kilometres of temporary crane path and construction roads which would be approximately 15 metres wide, are also required during the construction period. Capital Power stated that these roads will share routing with the collector system where practical.

5.2 Consultation

39. Capital Power retained Access Land Services Limited to assist in all aspects of land acquisition for the proposed project. Capital Power stated it conducted a consultation program for the project in accordance with the requirements of the Commission's Rule 007. Public notification was provided to occupants, residents and landowners within 2,000 metres of the

project area boundary and personal consultation was conducted for stakeholders within 800 metres of the project area boundary.

40. Capital Power stated that the consultation program ensured stakeholders gained a detailed understanding of the project and had opportunities to respond to project information and provide comments and input. Capital Power conducted direct face-to-face consultation meetings, phone and email correspondence, held public open house sessions, and distributed project information via mail-outs, emails and a website. It stated that stakeholder feedback was used to adapt or modify the project.

41. Project-specific information packages were first delivered to stakeholders within the consultation area in August 2017. These information packages contained a description of the project, preliminary location of components, AUC involvement information, environmental and noise information, and applicant contact details. Capital Power also provided notification to the Blood Tribe, Piikani Nation, Siksika Nation, Stoney Nakoda Nation (Bears paw, Chiniki and Wesley), Tsuut'ina Nation and Métis Nation Region 3. Capital Power stated it continues to be open to further engagement and consultation activities with the Indigenous communities in the area. It distributed a second round of project-specific information mail-out in November 2017.

42. Capital Power held an open house in the Town of Bow Island on September 11 and 12, 2017. The open house gave attendees an opportunity to preview details of the project, provide feedback and pose questions to the applicant and their consultants. Sixteen people attended the open house. A second open house was held in Bow Island on March 8, 2018.

43. Capital Power also hosted a dinner for Whitla Wind Project landowners to introduce the project, provide an overview of the development and obtain input on turbine locations, access roads, and collector lines.

44. Capital Power stated it has been in contact with the County regarding the project since June 2016. It provided regular updates to the County council, as scheduled by the County's chief administrative officer, pertaining to County development and permitting for the project.

5.3 Noise impacts

45. Capital Power retained Stantec Consulting Ltd. (Stantec) to prepare an NIA for the project. After submitting its first NIA dated October 19, 2017,¹⁷ Capital Power subsequently submitted four updated NIAs in response to information requests and to address the evolution of the project and neighboring proposed facilities.¹⁸ The NIA filed on May 10, 2018, the final version, was relied upon by the Commission in making its decision (the project NIA).¹⁹

46. The sound power level for the project wind turbines was established using noise data provided by the turbine manufacturer, Vestas. The project NIA indicates that the sound power level for a hub height wind speed of 20 metres per second was selected for assessment to meet

¹⁷ Exhibit 23049-X0008, Noise Impact Assessment.

¹⁸ Exhibit 23049-X0076, Whitla Wind Project - Responses to AUC Round 2 IRs - (February_16_2018 - Final Consolidated), PDF pages 13-75; Exhibit 23049-X0081, Whitla Wind Project - Updated Noise Impact Assessment - March 6, 2018; Exhibit 23049-X0089, Whitla Wind Project - Updated Noise Impact Assessment and Responses to AUC Round 3 IRs (March_21_20_2018), PDF pages 8-69; Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510.

¹⁹ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510.

the Rule 012 requirement that a wind turbine must be modelled under “planned maximum operating conditions.”²⁰

47. The project NIA indicates that the project wind turbines will operate in high wind operation mode “P-01 (HWO) mode”, which is an unrestricted operating mode optimized for extended operations in high wind (up to 27.5 metres per second). Capital Power stated that the P-01 (HWO) operating mode is the only mode fitted on the Vestas V136 - 3.6 turbine technology proposed in its application.²¹ In the event of non-compliance, Capital Power submitted that potential noise control measures could include insulating nacelles, mechanical equipment upgrades, and turbine curtailment in P-01 (HWO) mode.²² Capital Power explained that utilization of such options would be assessed on a case-by-case basis and that it could not easily quantify the predicted reduction in sound power level emitted from each turbine due to implementing these options.²³

48. As noted above, the proposed substation, to be constructed in two phases, was included in the project NIA. Phase 1 will include a 224-MVA transformer and Phase 2 will include a 111-MVA transformer. Sound power levels for both transformers, under Oil Natural Air Forced operating condition, were estimated using theoretical methods from acoustic literature.²⁴ The project NIA identified and quantified the noise contribution from existing third-party energy-related facilities within three kilometres of the project footprint, including four compressor stations and one substation. The project NIA also included the noise contribution from the RES wind project subsequently approved in Decision 22966-D01-2018.²⁵ A field study was conducted on October 5 and 6, 2016.²⁶ The sound power level for one of the existing compressor stations²⁷ was established based on field measurement data.²⁸ Sound power levels for the other existing third-party energy-related facilities were quantified using measurement results presented in the NIA for the RES wind project, dated March 22, 2018,²⁹ and the NIA for the Suncor wind project in the area, dated October 17, 2017.³⁰

49. The project NIA identified 44 dwellings located within 1.5 kilometres of the project wind turbines. In addition, seven other dwellings, which were identified in the RES wind project NIA and are located beyond 1.5 kilometres but within five kilometres of the project wind turbines, are considered in the project NIA. In total, 51 dwellings are identified as noise receptors in the project NIA.³¹

²⁰ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 30, paragraph 4.

²¹ Exhibit 23049-X0053, Final Responses to AUC Round 1 IRs - Whitla Wind Project (12_18_20172), PDF page 10, paragraph 7.

²² Exhibit 23049-X0053, Final Responses to AUC Round 1 IRs - Whitla Wind Project (12_18_20172), PDF page 11, paragraph 1.

²³ Exhibit 23049-X0089, Whitla Wind Project - Updated Noise Impact Assessment and Responses to AUC, PDF page 7, paragraph 2.

²⁴ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 30, paragraph 5.

²⁵ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 14, paragraph 2.

²⁶ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 22, paragraph 4.

²⁷ The compressor station in 15-13-8-10-W4M.

²⁸ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 22, paragraph 6.

²⁹ Exhibit 22966-X0108, Noise Impact Assessment Update.

³⁰ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 22, paragraph 3, and PDF page 23, paragraphs 1-2.

³¹ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 14, paragraph 3.

50. The project NIA indicates that the permissible sound level (PSL) values determined in accordance with Rule 012 are 40 dBA L_{eq} nighttime and 50 dBA L_{eq} daytime for all dwellings. The project NIA presents modelled sound levels at a height of 1.5 metres above ground level for single-storey dwellings and at a height of 4.5 metres for two-storey dwellings.³² The project NIA used the following model settings:³³

- Temperature: 10°C.
- Relative humidity: 70 per cent.
- Wind direction: downwind condition.
- Wind speed: one to five metres per second.
- Noise prediction software: CadnaA (DataKustik 2017).
- Noise propagation calculation standard: ISO 9613.
- Ground attenuation factor: 0.5.
- Terrain parameters: The CanVEC database produced by Natural Resources Canada (NRCan) with 8 metre terrain intervals.

51. The project NIA predicted sound levels at nearby dwellings for a baseline case and an application case. The baseline case sound level at each dwelling was calculated as the sum of the ambient sound level and noise contribution from the existing and proposed regulated facilities, which include four compressor stations, one substation, and the RES project.³⁴ Cumulative sound levels for the application case accounted for the noise contribution from the proposed project wind turbines combined with the baseline case sound levels.³⁵

52. In response to an information request from the Commission, Stantec presented a comparison between the nighttime baseline case sound levels and the PSL. This comparison indicated that the nighttime baseline case sound levels were less than the nighttime PSL of 40 dBA at all the dwellings except for the dwelling identified as Receptor 73. The predicted nighttime baseline case sound level at Receptor 73, which includes a predicted noise contribution of 38.3 dBA from the RES wind project, was equal to the nighttime PSL of 40 dBA.³⁶ The application case cumulative sound levels were also compared with the PSL. This comparison indicated that the cumulative sound levels at all receptors were less than the nighttime PSL of 40 dBA, except for Receptor 73. The predicted cumulative sound level at Receptor 73 was

³² Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 14, paragraph 5.

³³ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 21, paragraph 2 and Table 3.

³⁴ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 22, paragraph 1.

³⁵ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 38, paragraph 1.

³⁶ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF pages 2-4, Table 5 Baseline Case Sound Levels.

40.1 dBA, which includes a predicted noise contribution of 23.9 dBA from the project and a predicted noise contribution of 38.3 dBA from RES wind project.³⁷

53. Stantec referred to a recent Commission decision that stated “compliance may be achieved in accordance with generally accepted principles of rounding”.³⁸ As such, it submitted that the cumulative sound level of 40.1 dBA could be considered in compliance with the nighttime PSL of 40 dBA.³⁹

54. In addition to Receptor 73, Stantec’s comparison of cumulative sound levels to the nighttime PSL indicated that the compliance margin⁴⁰ at three receptors (R03, R32, and 71) was less than or equal to 0.5 dB.⁴¹ Among these three receptors, Receptor R03 was not included in the RES wind project NIA and is located within 1.5 kilometres of the project wind turbines, Receptor R32 was included and labelled as 72 in the RES wind project NIA and is located within 1.5 kilometres of the project wind turbines, and Receptor 71 was included in the RES wind project NIA and is located beyond 1.5 kilometres but within five kilometres of the project wind turbines.

55. The noise contribution at Receptor R03 from the project was predicted to be 37.6 dBA. The nighttime sound levels at Receptor R32 from the project and from the RES wind project were predicted to be 35.3 dBA and 34.6 dBA, respectively. The nighttime sound levels at Receptor 71 from the project and from the RES wind project were predicted to be 37.8 dBA and 23.9 dBA, respectively.⁴²

56. The project NIA evaluated the potential for low frequency noise impact from the project. Section 3.2(11) of Rule 012 indicates that a low frequency noise issue exists if the following two conditions are met:

- The time-weighted average dBC – dBA value for the measured daytime or nighttime period is equal to or greater than 20 dB; and
- A clear tonal component exists at a frequency between 20 to 250 hertz.

57. The project NIA indicated that while the difference between dBC noise levels and dBA noise levels is predicted to be greater than 20 decibels at 36 of the 51 receptor locations, the turbine manufacturer confirmed that low frequency tonality was not present in the sound power

³⁷ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF pages 6-8.

³⁸ Decision 22563-D01-2018: Capital Power Generation Services Inc. – Halkirk 2 Wind Power Project, Proceeding 22563, Applications 22563-A001 and 22563-A002, April 11, 2018, PDF page 35, Section 175.

³⁹ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 6, bullet (a).

⁴⁰ PSL minus cumulative sound level

⁴¹ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 8, bullet (c).

⁴² Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF pages 6-8; Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 40, Table 9.

levels for the proposed wind turbines. Based on the low frequency noise analysis described above, Stantec submitted that low frequency noise effects are not expected at any receptors.⁴³

58. Stantec indicated that conservative assumptions were used in the noise modelling for the project. For example, all wind turbines were modelled:

- as operating continuously,
- as operating at maximum output 100 per cent of the time,
- with downwind condition from each noise source towards each receptor,
- with a conservative ground absorption factor of 0.5.⁴⁴

59. In response to an information request about construction noise, Capital Power stated that it would follow the mitigation measures recommended in Section 2.7 of Rule 012 to manage any potential noise impacts on nearby dwellings caused by construction activities, including directional drilling.⁴⁵

5.4 Environmental impacts

60. Capital Power retained Stantec to prepare an environmental evaluation report for the project (EE report).⁴⁶ The EE report was based on desktop information but was supplemented by vegetation, wetland and wildlife field work conducted in 2016 and 2017. Stantec described the environmental components present in the project area including terrain and soils, wetlands, groundwater, vegetation, environmentally sensitive areas, wildlife and wildlife habitat. It discussed and assessed the potential adverse effects of the project on these environmental components, and predicted that, with implementation of the proposed mitigation measures, the magnitude of the residual effects for all environmental components ranged from low to moderate and would be considered “not significant”.⁴⁷

61. Capital Power prepared a draft Post-Construction Monitoring Plan⁴⁸ and Construction and Operation Mitigation Plan⁴⁹ for the project to define specific mitigation measures, commitments, and best management practices to be implemented during project construction and operation. The Construction and Operation Mitigation Plan itemized and described the mitigation measures that would eliminate or reduce potential environmental effects of the project and would be incorporated into a project-specific environmental protection plan.

62. Capital Power stated that, prior to the start of construction, a project-specific environmental protection plan would be developed to ensure that the mitigation measures identified in the AUC application materials, environmental reports and field surveys, and any

⁴³ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 35, paragraphs 2-4.

⁴⁴ Exhibit 23049-X0053, Final Responses to AUC Round 1 IRs - Whitla Wind Project (12_18_2017), PDF page 14, bullet (a).

⁴⁵ Exhibit 23049-X0076, 23049-X0076 Whitla Wind Project - Responses to AUC Round 2 IRs - (February_16_2018 - Final Consolidated), PDF page 6.

⁴⁶ Exhibit 23049-X0103, Attachment_6_Environmental_Evaluation_Report_20180510_r01.

⁴⁷ Exhibit 23049-X0103, Attachment_6_Environmental_Evaluation_Report_20180510_r01, PDF page 3.

⁴⁸ Exhibit 23049-X0106, appC_pcmp_20180510.

⁴⁹ Exhibit 23049-X0105, appB_construction_and_operation_mitigation_plan_20180510.

other government approvals received for the project are communicated to the construction contractor and incorporated into construction and operation.⁵⁰

63. Capital Power provided a *Renewable Energy Referral Report* issued by AEP WM for the project as part of its application.⁵¹ The AEP WM *Renewable Energy Referral Report* concluded that the project posed a “high” unmitigated mortality risk to bats which could be significantly reduced to “moderate” with the implementation of post-construction mitigation measures. It further concluded that the project posed an overall “low to moderate” risk to wildlife and wildlife habitat.

64. The EE report described the methods and results of the pre-construction wildlife surveys. Wildlife survey types were determined using desktop wildlife habitat information such as Wildlife Sensitivity Data Maps, the Fish and Wildlife Management Information System (FWMIS) search results, the *2011 Wildlife Guidelines for Alberta Wind Energy Projects*⁵² and direct consultation with the AEP WM biologist. Where applicable, survey methods followed the *Sensitive Species Inventory Guidelines*.

65. The initial round of pre-construction wildlife field surveys conducted by Stantec in 2016 and 2017 included:

- spring and fall bird migration surveys (three survey visits per season)
- sharp-tailed grouse survey (two survey visits)
- raptor nest survey
- burrowing owl survey
- breeding bird surveys (two survey visits)
- spring and fall bat migration (acoustic surveys)

66. Stantec emphasized that it would continue to consult and co-ordinate with AEP WM throughout the project’s construction phase on appropriate pre-construction environmental assessments, the post-construction monitoring plan, and adaptive management strategies.⁵³

67. Stantec stated that all construction activities would be managed to prevent the introduction and spread of existing occurrences of noxious and prohibited noxious weeds in accordance with the Alberta *Weed Control Act* and regulations. It submitted that monitoring for occurrences within the project footprint would be implemented during construction, to prevent the introduction and spreading of weeds.⁵⁴

⁵⁰ Exhibit 23049-X0103, Attachment_6_Environmental_Evaluation_Report_20180510_r01, PDF page 2.

⁵¹ Exhibit 23049-X0005, AEP Renewable Energy Referral Report.

⁵² GOA (Government of Alberta). 2017. Wildlife Directive for Alberta Wind Energy Projects. Fish and Wildlife Policy, Alberta Environment and Parks.

⁵³ Exhibit 23049-X0105, appB_construction_and_operation_mitigation_plan_20180510.

⁵⁴ Exhibit 23049-X0103, Attachment_6_Environmental_Evaluation_Report_20180510_r01, PDF page 75.

68. On March 6, 2018, the Commission sent a letter to AEP WM requesting additional information on the potential cumulative environmental effects of the project as a result of its proximity to and overlap with the proposed Suncor and RES wind energy projects in the Forty Mile area. The Commission requested that AEP WM provide any additional comments and recommendations on the potential for cumulative impacts as a result of the proposed projects and any mitigation measures.⁵⁵

69. In its April 5, 2018 response to the Commission, AEP WM submitted that the current review process for assessing the risk to wildlife of renewable energy projects does not account for the cumulative risk of multiple projects and was therefore not considered in the individual renewable energy referral reports previously issued to the proponents.⁵⁶

70. AEP WM recommended addressing potential cumulative impacts to bird and bat populations in the County because the risk of impacts to bird and bat populations in the area would increase with the addition of each project. AEP WM submitted that applying mitigation measures for the three projects collectively would be more effective in managing the potential risk to bird and bat populations. AEP WM recommended specifically addressing the potential cumulative impacts on raptor mortality, ferruginous hawk nest disturbance, migratory bat mortality, and resident bat mortality related to bat roosts and hibernacula.

71. AEP WM made the following recommendations to address its concerns relating to cumulative impacts to birds:

- Reducing the overall number of turbines in close proximity to ferruginous hawk nests.
- Moving turbines to allow for unobstructed flyways between raptor nests and foraging grounds.
- Monitoring all ferruginous hawk nests during both construction and the initial three years of post-construction monitoring, including monitoring for the number of fledged young annually, nest occupancy, and mortalities.
- Compiling the results of the construction and post-construction ferruginous hawk monitoring for all three projects into one single report, and using these combined monitoring results to inform the development of an appropriate raptor mitigation plan for all three projects.⁵⁷

72. AEP WM also made several recommendations to address its concerns pertaining to cumulative impacts to bats, as follows:

- Completing annual bat acoustic monitoring surveys during the three year post-construction monitoring program.
- Conducting post-construction bat mortality monitoring at all turbines located within 1,000 metres of an identified bat roost or lake/reservoir. These turbines would be in

⁵⁵ Exhibit 23049-X0078, AUC letter to AEP.

⁵⁶ Exhibit 23049-X0091, AEP-WM's evaluation of cumulative wildlife effects for the three Forty Mile projects.

⁵⁷ Exhibit 23049-X0091, AEP-WM's evaluation of cumulative wildlife effects for the three Forty Mile projects, PDF page 5.

addition to (not counted towards) the requirement to conduct mortality monitoring at a minimum of one third of the turbines.

- Compiling the results of the post-construction bat mortality monitoring for all three projects into one single report, and using these combined monitoring results to inform the development of an appropriate bat mitigation plan for all three projects.
- All three projects would be in compliance at the time of commissioning, meaning that the estimated corrected migratory bat fatality rate for all three projects combined cannot exceed 500 migratory bats per year.⁵⁸

73. AEP WM submitted if only one of the Capital Power, RES or Suncor projects is in operation, the project impacts would be assessed in isolation and mitigation would be required following standard process in accordance with current AEP WM policy. AEP WM stated that it would evaluate cumulative impacts if two or more projects are in operation and would recommend further mitigation for all projects if mortality is found to be high. It further submitted that if project commissioning is separated by five years or more, monitoring must be continued or repeated in order to assess cumulative impacts, which could result in additional post-construction mitigation and monitoring.

74. In response to these recommendations, Capital Power submitted that the assessment of cumulative impacts is not currently required in Rule 007 or specified in AEP WM's Wildlife Directive. Capital Power stated that the proposed collective monitoring recommended by AEP WM would have a greater impact on the first project to construct as it may subject the proponent to additional monitoring beyond current policy requirements. If additional monitoring is required as a result of the commissioning of multiple projects, Capital Power submitted that it should be the responsibility of the developer to ensure its project is compliant.⁵⁹

75. Capital Power also stated that individual turbines have been sited greater than 500 metres apart to maintain spacing as recommended by AEP WM in the Wildlife Directive, and that this spacing would provide adequate unobstructed flight paths for raptors and ferruginous hawks to access foraging habitat within the project area.⁶⁰

76. Capital Power submitted that to assess the impact to bat populations, bat mortality limits should be considered on a per turbine basis. Capital Power stated that the term "local area" as used in the Bat Mitigation Framework is not clearly defined and therefore, it would not be reasonable to impose the 500 bat fatalities threshold on the project. It noted that it is committed to working with AEP WM to implement any required mitigation measures based on the results of post-construction monitoring.⁶¹

⁵⁸ Exhibit 23049-X0091, AEP-WM's evaluation of cumulative wildlife effects for the three Forty Mile projects, PDF pages 7-8.

⁵⁹ Exhibit 23049-X0112, Capital Power Cover Letter to the AUC re Response to AUC's Information Requests Round 5.

⁶⁰ Exhibit 23049-X0111, Attachment 1 - Capital Power Response to the AUC Information Requests Round 5, PDF page 10.

⁶¹ Exhibit 23049-X0111, Attachment 1 - Capital Power Response to the AUC Information Requests Round 5, PDF page 8.

77. To reduce the potential for migratory bat mortalities, Capital Power committed to conducting annual maintenance for individual turbines during the peak August period of migratory bat activity. Capital Power submitted that it would implement bat mitigation, if necessary, based on the results of post-construction monitoring, as outlined in the Post-Construction Monitoring Plan and AEP WM *Renewable Energy Referral Report*, which would be consistent with AEP WM's Wildlife Directive.⁶²

78. Capital Power submitted that alternate turbine sites 84, 85 and 86, which were identified in the AEP WM *Renewable Energy Referral Report* as being in close proximity to a bat roost site, have been removed from the proposed project design layout to reduce the overall risk of bat mortality.

79. Capital Power concluded that only project-specific conditions and commitments with regard to monitoring and mitigation should be imposed by the Commission. It noted that approval of the project should be based on existing rules, requirements, and guidelines, and submitted that if concerns are identified during post-construction monitoring, conditions of approval could address any cumulative impacts associated with the project.⁶³

80. With respect to reclaiming temporary impacts caused during construction, Capital Power stated that site clean-up and reclamation would be conducted concurrently with construction. Compacted soils would be de-compacted and stripped soils conserved and replaced and re-contoured at the temporary workspaces. Disturbed areas would be re-seeded as appropriate or left in a condition specified by the landowner.

81. Capital Power confirmed in response to a Commission information request that the project is ultimately required to obtain a reclamation certificate under current legislation, and that recent amendments to the *Conservation and Reclamation Regulation*,⁶⁴ enacted under the *Environmental Protection and Enhancement Act*,⁶⁵ state that land used as part of a renewable energy operation is now considered "specified land" under that legislation.

82. Capital Power estimated the decommissioning and reclamation cost of Phase 1 to be \$5.6 million, with an expected salvage value of \$5.05 million. For Phase 2, it estimated a decommissioning and reclamation cost of \$3.3 million and an expected salvage value of \$3 million. The Commission also asked Capital Power whether it has budgeted for, or otherwise set aside, any funds for the purpose of covering the costs of its planned decommissioning and reclamation activities. Capital Power responded that it sets aside a financial provision to cover the costs of planned decommissioning and reclamation activities.⁶⁶

5.5 Other approvals

83. Capital Power submitted applications for the project to NAV Canada and Transport Canada. NAV Canada completed its review and issued a letter on December 15, 2017, advising that it has no objections to the project. Transport Canada stated that its Aeronautical Assessment Obstruction Evaluation Form 26-0427 (form) is not an approval or permit but is used

⁶² Exhibit 23049-X0111, Attachment 1 - Capital Power Response to the AUC Information Requests Round 5.

⁶³ Exhibit 23049-X0112, Capital Power Cover Letter to the AUC re Response to AUC's Information Requests Round 5.

⁶⁴ Alta Reg 115/1993.

⁶⁵ RSA 2000, c E-12.

⁶⁶ Exhibit 23049-X0118, Capital Power's Response to AUC Round 7 Information Request.

to assess the need and application of marking and lighting for objects that may pose a hazard to aviation and to determine conformance to Airport zoning regulations. Transport Canada informed Capital Power that only a proponent who has received approval from the Commission to construct a proposed wind power plant should submit the form to it for review.

84. Capital Power contacted the Meteorological Service of Canada, a branch of Environment and Climate Change Canada, which indicated that the project's potential interference with weather radar would not be severe and that it did not have objections to the project. Capital Power also contacted the Department of National Defence – Air Defence, Navigational Aid and Major Military Installations and Radiocommunication Systems, which filed a letter of non-objection to the project on April 26, 2018.

85. Capital Power received an approval under the *Historical Resources Act* with conditions on August 17, 2017.⁶⁷ The conditions of approval include maintaining a one-kilometre setback from the edge of the Forty Mile Coulee and conducting a historic resources impact assessment for paleontological resources, in the form of a monitoring program at turbine foundation sites where the depth of the recent sedimentary cover is less than three metres. Capital Power submitted an updated historical resources application to Alberta Culture and Tourism on October 18, 2017, to show the final locations of all project infrastructure,⁶⁸ and received approval on November 28, 2017.⁶⁹

6 Commission findings

86. In considering Capital Power's applications, the Commission reviewed the applicable provisions of the *Hydro and Electric Energy Act* and considered whether the applications met the requirements of Rule 007 and are in the public interest, in accordance with Section 17 of the *Alberta Utilities Commission Act*.

87. Under Rule 007, applicants must provide technical and functional specifications of the project, environmental and land-use information, including an NIA. The Commission has determined that the technical, siting, emissions, environmental and noise aspects of the power plant required under Rule 007 have been met.

88. The project's wind turbines and substation have been sited on private lands that are primarily cultivated. Siting a proposed project on previously-disturbed land reduces the potential for adverse environmental effects resulting from the project. The Commission is satisfied that in siting the project, Capital Power considered proximity to residences and environmental features.

89. In addition, Rule 007 requires an applicant to conduct a participant involvement program before a facilities application is filed with the Commission, and it is the applicant's responsibility to meet the notification and consultation requirements under Rule 007. The Commission has reviewed the information provided by Capital Power on its consultation activities and considers that Capital Power's participant involvement program was successful; there are no outstanding public or industry objections or concerns with the project.

⁶⁷ *Historical Resources Act* approval number 4941-17-0016-001.

⁶⁸ Exhibit 23049-X0100, Attachment_B_whitla_wind_auc_application_amendment_fnl_20180510, PDF page 20.

⁶⁹ Exhibit 23049-X0056, Whitla Wind - Round 1 IR - Enclosure 3.

90. The evidence filed by Capital Power with respect to consultation demonstrates that accurate project information was presented to landowners and that they were given an opportunity to have their concerns heard. Capital Power also contacted stakeholders after they filed statements of intent to participate in an attempt to resolve their concerns. In addition, a number of stakeholders withdrew their objections to the project. The Commission is therefore satisfied that Capital Power's participant involvement program complies with the notification and consultation requirements outlined in Rule 007.

Noise impacts

91. The purpose of Rule 012 is to ensure that the noise from a facility, measured cumulatively with noise from other energy-related facilities, does not exceed the PSL calculated in accordance with the rule. The PSL is the maximum daytime or nighttime sound level, measured at a point 15 metres from a dwelling in the direction of the facility. As noted previously, the PSL values for this project determined in accordance with Rule 012 are 40 dBA L_{eq} nighttime and 50 dBA L_{eq} daytime for all dwellings.

92. Capital Power's NIA for the project included the sound levels for the proposed project turbines and substation, and noise contribution from third-party energy-related facilities in proximity to the project. The sound power level and spectrum for the proposed wind turbines were established by Stantec based on data provided by the turbine manufacturer, Vestas, as is contemplated in Rule 012. In addition, the sound power level and spectrum for the proposed project substation were estimated by Stantec using theoretical methods from acoustic literature. The Commission considers that the approach taken was reasonable.

93. The Commission finds that Stantec used reasonable methods to identify and characterize third-party energy-related facilities with the potential to influence cumulative sound levels at the receptors considered in the project NIA. It is also satisfied that the sound power levels used in the project NIA to represent third-party energy-related facilities are reasonable and acceptable.

94. As described previously, the project is adjacent to, and partially overlaps, the RES wind project approved in Decision 22966-D01-2018 and the Suncor project currently proposed in the area. The RES project is located to the north of Capital Power's project, and the proposed Suncor project is located to the east of Capital Power's project. With respect to cumulative noise impacts, as described above, the Commission's ruling on the joint process for the Capital Power, RES and Suncor projects described above,⁷⁰ set out the requirements for a project to be deemed complete. Once a project was deemed complete, all subsequent, proximate projects were required to incorporate the noise, or predicted noise from that project into their NIAs. As noted above, the Commission deemed the Capital Power project to be complete after it had deemed the RES project to be complete. As a result, the Capital Power project was required to incorporate the predicted noise contribution from the RES project into its NIA.

95. The Commission considers that the NIA conducted for Capital Power's project properly included the noise contribution from the RES project in its assessment of cumulative sound levels at dwelling receptors, as required by the Commission's ruling on joint process described above. It also notes that the project NIA complied with that ruling by using the common

⁷⁰ Exhibit 23049-X0077, AUC Ruling on further process.

modelling parameters and inputs agreed upon by the applicants of the three proposed wind projects in the area.⁷¹

96. The Commission is satisfied that the project's NIA includes a sufficient analysis of potential low frequency noise issues from the project based on Rule 012 requirements. Based on the results of the low frequency noise analysis, the Commission accepts that low frequency noise issues are unlikely to exist at dwelling receptors.

97. As noted above, the purpose of Rule 012 is to ensure that the noise from a facility, measured cumulatively with noise from other energy-related facilities, does not exceed the PSL calculated in accordance with Rule 012. In this case, Rule 012 requires that the noise from Capital Power's proposed project, measured cumulatively with other energy-related facilities in the area, including the RES project approved in Decision 22966-D01-2018, does not exceed the PSL.

98. Capital Power's NIA indicates that the predicted cumulative sound level at Receptor 73 is 40.1 dBA, whereas the nighttime PSL for the project is 40 dBA. The Commission must therefore determine if the project complies with Rule 012 by assessing whether the predicted cumulative sound level at Receptor 73 is compliant with the nighttime PSL. In response to an information request, Capital Power submitted that based on the principles of rounding, and as accepted in a previous Commission decision, the predicted cumulative sound level at Receptor 73 is compliant with the nighttime PSL of 40 dBA.⁷²

99. Rule 012 defines the concept of "no net increase" as "[t]he logarithmic addition of sound pressure levels when predicting noise where the sum does not exceed the PSL by 0.4 dBA."⁷³ The predicted nighttime baseline case sound level at Receptor 73 is equal to the nighttime PSL of 40 dBA,⁷⁴ whereas the predicted application case cumulative sound level is 40.1 dBA.⁷⁵ Accordingly, the net increase at Receptor 73 caused by the project is predicted to be 0.1 dB. Using the definition of "no net increase" in Rule 012, the Commission finds that the 0.1 dB increase of sound level at Receptor 73 caused by the project has resulted in no net increase in sound level at Receptor 73.

100. In accordance with its findings in Decision 22563-D01-2018: *Capital Power Generation Services Inc. Halkirk 2 Wind Power Project*, the Commission considers that using "generally accepted principles of rounding" is an acceptable approach to demonstrate noise compliance at Receptor 73.⁷⁶ Given the circumstances, the Commission finds that both the "no net increase" and "generally accepted principles of rounding" approaches are reasonable methods of demonstrating compliance with the nighttime PSL at Receptor 73. The Commission accordingly

⁷¹ Exhibit 23049-X0077, AUC Ruling on further process, the table on PDF page 6.

⁷² Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 6.

⁷³ Rule 012 : *Noise Control*, PDF page 36.

⁷⁴ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF pages 2- 4, Table 5 Baseline Case Sound Levels.

⁷⁵ Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF pages 6-8.

⁷⁶ Decision 22563-D01-2018: Capital Power Generation Services Inc. Halkirk 2 Wind Power Project (April 11, 2018).

finds the predicted nighttime cumulative sound level at Receptor 73 to be compliant with the nighttime PSL of 40 dBA.

101. Furthermore, the Commission recognizes that the project will not be a significant noise contributor at Receptor 73, because the predicted noise contribution from the project at Receptor 73 (23.9 dBA) is lower than the nighttime ambient sound level at this dwelling (35 dBA) and also lower than the predicted noise contribution from the RES wind project (38.3 dBA).⁷⁷

102. In regard to other receptors in the project area, the Commission finds that the predicted nighttime cumulative sound levels at three dwellings (R03, R32 and 71) are close to the nighttime PSL of 40 dBA (i.e. within 0.5 dBA).

103. The Commission finds that the project will not be a significant noise contributor at Receptor 71 because the predicted noise contribution from the project at Receptor 71 (23.9 dBA) is lower than the nighttime ambient sound level at this dwelling (35 dBA) and lower than the predicted noise contribution from the RES wind project (37.8 dBA).⁷⁸

104. Noise contribution from the project at Receptor R03 was predicted to be 37.6 dBA.⁷⁹ Because it is located more than 1.5 kilometres from any RES wind turbines, Receptor R03 was not included in the RES wind project NIA. Noise contribution from the Capital Power project and from the RES wind project at Receptor R32 were predicted to be 35.3 dBA and 34.6 dBA, respectively.⁸⁰ The Commission therefore finds that the project is a major noise contributor at receptors R03 and R32.

105. The Commission considers that Stantec used conservative assumptions in its noise modelling for the project, such as a ground absorption factor of 0.5, all turbines operating at 100 per cent at all times, and that all receptors are downwind from all turbines. The Commission likewise accepts that the results presented in the project NIA are likely conservative.⁸¹ However, the project's compliance with the PSL is of paramount importance to the Commission. Given the 40.1 dBA predicted cumulative sound level at Receptor 73 and the relatively small margin of compliance at three dwellings (R03, R32 and 71), the Commission finds that it would be reasonable to require Capital Power to conduct post-construction comprehensive sound level (CSL) monitoring for the project to confirm compliance.

106. The Commission considers numerous criteria when selecting locations for the post-construction CSL survey. Such criteria include the project layout, receptor locations, predicted cumulative sound levels and margin of compliance, noise contribution of the project and the neighboring projects, conservatism of noise modelling for the project, as well as whether there were issues and concerns brought forward by local residents in the study area.

⁷⁷ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 33; Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 4.

⁷⁸ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 33; Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 4.

⁷⁹ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 31.

⁸⁰ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 32; Exhibit 23049-X0115, Whitla Wind Project - Final Responses to AUC Round 6 IRs (June_6_2018), PDF page 3.

⁸¹ Exhibit 23049-X0099, Attachment_A_123512223_whitla_nia_20180510, PDF page 38.

107. The Commission finds that the project is not a significant noise contributor at Receptor 71 or Receptor 73, compared to the RES wind project. In the absence of stakeholder concerns about project sound levels, the Commission will not require post-construction CSL surveys at these two dwellings as a condition of approval.

108. The project is a major noise contributor at receptors R03 and R32; the margins of compliance at these two dwellings are 0.5 dB and 0.3 dB respectively. Because of these two factors, the Commission will direct Capital Power to conduct post-construction CSL surveys at these two dwellings to ensure noise compliance of the project.

109. Accordingly, the Commission finds that should it approve the project, it would place the following conditions on the project's approval:

- a. Capital Power shall conduct post-construction comprehensive noise studies and an evaluation of low frequency noise at receptors R03 and R32 under representative operating conditions, and in accordance with Rule 012. Capital Power shall file all studies and reports relating to the post-construction noise survey and low frequency noise evaluation with the Commission within one year of connecting the project to the Alberta Interconnected Electric System.

110. In the Commission's joint process ruling addressing the cumulative effects of the Capital Power, Suncor and RES projects, it stated with respect to cumulative noise effects:

Once an application is deemed complete, the Commission will issue a notice. In these circumstances, the notice will specify the date when the application was deemed complete. Any applications deemed complete after that point must take into account the preceding projects (those for which notice of application has been issued) for the purpose of calculating the cumulative sound level in Rule 012, and incorporate "proposed facilities" into NIAs and any applicable noise mitigation plans.⁸²

111. In accordance with its previous ruling, the Commission considers that projects must implement noise mitigation measures in accordance with the order in which they were deemed complete. In these circumstance, this means that should RES' project come into operation and result in cumulative noise levels exceeding Rule 012 requirements, it will be incumbent upon Capital Power to implement mitigation measures to address those effects.

112. Overall, the Commission finds that the project NIA dated May 10, 2018, prepared by Stantec and submitted by Capital Power, meets the requirements of Rule 012. Based on the results presented in the project NIA, the Commission accepts that the project will likely be compliant with the daytime and nighttime PSLs at all receptor locations assessed.

Environmental effects

113. With respect to the project's environmental effects, the Commission finds that the implementation of the proposed mitigation measures outlined in the EE report, Post-Construction Monitoring Plan, and Construction and Operation Mitigation Plan are essential to minimizing the project's impacts on the environment. The Commission acknowledges that a project-specific

⁸² Exhibit 23049-X0077, AUC Ruling on further process, paragraph 17.

Environmental Protection Plan will be developed prior to the start of construction and will be implemented during construction and operation.

114. The Commission acknowledges Capital Power's commitment to conducting pre-construction nest surveys to identify nests if the project is approved. The Commission considers that the survey area boundary for any pre-construction nest search surveys must be extensive enough to cover AEP WM's recommended setbacks for the nests of species at risk with the potential to nest within or near the project area.

115. The Commission also notes that in an effort to reduce the overall risk of bat mortality, Capital Power has eliminated alternate turbine sites 84, 85 and 86 which were identified in the AEP WM *Renewable Energy Referral Report* as being in close proximity to a bat roost site.

116. The Commission acknowledges that to reduce the potential for migratory bat mortalities, Capital Power has committed to conducting its annual maintenance activities for individual turbines during the peak August period of migratory bat activity. The Commission finds that this may help nominally reduce annual bat mortalities.

117. Capital Power has also committed to monitoring, for at least the first three years of operation, all ferruginous hawk nests within the project area during construction for potential breeding impacts, as recommended by AEP WM. The Commission acknowledges that all project infrastructure has been sited greater than 1,000 metres from ferruginous hawk nests and that turbines have been sited greater than 500 metres apart to provide reasonable flight pathways for raptor species based on the requirements outlined in AEP WM's Wildlife Directive.

118. In rendering its decision on the applications, the Commission has taken into account the various commitments made by Capital Power with respect to mitigating the project's effects on the environment, including those described above. The Commission expects Capital Power to uphold all of its commitments and to monitor the effectiveness of its proposed mitigation measures. If mitigation measures are unsuccessful, the Commission expects Capital Power to develop and implement additional mitigation to minimize adverse effects on the environment.

119. Based on the evidence on the record and having regard to the recommendations in AEP WM's *Renewable Energy Referral Report*, and the various commitments made by Capital Power in its application materials, the Commission determines that, should it approve the project, it would impose the following conditions:

- a. Capital Power will abide by all of AEP WM's requirements, recommendations, and directions outlined in the AEP WM's *Renewable Energy Referral Report*⁸³ for the project and any additional commitments made in its responses to information requests from AEP WM.
- b. The siting, construction and operation of the project's infrastructure will meet all of AEP WM's recommended minimum setbacks from wetlands and watercourses and wildlife species at risk habitat features for the project, unless AEP WM has agreed to one or more of the following: a reduced setback; alternative mitigation in the project's *Renewable Energy Referral Report*; or approval under the *Water Act* for the project.

⁸³ Exhibit 23049-X0005, AEP Renewable Energy Referral Report.

- c. If any changes are made to any infrastructure associated with the project, the construction schedule, or the proposed wildlife mitigation measures, Capital Power will submit these changes to AEP WM for its further review to ensure wildlife and wildlife habitat are protected.
- d. Capital Power shall abide by all of the commitments and recommendations included in its Post-Construction Monitoring Plan, Construction and Operation Mitigation Plan and Environmental Protection Plan developed for the project. In accordance with the Post-Construction Monitoring Plan, Construction and Operation Mitigation Plan and AEP WM's requirements, Capital Power will complete a minimum of three years of post-construction wildlife monitoring and submit a report on the results annually to AEP WM. If further mitigation is required/recommended by AEP WM following its review of the post-construction wildlife monitoring surveys and reports, Capital Power will complete additional post-construction wildlife monitoring surveys and reports to assess the efficacy of the additional mitigation, as directed by AEP WM.
- e. Capital Power will submit to the Commission annually a copy of the project's post-construction wildlife monitoring report along with any correspondence from AEP WM summarizing its views on the report.
- f. Following completion of the post-construction wildlife monitoring program, Capital Power will communicate to AEP WM the discovery of any carcasses of species at risk which might be observed near project infrastructure during operation and maintenance and if required, implement mitigation measures in consultation with AEP WM.
- g. In addition to any representative turbines in the project area chosen for its post-construction bat carcass surveys in consultation with AEP WM in accordance with the stratified random sample method, Capital Power shall include any turbines that are located near potential roost sites, reservoirs and areas of foraging habitat which would have a higher risk of bat mortality. Turbines monitored under this requirement would not be counted towards the one third selected using the stratified random sample method.
- h. Capital Power shall implement mitigation measures, in consultation with AEP WM, if (i) the results of the post-construction bat carcass monitoring program indicate that the estimated corrected rate of bat fatalities for the Capital Power project exceeds an average of four fatalities per turbine per year; or if (ii) upon the direction of AEP WM, the estimated corrected rate of bat mortalities cumulatively in the local area, as defined by AEP WM, exceeds a threshold determined by AEP WM.
- i. Capital Power shall schedule any non-emergency, regularly scheduled (e. g. annual or semi-annual) maintenance activity during the peak August period of migratory bat activity to reduce potential migratory bat mortalities.

120. With respect to abandonment and reclamation of the project at its end of life, the Commission notes that its predecessor, the Alberta Energy and Utilities Board, commented on the financial capability of power plant proponents in the context of its deregulated electric generation market, as follows:

“...the public and the province are entitled to the assurance that significant liabilities such as decommissioning costs, reclamation costs and potential public liability for injury or damage to persons or property are properly addressed in power plant applications.”⁸⁴

121. In that decision, the Board required the proponent to provide a report estimating decommissioning costs and the means of securing the required funds, as well as insurance, for a natural gas-fired power plant.

122. In this case, Capital Power has estimated the expected costs of decommissioning and reclaiming each phase of its proposed project, and the comparative expected salvage value of those phases could cover a significant portion of those costs. Further, Capital Power has confirmed that it accounts for the expected costs of decommissioning and reclamation activities. As a result of the analysis provided by Capital Power and its consideration of the expected costs at the facility’s end of life, the Commission considers that Capital Power has adequately considered its responsibility to decommission its project and undertake sufficient reclamation activities on the land affected by the project. The Commission is assured that Capital Power has considered and accounted for the significant liabilities resulting from the decommissioning and reclamation activities that will be required at the project’s end of life.

123. The Commission expects that Capital Power will comply with all applicable requirements for conservation and reclamation of the project site under the *Environmental Protection and Enhancement Act* at the end of the project’s life, including the requirement to obtain a reclamation certificate. However, if for any reason, at the time of decommissioning, there are no statutory reclamation requirements in place for wind electric power generating facilities, Capital Power will be required to submit a reclamation plan to the Commission for its review and approval.

124. Accordingly, the Commission finds that if approved, the project will be subject to the following condition:

- Capital Power will comply with current applicable reclamation standards at the time of decommissioning. If no legislative requirements pertaining to reclamation are in place at the time of decommissioning, Capital Power will submit a reclamation plan to the Commission for approval.

125. Finally, Capital Power submitted in response to an information request in this proceeding that it was willing to participate in a working group with the proponents of the other two projects in the area, along with AEP WM, for the purposes of sharing wildlife information and collaborating where necessary to address cumulative effects in conjunction with a broader wind industry consultation process.⁸⁵ As noted in Decision 22966-D01-2018, RES testified that it

⁸⁴ Decision 2001-101: AES Calgary ULC 525-MW Natural Gas-Fired Power Plant Application 2001113, December 11, 2001, section 9.1.3, pages 48-49.

⁸⁵ Exhibit 23049-X0120, Whitla Wind Project – Final Cover Letter and Response to AUC Round 8 IR (08_09_2018).

supported participating in a collaborative working group with other wind developers in the area and AEP WM if other wind projects become operational, to ensure that wildlife data is shared and mitigation measures implemented for the project contribute to an overall reduction in residual risk to wildlife.⁸⁶

126. The Commission acknowledges that cumulative impacts on bird and bat populations in the area, as identified by AEP WM, may occur as other projects are in the area are constructed. However, the Commission considers the nature and extent of the potential cumulative impacts identified by AEP WM will only be known if and when other projects are constructed in the area. Because of the uncertain nature of the potential cumulative impacts that may arise, including uncertainty surrounding whether other projects are applied-for, approved or constructed in the area, the Commission considers that a working group comprised of the project proponents in the area and AEP WM could be an effective means of considering and addressing potential cumulative effects that may arise.

127. The Commission expects that Capital Power will form a working group with RES and AEP WM for the purpose of sharing wildlife information amongst the proponents and with AEP and implementing mitigation measures as necessary to address any such cumulative effects. The Commission considers that it would be useful for all of the proponents of other projects proposed in the area to participate in such a working group, including Suncor.

128. Accordingly, should the project be approved, the following would be a condition of approval:

- Capital Power will abide by any requirements, recommendations and directions provided by AEP WM, whether in the context of a working group or otherwise, including any additional monitoring and mitigation that AEP WM considers necessary to address cumulative effects occurring from two or more projects within the local area, as defined by AEP WM.

129. With the implementation of the mitigation measures committed to by Capital Power, the recommendations outlined by AEP WM in its *Renewable Energy Referral Report*, and the adherence to the conditions outlined in this decision, the Commission concludes that the project's effects on the environment can be mitigated to an acceptable degree.

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

⁸⁶ Decision 22966-D01-2018: *BHEC-RES Alberta G.P. Inc., Forty Mile Wind Project* (August 30, 2018), paragraph 154.

7 Decision

131. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the applications and grants Capital Power the approval set out in Appendix 1 – Whitla Wind Project – Power Plant Approval 23049-D02-2018 – August 30, 2018 (Appendix 1 will be distributed separately). The Commission’s decision to approve the project is subject to the following conditions:

- a. Capital Power shall conduct post-construction comprehensive noise studies and an evaluation of low frequency noise at receptors R03 and R32 under representative operating conditions, and in accordance with Rule 012. Capital Power shall file all studies and reports relating to the post-construction noise survey and low frequency noise evaluation with the Commission within one year of connecting the project to the Alberta Interconnected Electric System.
- b. Capital Power will abide by all of AEP WM’s requirements, recommendations, and directions outlined in the AEP WM’s *Renewable Energy Referral Report*⁸⁷ for the project and any additional commitments made in its responses to information requests from AEP WM.
- c. The siting, construction and operation of the project’s infrastructure will meet all of AEP WM’s recommended minimum setbacks from wetlands and watercourses and wildlife species at risk habitat features for the project, unless AEP WM has agreed to one or more of the following: a reduced setback; alternative mitigation in the project’s *Renewable Energy Referral Report*; or approval under the *Water Act* for the project.
- d. If any changes are made to any infrastructure associated with the project, the construction schedule, or the proposed wildlife mitigation measures, Capital Power will submit these changes to AEP WM for its further review to ensure wildlife and wildlife habitat are protected.
- e. Capital Power shall abide by all of the commitments and recommendations included in its Post-Construction Monitoring Plan, Construction and Operation Mitigation Plan and Environmental Protection Plan developed for the project. In accordance with the Post-Construction Monitoring Plan, Construction and Operation Mitigation Plan and AEP WM’s requirements, Capital Power will complete a minimum of three years of post-construction wildlife monitoring and submit a report on the results annually to AEP WM. If further mitigation is required/recommended by AEP WM following its review of the post-construction wildlife monitoring surveys and reports, Capital Power will complete additional post-construction wildlife monitoring surveys and reports to assess the efficacy of the additional mitigation, as directed by AEP WM.
- f. Capital Power will submit to the Commission annually a copy of the project’s post-construction wildlife monitoring report along with any correspondence from AEP WM summarizing its views on the report.
- g. Following completion of the post-construction wildlife monitoring program, Capital Power will communicate to AEP WM the discovery of any carcasses of species at

⁸⁷ Exhibit 23049-X0005, AEP Renewable Energy Referral Report.

risk which might be observed near project infrastructure during operation and maintenance and if required, implement mitigation measures in consultation with AEP WM.

- h. In addition to any representative turbines in the project area chosen for its post-construction bat carcass surveys in consultation with AEP WM in accordance with the stratified random sample method, Capital Power shall include any turbines that are located near potential roost sites, reservoirs and areas of foraging habitat which would have a higher risk of bat mortality. Turbines monitored under this requirement would not be counted towards the one third selected using the stratified random sample method.
- i. Capital Power shall implement mitigation measures, in consultation with AEP WM, if (i) the results of the post-construction bat carcass monitoring program indicate that the estimated corrected rate of bat fatalities for the Capital Power project exceeds an average of four fatalities per turbine per year; or if (ii) upon the direction of AEP WM, the estimated corrected rate of bat mortalities cumulatively in the local area, as defined by AEP WM, exceeds a threshold determined by AEP WM.
- j. Capital Power shall schedule any non-emergency, regularly scheduled (e.g. annual or semi-annual) maintenance activity during the peak August period of migratory bat activity to reduce potential migratory bat mortalities.
- k. Capital Power will comply with current applicable reclamation standards at the time of decommissioning. If no legislative requirements pertaining to reclamation are in place at the time of decommissioning, Capital Power will submit a reclamation plan to the Commission for approval.
- l. Capital Power will abide by any requirements, recommendations and directions provided by AEP WM, whether in the context of a working group or otherwise, including any additional monitoring and/or mitigation that AEP WM considers necessary to address cumulative effects occurring from two or more projects within the local area, as defined by AEP WM.

132. Pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants Capital Power the approval set out in Appendix 2 – Substation Permit and Licence 23049-D03-2018 – August 30, 2018, to construct and operate the Shamrock 1018S Substation (Appendix 2 will be distributed separately).

Dated on August 30, 2018.

Alberta Utilities Commission

(original signed by)

Anne Michaud
Vice-Chair

Appendix A – Standing ruling



Appendix A -
Standing ruling.pdf

(consists of 4 pages)

Appendix B – Ruling on further process



Appendix B - Ruling
on further process.pdf

(consists of 9 pages)

Appendix C – Project location

Section	Township	Range	Meridian
24 (NW), 26, (NW) 27 (SW), 29 (NE), 33 (NW, SE, SW)	7	9	W4M
20 (NE), 21 (NE, NW), 25 (NE, NW), 26 (NE, NW, SE, SW), 27 (SE, SW), 28 (NE, NW, SE, SW), 29 (NE, NW), 32 (NE, SE, SW), 33 (NE, SE), 34 (SE, SW), 35 (NE, NW, SE, SW), 36 (SE, SW)	7	10	W4M
1 (NE), 4 (NE, NW, SE, SW), 6 (NE, NW, SE, SW), 9 (SE, SW), 11 (NE), 12 (NE, SE), 13 (NE, SE, SW), 15 (NW, SW), 17 (NE, NW, SE, SW), 18 (NE, SE), 19 (NE, SE), 28 (NW, N half of SW), 29 (SE, SW), 30 (SE), 31 (NE, N half of NW, SW)	8	9	W4M
3 (NE, NW, SE, SW), 4 (SE), 5 (NE, NW, SE, SW), 6 (NE, SW), 7 (NE, NW, SE, SW), 8 (NE, NW, SE, SW), 9 (NE, NW, SE, SW), 10 (NE, NW, SE, SW), 12 (NE, NW, SE, SW), 13 (NE, NW, SE), 14 (NE, NW, SE, SW), 15 (NW, SE, SW), 16 (NE, NW, SE, SW), 17 (NE, NW, SE, SW), 18 (NE, NW, SE, SW), 19 (NE, NW, SE, SW), 20 (NW, SW), 21 (NW, SE, SW), 22 (NE, NW, SE, SW), 23 (NE), 24 (NE, NW, SE, SW), 25 (NW, SW), 27 (NE, NW, SE, SW), 28 (NE, NW, SE, SW), 29 (NE, NW, SE, SW), 30 (NE, NW, SE, SW), 31 (NW, SE, SW), 32 (NE, NW, SE, SW), 33 (NE, NW, SE, SW), 34 (NE, NW, SE, SW), 35 (SE, SW), 36 (NE, SE, SW)	8	10	W4M
12 (NE, SE), 13 (NE, NW, SE, SW), 24 (NE, NW, SE, SW), 25 (NE, NW), 34 (SE), 36 (NE, SE, SW)	8	11	W4M
6 (SE, SW), 7 (NE, SE, SW)	9	10	W4M
12 (NE, SE)	9	11	W4M

Appendix D – Summary of Commission directions with required deliverables

This section is intended to provide a summary of those conditions which require follow-up with the Commission; it is not intended to summarize all of the conditions imposed on the applicant. This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. Capital Power shall conduct post-construction comprehensive noise studies and an evaluation of low frequency noise at receptors R03 and R32 under representative operating conditions, and in accordance with Rule 012. Capital Power shall file all studies and reports relating to the post-construction noise survey and low frequency noise evaluation with the Commission within one year of connecting the project to the Alberta Interconnected Electric System.....Paragraph 109
2. Capital Power will submit to the Commission annually a copy of the project's post-construction wildlife monitoring report along with any correspondence from AEP WM summarizing its views on the report.....Paragraph 119

April 19, 2018

To: Persons registered on Proceeding 23049

Capital Power (Whitla) LP
Capital Power (Whitla) L.P., Whitla Wind Project Application
Proceeding 23049
Applications 23049-A001, 23049-A002

Ruling on standing

1. In this ruling, the Alberta Utilities Commission decides whether to hold an oral public hearing to consider applications by Capital Power (Whitla) LP (Capital Power) relating to its 298.8 MW Whitla Wind Project located in the County of Forty Mile No. 8, Alberta.
2. The Commission must hold a hearing if persons who have filed a statement of intent to participate (SIP) in Proceeding 23049 have demonstrated that they have rights that may be “directly and adversely affected” by the Commission’s decision. Such a person may participate fully in the hearing, including giving evidence, questioning of witnesses, and providing argument. This permission to participate is referred to as standing.
3. The Commission issued a notice of application for Proceeding 23049 on November 6, 2017. The Commission received statements of intent to participate from 1576834 Alberta Ltd. (Benign Energy Canada II Inc. (BECI)), Renewable Energy Systems Canada Inc. (RES), John Crooymans, Suncor Energy Inc. (Suncor) and Nathan Hofmann. Mr. Crooymans, Suncor, and RES subsequently requested to withdraw their interventions.
4. The Commission has authorized me to communicate its decision on standing. The Commission has decided that BECI and Nathan Hofmann do not have standing in this proceeding.

Statements of intent to participate

Nathan Hofmann

5. Mr. Hofmann stated in his SIP that he and his wife own and operate an aerial application service called Top Crop Applicators Inc. out of the Bow Island Airport. Mr. Hofmann identified the legal land description of the Bow Island Airport in his SIP and stated that it is greater than 1,000 metres from the proposed project. Mr. Hofmann explained that the Commission’s decision on the application will impact his ability to serve existing customers within a two mile radius of any approved wind turbine. He also stated that proposed turbines within 10 miles of the Bow Island Airport raise concerns that will affect the safety of his flight crew due to large number of movements required to and from the Bow Island Airport.

Benign Energy Canada II Inc.

6. BECI filed a SIP in each of Proceedings 23049, 22966 and 23030, along with maps of the area.¹ BECI stated that it “registers the required SIP in order to follow the regulatory process and AUC decisions only as they pertain to same, given BECI intervener status is not qualified for”. BECI then listed a number of questions and concerns with the three applications, including concerns with the potential cumulative noise and environmental effects of the proposed projects, the Commission process to be followed in considering those applications, and the transmission system’s ability to accommodate the projects.

7. BECI subsequently filed an updated SIP in each of the three proceedings that included additional maps, information from Ducks Unlimited Canada, the US Fish and Wildlife Service, the Saskatchewan Ministry of Environment, Environment and Climate Change Canada, and which identified additional environmental concerns with the projects.²

8. Capital Power filed a letter requesting that the Commission deny BECI’s request for standing in Proceeding 23049.³ Capital Power submitted that BECI acknowledges in its SIP that it does not qualify for standing in the proceeding, and submitted that BECI does not meet the standing test as its SIP discloses no legal right or interest that would be potentially affected by the Commission’s decision on Capital Power’s application. Capital Power noted that BECI stated that the purpose of the SIP is to follow the regulatory process, and that anyone monitoring the Commission’s website may do so. Capital Power submitted that participation rights or standing, including the right to submit evidence, must not “be founded on a mere desire to follow a regulatory proceeding”.

9. BECI subsequently filed a letter on the record of Proceedings 23049, 22966 and 23030⁴ responding to what it characterized as “false accusations” made by Suncor⁵ on the record of Proceeding 23030. The letter included additional concerns with the three projects as well as information relating to tailings ponds. The letter did not include a specific response to Capital Power’s correspondence described above.

10. BECI filed additional correspondence for the stated purpose of supporting the AUC’s assessment of the cumulative effects of the three projects. BECI included comments on cumulative noise assessments, information relating to the AESO’s generation queue as of 2009, and information relating to the Oldman 2 Wind Project.⁶

¹ Exhibits 23049-X0025, 23049-X0026, 23049-X0027, 23049-X0028, 23030-X0044, 23030-X0045, 23030-X0046, 23030-X0047, 22966-X0038, 22966-X0040, 22966-X0041, 22966-X0042.

² Exhibits 23049-X0031, 23049-X0032, 23049-X0033, 23049-X0034, 23049-X0035, 23030-X0056, 23030-X0057, 23030-X0058, 23030-X0059, 23030-X0060, 22966-X0053, 22966-X0054, 22966-X0055, 22966-X0056, and 22966-X0057.

³ Exhibit 23049-X0060.

⁴ Exhibits 23049-X0061, 23030-X0067, and 22966-X0071.

⁵ Exhibit 23030-X0063.

⁶ Exhibit 23049-X0066, 22966-X0086, and 23030-X0071.

How the Commission determines standing

11. Section 9(2) of the *Alberta Utilities Commission Act* sets out how the Commission must determine standing:

(2) If it appears to the Commission that its decision or order on an application *may directly and adversely affect the rights of a person*, the Commission shall

- (a) give notice of the application in accordance with the Commission rules,
- (b) give the person a reasonable opportunity of learning the facts bearing on the application as presented to the Commission by the applicant and other parties to the application, and
- (c) hold a hearing. [emphasis added]

12. The meaning of the key phrase, “directly and adversely affect,” has been considered by the Alberta Court of Appeal on multiple occasions, and the legal principles set out by the court guide the Commission when it determines standing. Standing is determined by application of a two-part test. The first test is legal: a person must demonstrate that the right being asserted is recognized by law. This could include property rights, constitutional rights or other legally recognized rights, claims or interests. The second test is factual: a person must provide enough information to show that the Commission’s decision on the application may “directly and adversely affect” the person’s right, claim or interest.⁷

13. To determine if a right is “directly” affected, the court has said that “[s]ome degree of location or connection between the work proposed and the right asserted is reasonable.”⁸ When considering the location or connection, the Commission looks at factors such as residence and the frequency and duration of the applicant’s use of the area near the proposed site.⁹

14. The Commission summarized court decisions relating to the meaning of the phrase “directly and adversely affected” in a decision issued in 2015 and concluded that to pass the test for standing, “the potential effects associated with a decision of the Commission must be personal rather than general and must have harmful or unfavourable consequences.” The Commission further commented that the court decisions “highlight the need for persons seeking standing to demonstrate the degree of connection between the rights asserted and potential effects identified.”¹⁰

15. The Commission assesses the potential for a “direct and adverse effect” on a case-by-case basis. It considers the specific circumstances of each proposed project application and each statement of intent to participate that it receives. In the past, the Commission has decided that general or broad concerns about a proposed project will generally be insufficient to establish

⁷ *Cheyne v Alberta (Utilities Commission)*, [2009 ABCA 94](#); *Dene Tha’ First Nation v Alberta (Energy and Utilities Board)*, [2005 ABCA 68](#) [*Dene Tha’*].

⁸ *Dene Tha’*.

⁹ *Sawyer v Alberta (Energy and Utilities Board)*, [2007 ABCA 297](#).

¹⁰ [Decision 3110-D02-2015](#), Market Surveillance Administrator Allegations against TransAlta Corporation et al., Phase 2 Preliminary matters; Standing and Restitution, Proceeding 3110, September 18, 2015.

standing, unless a more specific link or connection to the demonstrated or anticipated characteristics of a proposed project is established.

Ruling

16. The Commission finds that Mr. Hofmann has not met the first part of the standing test, as he has not demonstrated that he has a legal right which could be affected by the Commission's decision on the application. In order to meet the first part of the standing test, a person must assert a right recognized by law. The Commission considers that Mr. Hofmann is asserting an economic interest in providing aerial spraying services to a particular area, or customer base. The Commission is not satisfied that this economic interest is a right recognized by law, and accordingly finds that Mr. Hofmann does not meet the first part of the standing test. Notwithstanding, the Commission notes, with respect to the second part of the standing test, that the airport is located approximately 16 kilometres from the closest wind turbine location proposed in Capital Power's application, and Capital Power's proposed project is located perpendicular to the airport's runway, rather than in line with the takeoff and landing path. Accordingly, the Commission considers that Mr. Hofmann has not demonstrated that he holds a legal right which may be directly and adversely affected by the Commission's decision on Capital Power's application.

17. The Commission finds that BECI has not provided sufficient information to demonstrate that it holds rights that may be directly and adversely affected by the Commission's decision in this proceeding. BECI noted in its initial SIP that it does not qualify for intervenor status, and it has not provided any additional information which would contradict this conclusion. The Commission therefore denies standing to BECI in Proceeding 23049.

18. Notwithstanding BECI's initial submission that it registered a SIP to follow the regulatory process, the Commission notes that BECI has filed voluminous information on the record of Proceedings 23049, 22966, and 23030, as described above. The Commission has considered that information to the extent necessary to determine whether BECI meets the its standing test, and will not consider it for any purpose outside the limited context of determining BECI's standing.

19. Because no parties have demonstrated that they have rights that may be "directly and adversely affected" by its decision, the Commission will not be holding an oral hearing to consider the applications filed by Capital Power pertaining to the 298.8 MW Whitla Wind Project.

20. Please contact me at 403-592-4385 or at Kim.Macnab@auc.ab.ca if you have any questions about the matters addressed in this ruling.

Regards,

Kim Macnab
Commission Counsel

March 6, 2018

To: Parties currently registered on Proceedings 22966, 23030, and 23049

Three wind energy projects in the County of Forty Mile proposed by Renewable Energy Systems Canada Inc., Suncor Energy Inc. and Capital Power Whitla LP

Proceedings 22966, 23030, and 23049

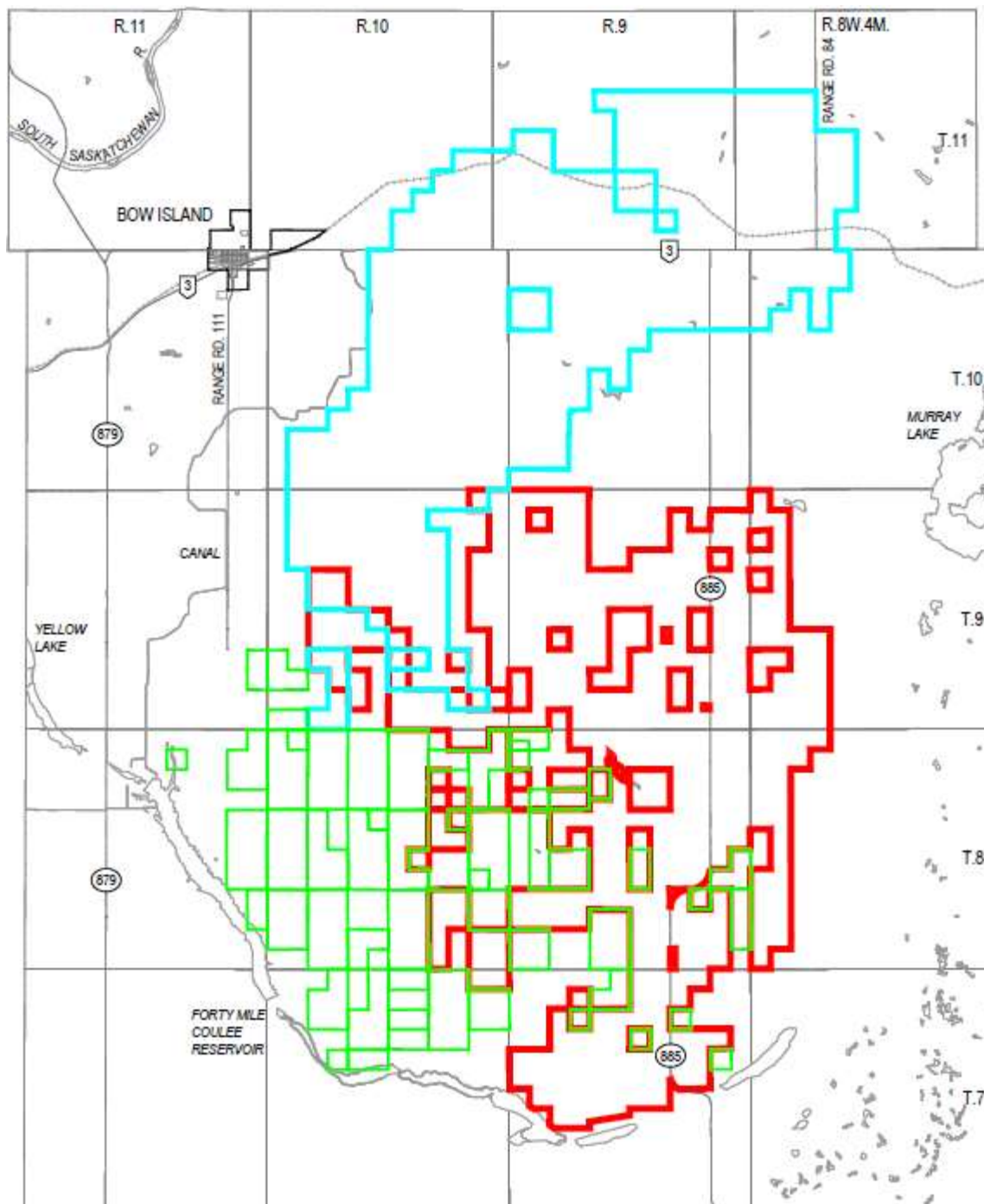
Applications 22966-A001, 23030-A001 to 23030-A005, and 23049-A001 to 23049-A002

Ruling on further process

1. The Commission received applications from Renewable Energy Systems Canada Inc., (RES) Suncor Energy Inc. (Suncor) and Capital Power Whitla LP (Capital Power) for the following wind energy projects located in the County of Forty Mile:

- RES's 398.48-megawatt (MW) Forty Mile Wind Power Project;
- Suncor's 400-MW Forty Mile Wind Power Project; and
- Capital Power's 298.8-MW Whitla Wind Project.

2. As shown in the map on the following page, the three projects are adjacent to each other and, in some cases, overlap.



- Proceeding 22966 - Forty Mile Wind Project, Berkshire Hathway Energy Company and Renewable Energy Systems Alberta Limited Partnership
- Proceeding 23030 - Forty Mile Wind Project, Suncor Energy Inc.
- Proceeding 23049 - Whitley Wind Project, Capital Power Corporation

3. Given the large scale of the projects and their overlapping nature, the Commission decided to hold a technical meeting and requested pre-filed written submissions from the three applicants. Due to scheduling conflicts the Commission substituted a written process for the technical meeting.

4. In its notice of technical meeting, the Commission requested that the parties address the following topics in their submissions:

- How the Commission should consider the cumulative impacts from the three wind projects.
- The need for representative noise impact assessments (NIAs) that take into account all three proposed projects.
- Whether the NIAs should employ common modelling parameters, common dwelling labels and common reporting formatting.
- Noise mitigation plans if cumulative sound levels at any noise receptors are predicted to exceed permissible sound levels.
- The need for environmental impact reporting that takes into account the impact of all three projects.
- Whether the environmental studies can use consistent and similar techniques, equipment and personnel for surveys of the three projects, particularly for the pre-construction acoustic bat activity surveys and for the post-construction bird and bat mortality surveys.
- Determination on final turbine locations and turbine models, including adequate spacing for migratory birds and bats between the turbines of different projects.
- Transmission proliferation and the potential for sharing transmission interconnections.
- Potential to combine the three proceedings.
- Timing for finalized applications.

5. RES, Suncor and Capital Power each provided written submissions on the above topics in early January.¹ All three applicants subsequently responded to a round of information requests (IRs) issued by the Commission and filed written reply submissions.²

¹ Exhibit [22966-X0073](#), BHE RES AUC Technical meeting submissions (January 5, 2018); Exhibit [23030-X0069](#), Suncor letter to AUC regarding pre-filing materials in advance of technical meeting (January 5, 2018); Exhibit [23049-X0063](#), Written submissions of Capital Power (Whitla) LP re technical meeting (January 5, 2018).

² Exhibit [22966-X0091](#), BHEC-RES reply submission (February 2, 2018); Exhibit [23030-X0078](#), Suncor - 40 Mile - AUC IR response reply (February 2, 2018); Exhibit [23049-X0075](#), Reply argument of Capital Power – AUC technical session (February 2, 2018).

6. The goal of this preliminary technical meeting process was to establish a fair and effective schedule and process for the review and consideration of the three projects having regard to the following: (i) the three applications were filed within weeks of each other,³ (ii) the proposed projects are located in the same area and overlap, and (iii) each project is relatively large, between 300 and 400 MW. The Commission considers this factual situation to be unique, and as such sought input from parties on whether a specific process tailored to these circumstances is required.

7. The Commission has considered the process that it will follow to review these three projects in this instance, and has authorized me to communicate its decision as set out below.

Separate proceedings for the applications

8. In its notice of technical meeting, the Commission requested submissions on the potential to combine the three proceedings, as well as the timing for finalized applications. Capital Power and RES submitted that a single hearing would be procedurally unfair to the applicants. Suncor submitted that the parties should enter into negotiations for the purpose of resolving issues surrounding cumulative noise impacts, which would likely render a combined proceeding unnecessary. However Suncor submitted that if that process failed, the Commission may have to implement a combined process specifically to determine noise-related matters.

9. The Commission recognizes that the advantages of a combined proceeding could include the ability for interveners affected by all three projects to streamline their intervention, and the potential benefits of assessing the projects' cumulative effects.

10. However, there may be significant disadvantages to a combined proceeding. The three projects have been proposed by separate entities and are not at the same stage of the application process, nor do they necessarily share significant common factual or legal issues. Although there may be some interveners common to all three projects, there may also be interveners and objections specific to each proceeding. In a combined process, one applicant's decisions, such as changing its final turbine layout or amending the project, could have a significant impact on another applicant's project. As a result, the regulatory process for all three projects could be unduly delayed as a result of the actions of only one project proponent, thereby prejudicing the other applicants.

11. The Commission has consequently determined that the potential benefits of a combined proceeding are outweighed by the potential prejudice posed by such a process, and that it will not combine the three applications into a single proceeding. Each project will be assessed in a separate process. The Commission will consider the potential cumulative effects of the three projects, including cumulative noise and environmental effects, in the manner set out below.

Assessment of cumulative noise impacts: when applications are "deemed complete"

12. The purpose of the Commission's Rule 012: *Noise Control* is to ensure that the noise from a facility, measured cumulatively with noise from other energy-related facilities, does not exceed the permissible sound level (PSL) calculated in accordance with the rule. Measured

³ The applications were registered on the Commission's eFiling System as follows: (i) RES on September 22, 2017; (ii) Suncor on October 22, 2017; and (iii) Capital Power on October 26, 2017.

independently of each other, the NIAs submitted for the three proposed projects each appear to individually meet the PSL for the receptors (dwellings) identified, as stipulated in Rule 012. However, because the three NIA's do not take into account noise from the other projects proposed for the area, it is possible that the PSL at some receptors may, and likely will, be exceeded if more than one of the projects is approved.

13. The Commission's Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments* does not currently contain requirements facilitating the consideration of cumulative impacts for projects located in proximity to each other and applied for within a similar timeframe. Rule 007 therefore does not provide additional guidance for the process to be followed in these circumstances.

14. Rule 012 is designed to consider cumulative noise impacts by requiring new facilities to take into account existing noise in the area when determining compliance with the rule. The cumulative sound level as defined in Rule 012 includes: (i) the comprehensive sound level;⁴ (ii) noise from "proposed facilities"; (iii) noise from energy-related facilities that have been approved but not yet constructed; and (iv) the predicted noise from the applicant's proposed facility. Rule 012 defines a proposed facility as "a facility for which an application has been deemed complete by the Commission, but is not yet approved or for which an approval has been issued, but is not yet constructed." The current approach under Rule 012 therefore requires applicants to include noise impacts from other applied-for projects only once those applications are "deemed complete".

15. In the present circumstances, three applications for overlapping wind projects were submitted to the Commission within weeks of each other. Although there is an ongoing consultation process with respect to potential revisions to Rule 012,⁵ and future amendments to that rule may or may not include criteria for when an application is "deemed complete", there is currently no definition in Rule 012 that addresses the present situation.

16. In light of the unique facts before it, the Commission will apply a specific definition of "deemed complete" to the three wind projects proposed in proceedings 22966, 23030, and 23049 for the purposes of assessing noise impacts under Rule 012. For these three proceedings, an application will be "deemed complete" when: (i) a final turbine layout has been submitted; and (ii) the Commission is satisfied that the applicant has provided all of the information required by Rule 007 for a wind power plant.

- i. **Final layout:** notwithstanding that Rule 007 does not expressly require a final turbine layout, the Commission considers that, in these singular circumstances, a finalized layout is necessary to allow the Commission to assess whether persons may be directly and adversely affected by the applications. This includes that there are no remaining alternative turbine locations. More particularly, the Commission considers that in order to assess the potential impacts of the projects in these circumstances, it requires NIAs that are based on final turbine locations.

⁴ The comprehensive sound level includes ambient sound level, noise from existing facilities and energy-related facilities and should exclude abnormal noise events.

⁵ [Bulletin 2017-11](#), AUC Rule 012: Noise Control – Consultation on noise issues, December 13, 2017.

- ii. **Rule 007 completeness:** this means that the Commission is satisfied that all of the information requirements of Rule 007 have been met. For further clarity, the Commission's IR process does not necessarily have to be concluded for an application to have met the information requirements in Rule 007. The Commission may, after an application is deemed complete, ask IRs requesting information that is in addition to Rule 007 requirements, or for the purpose of clarifying or testing the information provided. However, until all of the answers to the Commission's IRs seeking information necessary to meet Rule 007 requirements have been provided, the application cannot be "deemed complete". This would include, for example, the signoff required under Rule 007, Section 3.2, PP10 from Alberta Environment and Parks (AEP) for new wind project applications, any Commission IRs related to that signoff, and the noise impact assessment required under Rule 007, Section 3.2, PP27.

17. Once an application is deemed complete, the Commission will issue a notice. In these circumstances, the notice will specify the date when the application was deemed complete. Any applications deemed complete after that point must take into account the preceding projects (those for which notice of application has been issued) for the purpose of calculating the cumulative sound level in Rule 012, and incorporate "proposed facilities" into NIAs and any applicable noise mitigation plans.

Assessment of cumulative noise impacts: common NIA elements

18. In the notice of technical meeting, the Commission also asked the applicants whether the NIAs should employ common modelling parameters, common dwelling labels and common reporting formatting. The applicants provided a collaborative response on common modelling parameters and turbine labels for their respective NIAs to facilitate the Commission's comparison and review.⁶ The applicants did not agree on the use of common receptor/dwelling labels and all submitted that the use of common reporting formatting was not necessary.

19. The Commission finds that the common modelling parameters agreed to by the applicants and set out in the table below are reasonable and will facilitate its review of the projects' respective NIAs.

Proposed NIA common modelling parameter	Proposed NIA common input value
Ground Absorption	0.50
Max Radius of Influence (Search radius)	5 kilometres
Terrain	The CanVEC database produced by Natural Resources Canada (NRCan) with standard 8 metre terrain intervals.
Receptor Height	One-storey dwellings will be modelled using receptors at 1.5 metres above ground level. Two-storey dwellings will be modelled using receptors at 4.5 metres above ground level.
Third Party Facilities (TPFs)	Five (5) TPFs have been identified and parties have agreed to use the same noise emission values for

⁶ [23049-X0071](#), Capital Power Responses to AUC Joint Technical Meeting IRs, Attachment 2, PDF page 14; [22966-X0089](#), BHE RES AUC IR response, Appendix 1, PDF page 15; [23030-X0074](#), Suncor cover letter joint IR responses, PDF pages 1-2.

	<p>these TPFs. All projects will use the following agreed upon noise emissions from these TPFs:</p> <ul style="list-style-type: none"> • Pine Cliff Energy Ltd. 16-2-7-9- W4 Compressor Station (RWDI Measured) • Encana Corporation 15- 19-7-9-W4 Compressor Station (RWDI Measured) • AltaLink substation 13- 33-7-9-W4 Substation (RWDI Measured) • Craft Oil Ltd 15-13-8-10-W4M Compressor Station (Stantec Measured) • Bellatrix Exploration Compressor Station (Golder Measured)
Relative Humidity	70 %
Temperature	10° C
Model Version (CADNA A)	2017

20. The parties agreed on the following common labelling system for individual wind turbines: (i) RES turbines will start with “B” (B-1, B-2, etc.); (ii) Suncor turbines will start with “S” (S-1, S-1, etc.); and (iii) Capital Power turbines start with “C” (C-1, C-2, etc.).

21. The parties appeared to agree in principle with the use of common labelling for dwellings/receptors, but did not agree to provide a unique identifier for each receptor affected by the three projects using a number and letter identifying the project causing the effect. Suncor submitted that consensus must first be reached on an approach to determine which projects affect which receptors. Capital Power submitted that any project design changes could create an unworkable and cumbersome process. RES proposed a concordance table process in each NIA rather than a negotiated common receptor list, as the parties discussed consistent labelling and UTM coordinates for receptors but could not reach final agreement on those values.

22. Since they filed their submissions to the Commission, Capital Power and RES have submitted updated NIAs⁷ that use all of the agreed-upon common modelling parameters in the table above, as well as the common labelling system for individual wind turbines. Suncor has submitted an updated NIA⁸ which uses most of the agreed-upon common modelling parameters, except ground absorption, terrain parameters, and search radius. All of the applicants have not used a consistent dwelling/receptor labelling system, but in some cases have identified where receptors are common to multiple projects.⁹

23. The Commission considers that identifying receptors at the same locations for multiple projects would be useful to facilitate its assessment of the projects and that the most efficient method of achieving this goal is for all three applicants to provide a table of concordance identifying any receptors which are the same as those identified in another project’s NIA. The Commission directs the parties to file this concordance by March 20, 2018. Further, as Suncor has not updated its NIA to include all of the agreed-upon common modelling parameters, the Commission directs Suncor to provide an updated NIA as of the date that it has eliminated its alternate turbine locations thus finalizing its turbine layout.

⁷ Exhibit 23049-X0076, Responses to AUC Round 2 IRs; Exhibit 22966-X0093, BHEC-RES Forty Mile NIA Update.

⁸ Exhibit 23030-X0003.01, Attachment 11 – Noise Impact Assessment.

⁹ E.g. Exhibit 23049-X0076, Responses to AUC Round 2 IRs, PDF page 32, Table 1, Receptor IDs 68, 69, and 71 are identified as common with the RES project. Receptor R35 is identified as receptor 72 from the RES project.

24. Finally, the Commission does not find it necessary for the applicants to use a common reporting format in their respective NIAs. The Commission considers that such a direction would not yield additional information and would create an added administrative burden without a significant corresponding benefit.

Assessment of cumulative environmental impacts

25. The Commission also requested submissions on the need for environmental impact reporting that takes into account the impact of all three projects, and whether the environmental studies can use similar techniques, equipment and personnel.

26. All three applicants submitted that the current regulatory requirements in place are sufficient to address the environmental impacts for each project. RES and Capital Power both noted the Rule 007 requirement for AEP signoff of each project's environmental evaluation for the purpose of ensuring compliance with AEP requirements. AEP assesses each project to ensure compliance with the *Wildlife Directive for Alberta Wind Energy Projects*, and this process provides a sufficient understanding of the projects' environmental effects, both individually and collectively, such that adequate monitoring and mitigation measures can be developed and implemented. Suncor submitted that the environmental evaluation of each project was completed in accordance with the current regulatory regime and that a cumulative assessment of these projects should not be required. The applicants all submitted that the environmental studies for all three projects already use consistent techniques where necessary, and that any further similarities in techniques, equipment or personnel are either unnecessary or impractical, particularly with respect to the potential for conflicts of interest and other issues surrounding the use of common personnel.

27. The Commission finds that it would not be useful for the applicants to redo their environmental evaluations for the purpose of using common techniques, equipment and/or personnel, because it would not provide additional information to assist in its determination of the environmental effects of the projects. Given the work already performed in accordance with current regulatory requirements, it is not necessary for the applicants to conduct a single, cumulative environmental assessment in order to consider the environmental effects of the projects.

28. By way of separate letter, the Commission will instead request that AEP provide comments and recommendations on the potential cumulative effects of the projects and mitigation measures that may be considered to address those effects.

Transmission proliferation

29. Finally, the Commission requested comments on transmission proliferation and the potential for sharing transmission interconnections. Capital Power and Suncor commented that there are limited opportunities to mitigate transmission proliferation in the area by sharing interconnection infrastructure. All three applicants submitted that interconnection matters are generally left to the transmission facility owner, in consultation with market participants and the Alberta Electric System Operator (AESO), and are therefore outside the scope of the present applications.

30. The Commission recognizes that there is a specific process for the development of transmission facilities to connect generation facilities to the Alberta interconnected electric system. That said, Section 2 of the *Hydro and Electric Energy Act* (HEEA) provides that one of its purposes is to provide for the “economic, orderly and efficient” generation and transmission of electric energy in Alberta. In considering an application for a power plant under Section 11 of the HEEA, the Commission must consider whether the construction or operation of the proposed power plants is in the public interest, having regard to its social, economic, and environmental effects. The public interest test in Section 11 must be considered in light of HEEA’s stated purpose to provide for the efficient generation and transmission of electric energy in the province. In certain circumstances, this may include consideration of whether proposed projects will contribute to the duplication of transmission infrastructure.

31. Notwithstanding that the Commission has not yet received applications for the transmission facilities required to connect the three projects to the Alberta interconnected electric system, the Commission strongly encourages the applicants to continue to explore the possibility of shared transmission facilities with the transmission facility owner(s) and the AESO.

32. Please contact me at 403-592-4385 or at Kim.Macnab@auc.ab.ca if you have any questions about the matters addressed in this ruling.

Regards,

Kim Macnab
Commission Counsel