



**PACE Bang Energy LP,
on behalf of 2518397 Alberta Ltd.**

Caroline Solar Farm

February 28, 2025

Alberta Utilities Commission

Decision 28295-D01-2025

PACE Bang Energy LP, on behalf of 2518397 Alberta Ltd.

Caroline Solar Farm

Proceeding 28295

Application 28295-A001

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1 Executive summary

1. In this decision, the Alberta Utilities Commission approves the application from PACE Bang Energy LP (PACE), on behalf of 2518397 Alberta Ltd., to construct and operate a 14.67-megawatt (MW) solar power plant, designated as the Caroline Solar Farm, and to connect the power plant to the FortisAlberta Inc. electric distribution system, on privately owned land within the village of Caroline in Clearwater County.

2. The Caroline Concerned Citizens Group (CCCG) objected to the project. The Commission has weighed those concerns against the benefits of the project and the various mitigative measures proposed by PACE, and imposed conditions where it believes necessary. The Commission finds that approval of the project is in the public interest for the reasons set out in detail in this decision. The Commission's reasons include the following:

- The project is located within the municipal boundary for the Village of Caroline and, subject to conditions, is not expected to cause significant adverse environmental impacts.
- Following an update to its participant involvement program (PIP) with stakeholders, PACE's PIP generally achieved the objectives of consultation and notification set out in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* requirements.
- The project is predicted to comply with the permissible sound levels as defined in Rule 012: *Noise Control*. The compliance margins at receptors are predicted to be no less than 1.6 dBA.
- As conditioned in this decision, PACE's approach to reclamation is sufficient. The Commission expects PACE to fully reclaim the project and bear the costs of doing so.
- PACE has committed to installing a three-row vegetation screen (also referred to an "eco-buffer") along parts of 50th Street and 52nd Avenue to mitigate visual impacts and to maintain the vegetation screen throughout the life of the power plant.
- PACE is required to set the project fence at a minimum of 40 metres from adjacent residences.
- The project does not conflict with municipal land use planning documents and bylaws and the Village of Caroline did not oppose the project.

- The project will create temporary construction jobs, create full-time operation and maintenance jobs, generate contributions to the municipal tax base annually, and reduce carbon emissions during the project life.

2 Background

3. PACE, on behalf of its general partner and intended approval holder 2518397 Alberta Ltd., initially filed an application to construct and operate a 16.1-MW solar power plant and to connect the power plant to the FortisAlberta Inc. electric distribution system (together, the Caroline Solar Farm or project).¹ PACE later clarified that the project's capacity is 14.67 MW.² FortisAlberta confirmed that it is willing to connect the project to its electric distribution system.

4. The project will consist of approximately 7,000 Hi-MO5 LR5-72HBD 535~555M 540Wp, bifacial photovoltaic poly-silicon panels, on a 29-degree fixed-tilt racking system facing the southwest and four SMA MV, 4,000 kilowatt inverters. It will also include an electrical house, access roads, and a parking area for construction and temporary laydown and will be surrounded by a chain-link fence.

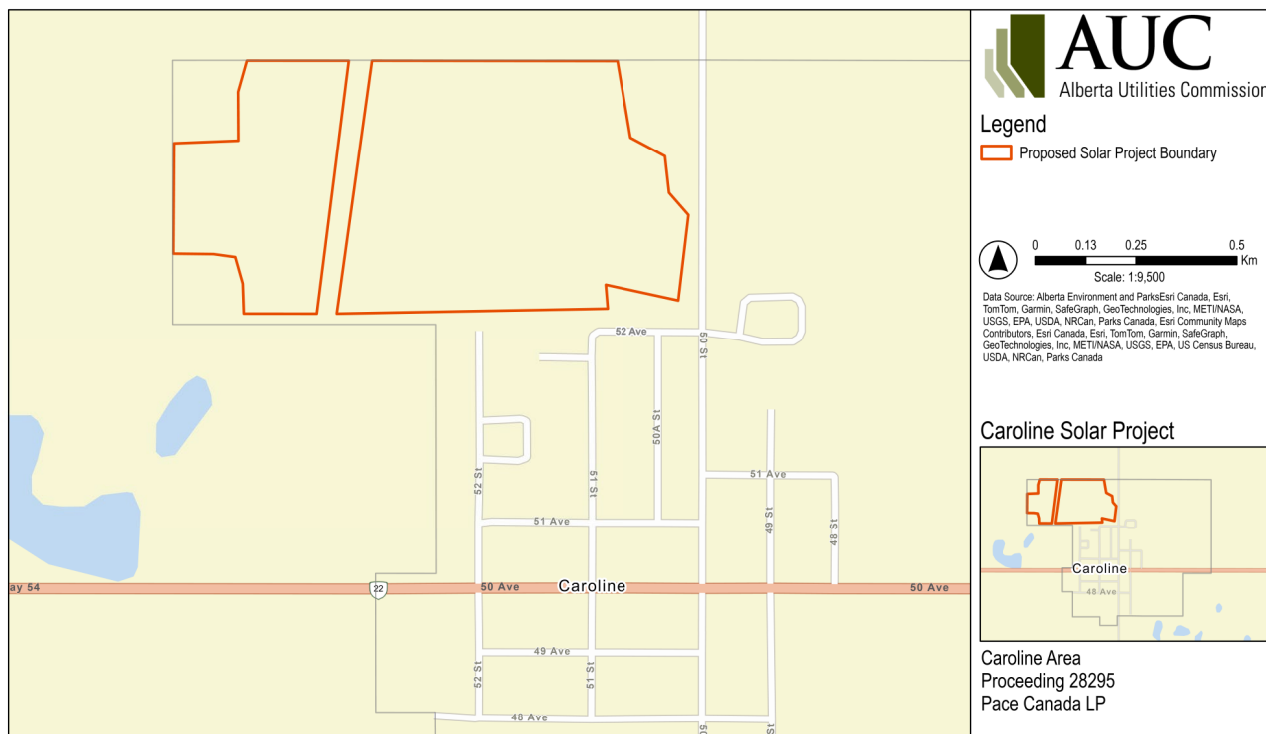
5. The project is sited on approximately 57 acres of privately-owned cultivated land within the municipal boundary of the Village of Caroline (the Village) in Clearwater County (the County).³ More specifically, the project is located within the northeast quarter of Section 14, Township 36, Range 6, west of the Fifth Meridian, as shown in Figure 1.

¹ Exhibit 28295-0002, Fortis letter of non objection.

² Exhibit 28295-0248, Application Update from PACE, PDF page 5.

³ On July 24, 2024, the Village of Caroline and Clearwater County announced their approval of an Amalgamation Report, which was a proposal to the Minister of Municipal Affairs to amalgamate the two municipalities. Pending a Ministerial Order in Council, the amalgamation was projected to come into effect on January 1, 2025. At the close of the record of this proceeding, the municipalities had not amalgamated.

Figure 1. Proposed Caroline Solar Farm area



6. The Commission issued a notice of application on September 15, 2023, and subsequently received a number of statements of intent to participate from interested parties. The Commission issued several rulings that granted standing to individual stakeholders. These interveners formed the CCCG, which ultimately represented 118 registered members.⁴

7. On February 8, 2024, the Commission placed the proceeding into abeyance due to concerns that PACE did not carry out its PIP, particularly personal consultation with relevant stakeholders, in accordance with Rule 007.⁵ The Commission directed PACE to re-examine its PIP and update, as necessary, its notice, personal consultation, and any other application materials.

8. On July 29, 2024, PACE filed a PIP update report and subsequently the Commission resumed consideration of the application.⁶ PACE filed amendments to its application materials which included among other items, changes to the project size and construction schedule, ownership structure and project maps. PACE stated that the construction start date would be January 31, 2025, with an in-service date of January 24, 2026. PACE expects actual construction to take three to four months.⁷

⁴ Exhibit 28295-0299, CCCG Group Submissions and Expert Reports, PDF page 5.

⁵ Exhibit 28295-0235, Application abeyance letter.

⁶ Exhibit 28295-0245, AUC letter – Resumption of Proceeding 28295.

⁷ Transcript, Volume 1, page 141, lines 15 to 22.

3 Discussion and findings

9. The Commission is an independent regulator tasked with considering the approval of applications for power plants, substations and energy storage facilities. Section 17 of the *Alberta Utilities Commission Act* sets out a broad public interest mandate, requiring the Commission to consider a proposed project's social and economic effects, and its effects on the environment, in addition to any other effects it may or must consider in reaching a conclusion on whether that project is in the public interest. The Commission can, and does, take into account many factors when executing this broad mandate.

10. For the reasons below, the Commission finds that approval of the project is in the public interest having regard to its social, economic, environmental and other effects. In the following subsections, the Commission discusses its findings regarding public consultation, project siting, noise and visual impacts, fire risks, property value impacts, security and reclamation, and project benefits.

3.1 Does the participant involvement program meet Rule 007 requirements?

11. Rule 007 sets out guidelines that an applicant should consider when creating its PIP. Stakeholders should be provided a meaningful opportunity to understand the potential impacts of a project and to raise any concerns they may have in respect of the project. If an applicant is unable to contact a stakeholder, reasonable attempts to establish contact should be demonstrated.

12. As discussed in Section 2, the Commission placed the proceeding into abeyance to provide PACE the opportunity to ensure its PIP met the requirements of Rule 007.⁸ PACE re-examined its PIP and subsequently filed a PIP update report,⁹ and the Commission resumed the proceeding.¹⁰ The report summarized PIP activities, including additional personal consultation activities carried out. The report also summarized unresolved objections and steps PACE took to address these objections.¹¹ In oral argument, PACE stated that it adapted elements of the project in response to landowner feedback, including the project's proximity to residences, the plant list for the vegetation screen, and the use of helical piles in construction.¹²

13. The Commission finds that PACE's PIP update meets Rule 007 requirements. The detailed log of consultations and notifications is sufficient, and PACE modified elements of its project, including proximity to residences, the vegetation screen, and piling selection, in response to certain concerns about the project. The Commission is satisfied PACE engaged with residents appropriately and made reasonable efforts to resolve their concerns.

14. The Commission expects PACE to continue to work with stakeholders throughout the life cycle of the project to address any concerns as they arise. PACE should provide contact information for project representatives so stakeholders are aware of who they need to contact if they have any concerns.

⁸ Exhibit 28295-X0235, Application abeyance letter.

⁹ Exhibit 28295-X0248, 20240816 Application Update from PACE.

¹⁰ Exhibit 28295-0245, AUC letter – Resumption of Proceeding 28295.

¹¹ Exhibit 28295-X0237, PACE PIP Report Update, July 29, 2024, PDF pages 9-62.

¹² Transcript, Volume 5, pages 590-591.

3.2 Does the project conflict with municipal land use authorities?

15. The Commission must have regard for a municipality's land use authority and planning instruments when deciding if approval of a project is in the public interest.¹³ Land use planning instruments are relevant to the Commission's consideration because they indicate, from the municipality's perspective, the nature of the past, present, and future uses of a proposed site or lands in close proximity to a site. The Commission has previously stated that a municipality's land use authority and the land use regime established under its bylaws form part of the Commission's overall public interest determination.¹⁴

16. The existing land use authorities of the Village, which include the Caroline Land Use Bylaw (LUB), the Caroline Municipal Development Plan (MDP), and the Caroline-Clearwater Intermunicipal Development Plan (IDP), are relevant for the purpose of assessing if the project is in the public interest. CCCG identified that on July 24, 2024, the Village and the County announced that they intend to amalgamate on January 1, 2025, pending a Ministerial Order in Council.¹⁵ As a result, the Commission asked information requests of the County in this proceeding. However, the Commission notes that the Village and County were separate municipalities during this proceeding as the proposed amalgamation had not yet been approved.

17. CCCG argued that the project is inconsistent with the IDP, MDP, and LUB, particularly as they relate to the future growth and expansion of the Village. It maintained that the project location is misaligned with the IDP's objective to "anticipate growth requirements and priorities for the Village and to take steps to minimize or remove obstacles to accommodate future Village growth." Similarly, CCCG submitted that the project is incompatible with the MDP's identification of the area as residential, park space and remnant agricultural land and promotion of development that is contiguous to existing built areas wherever possible. CCCG further noted the project site is zoned as Reserved for Future Residential Development in the LUB and submitted that a solar project is not compatible with the permitted uses of this land district.¹⁶

18. While the IDP includes an objective to minimize obstacles to future growth, the Commission does not view the project as imposing significant obstacles in this regard. The County indicated that the project was not in conflict with the intended land use concepts in the IDP, which demarcates a Village Growth Area that shows existing lands in the Village and lands that will eventually be needed to expand and grow the Village.¹⁷ There are several areas aside from the project lands that remain available for future growth.

19. The CCCG's planning experts also indicated during questioning that the MDP shows other areas within the Village with appropriate services and infrastructure that can be developed for residential purposes.¹⁸ In addition, the MDP contemplates alternative energy uses on at least part of the project site and further allows for additional land to be designated for industrial use.¹⁹

¹³ Decision 28086-D01-2024: Three Hills Solar Power Corp. – Three Hills Solar Project, Proceeding 28086, Application 28086-A001, June 12, 2024.

¹⁴ Decision 27842-D01-2024: Aira Wind Power Inc. – Aira Solar Project and Moose Trail 1049S Substation, Proceeding 27842, Applications 27842-A001 and 27842-A002, March 21, 2024, paragraph 28.

¹⁵ Exhibit 28295-X0270, CCCG Response to PACE Motion.

¹⁶ Exhibit 28295-X0299, CCCG Group Submissions and Expert Reports, October 1, 2024, PDF pages 13-16.

¹⁷ Exhibit 28295-X0325, Clearwater County Response AUC Information Request Round 1, PDF page 4.

¹⁸ Transcript, Volume 3, page 421, line 10 to page 426, line 5.

¹⁹ Exhibit 28295-X0373, Appendix B Report from A. Flootman re Caroline Solar Planning Evidence, PDF pages 5 and 14.

For these reasons, the Commission finds that the project does not conflict with either the MDP or the IDP, both of which identify other areas available for future growth and development.

20. Regarding the LUB, while the land use district is zoned as Reserved for Future Residential Development, the LUB recognizes a broad range of discretionary uses in this district.²⁰ Given the various potential uses for this district, many of which are industrial in nature, the Commission finds that no provision has been identified that indicates the project conflicts with the LUB.

3.3 Is the project sufficiently setback from adjacent residences?

21. The Commission is aware that setbacks may be prescribed by local authorities, such as municipalities and counties, in their bylaws and planning documents. In the case of the Caroline Solar Farm, the bylaws and planning documents of the Village and the County do not include specific setbacks for solar power plants from residences.²¹ Given the evidence presented in this proceeding, the Commission directs PACE to set the project fence a minimum of 40 metres from a residence.

22. There are residences directly adjacent along portions of the southern and eastern borders of the project. PACE provided a table²² showing the distances between the project's fence and the closest wall of an adjacent residence. There are 15 residences that have distances less than 100 metres to the fence with six of those having distances less than 40 metres to the fence. The shortest distance is 21 metres. PACE confirmed that the solar panels would be at least seven metres inside of the project's fence.²³ Given this, the Commission understands that the closest residence would be approximately 28 metres from the nearest solar panel.

23. CCCG was concerned about the proximity of the project to directly adjacent residences and that their view would be impacted by the solar project. CCCG recommended an 800-metre setback for the project from the walls of the nearest homes given the number of residences near the solar power plant.²⁴ As neither the Village nor the County currently require setbacks from solar power plants, CCCG supported its position by referencing the setback requirements of some other local authorities, which ranged from 150.2 metres to 1,600 metres.

24. CCCG stated that the County is considering a Renewable Energy Systems Land Use Bylaw, which would include solar power plants. The Commission issued information requests to the County who confirmed that a Renewable Energy Systems Land Use Bylaw is expected to be adopted in early 2025 and that it would include the general setbacks already prescribed in its Land Use Bylaw, but no new bylaw was in force at the time of the hearing.

25. CCCG retained B&A Studios to provide a planning policy assessment report.²⁵ B&A stated that one method to limit the potential impacts of solar power plants on adjacent developments are prescribed setbacks from the solar panels to the property line. These setbacks

²⁰ Exhibit 28295-X0114, Land Use Bylaw, Schedule C Land Use District Regulations.

²¹ These include the Caroline-Clearwater Intermunicipal Development Plan, Municipal Development Plan and the Village of Caroline Land Use Bylaw #450 as outlined in Exhibit 28295-X300, Appendix A_BA Planning Policy Assessment Report_February6_2024.

²² Exhibit 28295-X0141.01, 20231222 (F) PACE IR Response to CCCG_final, page 17 and 18.

²³ Transcript, Volume 1, page 70, line 20 to page 71, line 5.

²⁴ Exhibit 28295-X0299, CCCG Group Submissions and Expert Reports, PDF page 17.

²⁵ Exhibit 28295-X0300, Appendix A_BA Planning Policy Assessment Report_February6_2024.

are generally determined by local authorities and in its review of similar urban projects, the minimum setback to property lines varied from 10 metres to 50 metres. When asked if 800 metres was a reasonable setback or if it could recommend a distance, B&A Studios was unable to answer, stating it is typically the responsibility of the municipality to define or prescribe setbacks for these types of projects within municipal boundaries.

26. PACE retained Localis Planning & Local Government Services to provide a planning analysis of the proposed Caroline Solar Farm which included a review of setbacks. In this analysis, Albert Frootman concluded that land use bylaws prescribe setbacks and they range in distance but there is “no empirical data for establishing setbacks.”²⁶ The Commission asked if, in the absence of a setback required by local authorities, he could recommend a setback and he stated there is no fixed number that can reasonably be applied.

27. Assessing appropriate setbacks between project boundaries and adjacent residences is done on a case-by-case basis. Several factors may be relevant to determining an appropriate setback to dwellings, including Village and County requirements, topography of both the project and surrounding areas, and visual barriers between the project and residences.

28. At the time of the hearing, neither the Village nor the County specified a setback for a solar power plant within a municipal boundary. Although CCCG requested a setback of 800 metres, it did not provide any meaningful evidence to support this distance. Further, neither of the experts retained by the parties could recommend a reasonable setback for the project.

29. PACE submitted that its current design, where the shortest distance between the project fence and the closest point of the residence is 21 metres, is acceptable given that it will construct a vegetation screen between the project and the first row of housing. However, the Commission agrees with CCCG that a 21-metre setback places the project too close to residences in this case.

30. The Commission emphasizes that its setback finding is specific to this project and the evidence before it. This Commission is satisfied that a minimum 40-metre setback from the six impacted residences to the project fence is appropriate given the project location and the proposed vegetation screen which, as discussed in the following section, serves to mitigate the visual impact for adjacent residents. The Commission is aware this may result in a different project layout. PACE also has a responsibility to finalize and update the Commission on its project equipment and layout and file a final project update. For these reasons, the Commission imposes the following conditions of approval:

- a. 2518397 Alberta Ltd. shall provide the total generating capability of the project and a revised site layout with a minimum 40-metre setback from residences no later than May 31, 2025. The update shall also include updated construction and project completion dates.
- b. Once 2518397 Alberta Ltd. has finalized its equipment selection and project layout, it must file a final project update with the Commission to confirm that the project has stayed within the final project update allowances for solar power plants. The final project update must be filed at least 90 days prior to the start of construction.

²⁶ Exhibit 28295-X0373, Appendix B - Report from A. Frootman re Caroline Solar Planning Evidence, PDF page 15.

3.4 What are the project noise impacts and how will they be mitigated?

31. PACE retained Green Cat Renewables Canada Corporation (GCR) to evaluate the noise impacts of the project, which predicted that noise impacts from the project will comply with Rule 012.

32. CCCG is concerned about the potential noise impacts from project construction and operations and retained James Farquharson of FDI Acoustics Inc. to provide noise evidence, which is summarized below.²⁷

- J. Farquharson questioned whether it is appropriate to use Table 1 of Rule 012 to determine permissible sound levels (PSLs) for receptors within the Village.
- Assuming the Commission accepts the use of Table 1 of Rule 012 to establish PSLs, PACE should re-evaluate dwelling densities for receptors within the Village as dwelling density is an important factor when determining PSLs using Table 1.
- PACE should conduct a post-construction comprehensive sound level (CSL) to verify compliance with Rule 012.
- PACE should develop a construction noise management plan prior to the start of construction.

33. Merlin Garnett of GCR responded to CCCG's noise concerns and J. Farquharson's recommendations. In particular, M. Garnett provided an updated noise impact assessment (NIA) that re-evaluated dwelling densities for all receptors.

3.4.1 Is it appropriate to use Table 1 of Rule 012 to determine permissible sound levels for receptors?

34. M. Garnett and J. Farquharson disagreed about whether PSLs, based on Table 1 of Rule 012, are applicable to receptors within the Village. J. Farquharson submitted that PSLs determined based on Table 1 of Rule 012 may not be applicable to receptors within the Village, because these receptors are close to Highway 22 and traffic noise would be a significant contributor to the existing noise environment. J. Farquharson modelled traffic noise at these receptors and suggested that appropriate PSLs may be significantly lower than the values in the NIA and thus the project may not comply with these lower PSLs.²⁸ M. Garnett submitted that determination of PSLs using assumed ambient sound levels (ASLs) based on Table 1 of Rule 012 is standard practice, and Rule 012 describes specific cases where PSLs may be determined based on measured or modelled ASLs, but receptors within the Village do not meet these cases.²⁹

35. For the reasons that follow, the Commission finds that it is appropriate to use PSLs determined based on Table 1 of Rule 012 to assess project compliance at the application stage and a downward Class A2 adjustment (also called ambient monitoring adjustment) or modelling for traffic noise is unnecessary for this project.

²⁷ Exhibit 28295-X0303, Appendix D_FDI Acoustics_Caroline Solar Project NIA Review.

²⁸ Exhibit 28295-X0303, Appendix D_FDI Acoustics_Caroline Solar Project NIA Review, PDF page 3

²⁹ Exhibit 28295-X0377, Appendix F.1 - Noise Reply Evidence - Caroline Solar Project, PDF page 7.

36. In accordance with Rule 012, there are two types of ASLs: (i) assumed ASLs based on Table 1,³⁰ and (ii) measured ASLs established via an ASL survey. Class A2 adjustments are applicable only when assumed ASLs, according to Table 1 of Rule 012, are not representative of the actual noise environment. Class A2 adjustments are determined based on measured ASLs, and A2-adjusted PSLs are determined by adding Class A2 adjustments to basic sound levels from Table 1 of Rule 012. Rule 012 specifies that a Class A2 adjustment may be necessary in three cases:

- i. the proposed facility is in an area with noise sources other than energy-related facilities that may impact ASLs,
- ii. the proposed facility is in an area considered to be pristine, or
- iii. the noise receptor is in a populated area (i.e., suburban and urban noise receptors) where basic sound levels in Table 1 are not representative of the acoustic environment.

37. Rule 012 also specifies that a downward Class A2 adjustment may be considered only in cases (ii) and (iii).³¹ The Commission maintains discretion to determine if an ASL survey or a Class A2 adjustment is required in a particular area.

38. There is no compelling evidence provided indicating that receptors within the Village satisfy any of the cases where a downward Class A2 adjustment may be considered, nor any of the cases where modelled traffic noise levels are applicable. The Commission find the use of Table 1 in Rule 012 appropriate in this case. As mentioned in previous decisions,³² the Commission's use of the assumed ASLs in Rule 012 is intended to provide a reasonable, consistent and practical mechanism for predicting and assessing cumulative sound levels in NIAs. The use of assumed ASLs is also intended to promote consistency when assessing energy-related projects in similar environments and when assessing noise compliance at receptors within a common project area.

39. That being said, when a Class A2 adjustment is found to be necessary, two methods may be used to establish ASLs/Class A2 adjustments and determine PSLs: sound monitoring (i.e., an ASL survey) or traffic noise modelling. However, wherever feasible, sound monitoring is preferred over traffic noise modelling. Traffic noise modelling is only allowed in circumstances where values in Table 1 are not representative of the acoustic environment at the noise receptor, traffic noise is dominant, and ASL surveys are not practical.³³

40. As a result of M. Garnett re-evaluating dwelling densities for all receptors, in the updated NIA the PSLs at 10 receptors were decreased and the PSLs at two receptors were increased relative to the PSLs established in the initial NIA.³⁴ Further, dwelling densities for several receptors included in the updated NIA were determined to be from 164 to 176 dwellings per

³⁰ The assumed nighttime ASL is five dBA less than the applicable basic sound level from Table 1 of Rule 012.

³¹ Rule 012: *Noise Control*, Sections 2.5(3) and (4).

³² Decision 24401-D01-2019 EDP Renewables SH Project GP Ltd. – Sharp Hills Wind Project Amendments, Proceeding 24401, Applications 24401 and 24401-A002, December 20, 2019; Decision 22736-D01-2020: Pattern Development Lanfine Wind ULC – Lanfine Wind Power Project, Proceeding 22736, Applications 22736-A001 to 22736-A005, January 27, 2020; and Decision 27885-D01-2024: Airport City Solar East Ltd. – Airport City Solar Project, Proceeding 27885, Application 27885-A001, March 20, 2024.

³³ Rule 012: *Noise Control*, Section 2.5(6).

³⁴ Transcript Volume 2, page 320 lines 19-15 and page 321 lines 1-6.

quarter section of land, which are marginally above the threshold at which a step-change in PSLs is applied (i.e., 160 dwellings per quarter section of land). The Commission emphasizes that accurately establishing dwelling densities is critical when preparing an NIA, especially in the case of receptors located within developed areas. As such, any mischaracterization of the dwelling densities may impact the conclusions of the NIA.

41. As part of the final project update, PACE is required to submit a final NIA based on the final project design. In the final NIA, the Commission expects PACE to carefully re-evaluate the dwelling density for each receptor (in particular, receptors within the Village) to reflect any changes to the number of residential buildings within the surrounding quarter section land. If dwelling densities cannot be definitively established using satellite imagery and/or other desktop methods, PACE should verify dwelling densities via field reconnaissance.

3.4.2 Will noise impacts from the project comply with Rule 012?

42. The Commission finds that the project will comply with Rule 012 as the sound level at each receptor in the updated NIA will be below the nighttime permissible sound level.

43. J. Farquharson and M. Garnett disagreed about whether the heating and cooling unit for the project should be included in the NIA. Minor noise sources should be included in this case because (i) solar projects generally have low noise emissions (relative to other types of facilities) such that any noise-producing equipment may make a difference to overall noise impacts at receptors, and (ii) receptors in the Village are located close to the project boundary and thus any noise-producing equipment has the potential to impact sound levels at these receptors. Therefore, the Commission imposes the following condition of approval:

- c. As part of the final project update, 2518397 Alberta Ltd. shall submit a final noise impact assessment based on the final project design, in which 2518397 Alberta Ltd. shall re-evaluate dwelling densities for all receptors and shall consider potential impacts from all noise-producing equipment associated with the project, including building heating and cooling units.

44. Overall, the Commission accepts the conclusion of the updated NIA that the project is expected to comply with PSLs as set out in Rule 012. If PACE receives any noise complaints during project operations, the Commission requires PACE to promptly investigate the complaints and, where necessary, implement mitigation measures to reduce project noise. Residents with noise concerns can file complaints in accordance with Section 5 of Rule 012.³⁵ The Commission retains discretion to order noise mitigation to resolve noise complaints. Therefore, the Commission imposes the following condition of approval.

- d. 2518397 Alberta Ltd. shall file a report with the Commission detailing any complaints or concerns it receives regarding noise from the project during its first year of operation, as well as 2518397 Alberta Ltd.'s response to complaints or concerns. In particular, the report shall specify if any mitigation measures have been implemented in response to complaints/concerns. 2518397 Alberta Ltd. shall file this report no later than 13 months after the project becomes operational.

³⁵ Rule 012: *Noise Control*, Section 5, Noise complaint.

45. The compliance margins at receptors in the updated NIA are predicted to be no less than 1.6 dBA.³⁶ These compliance margins give the Commission confidence that noise from the project will comply with Rule 012. As such, the Commission finds that it is unnecessary to order a post-construction CSL survey. However, the Commission will investigate any noise complaints that may arise once the project commences operations and, in response to a complaint, may order a CSL survey to verify project compliance and evaluate noise impacts.

3.4.3 How will PACE manage and mitigate noise from project construction?

46. J. Farquharson recommended that PACE develop a construction noise management plan prior to the start of construction, and suggested PACE use temporary barriers as a mitigation measure to reduce noise impacts from project construction.³⁷

47. PACE committed to follow the mitigation measures in Section 2.10 of Rule 012, and to adhere to local bylaws relating to construction noise. In particular, PACE will maintain open communication with the local community to inform them of any construction activities that may generate significant noise and will promptly respond to and address any concerns or complaints raised by residents during project construction. Further, PACE committed to use helical piles, which generate less noise emissions than driven pile installations.³⁸

48. Rule 012 does not specify limits for construction noise nor does it require submission of a construction noise management plan. While the Commission is not directing PACE to use temporary barriers, the Commission expects PACE to uphold its commitment to minimize potential noise impacts from construction activities and put measures in place to ensure noise is managed responsibly. The Commission expects PACE to limit construction activities to the daytime hours (i.e., from 7 a.m. to 10 p.m.) where practical and to promptly address noise concerns or complaints from residents. In the event of concerns or complaints about construction noise, the Commission expects PACE to consider the implementation of mitigation measures as suggested by J. Farquharson (e.g., temporary barriers) where necessary and feasible. On this basis, the Commission has determined that PACE is not required to develop a construction noise management plan for the project.

3.5 What are the project's visual impacts?

49. As discussed above, the project is adjacent to a number of residences. CCCG stated that the project would be a new visual impact for those directly adjacent. CCCG recommended that the project be denied on this basis but should the Commission approve the project, PACE should consider a wall or berm to mitigate the visual impacts. CCCG was also concerned with glare impacts from the project, in particular that glare would impact the use and enjoyment of their homes and would impact road users.

3.5.1 Does the project's proposed vegetative screen effectively mitigate visual impacts?

50. In responding to CCCG's concerns, PACE submitted that a berm with vegetation on top was unsuitable due to the difficulty of maintaining healthy vegetation on a berm. Additionally, a cement wall would heighten visual impacts and harm the environment. Instead, PACE committed to planting a three-row vegetation screen, which it referred to as an eco-buffer, along

³⁶ Compliance margin is the difference between permissible sound level (PSL) and cumulative sound level (i.e., PSL minus cumulative sound level).

³⁷ Exhibit 28295-X0303, Appendix D_FDI Acoustics_Caroline Solar Project NIA Review, PDF page 4.

³⁸ Exhibit 28295-X0432, Appendix A - Commitments List Caroline, PDF page 1.

parts of 52nd Avenue and 50th Street to mitigate potential visual impacts.³⁹ PACE retained Katharina Kafka Landscape Architecture Inc. to design the vegetation screen and to create visual representations.⁴⁰ In argument, PACE indicated that it adapted elements of the project in response to landowner feedback, including the planting list for the vegetation screen.⁴¹ PACE also made numerous specific commitments regarding the planting and maintenance of the vegetation screen.⁴²

51. The vegetation screen consists of varying heights and native species of vegetation and incorporates the existing vegetation. The Commission finds the vegetation screen to be well thought out and notes that PACE made several commitments towards ensuring the successful establishment of the vegetation. The Commission acknowledges that a few adjacent landowners might not fully benefit from the vegetation screen for several years to come. However, PACE indicated that it would engage with stakeholders throughout the lifetime of the project should any issues or concerns arise.⁴³ PACE also confirmed its willingness to provide additional mitigation measures, including planting further trees in the yards of properties facing the project, with the consent of these landowners.⁴⁴

3.5.2 What are the glare impacts from the project and how will they be mitigated?

52. PACE retained GCR to conduct a solar glare assessment for the project, which predicted that Highway 22 and 16 nearby dwellings will receive some glare from the project.⁴⁵ Specifically:

- Highway 22 is predicted to receive up to 4,759 minutes of green glare and up to 338 minutes of yellow glare per year within drivers' 25-degree field of view (FOV);⁴⁶ and
- the most affected dwelling (D16) is predicted to receive up to 1,466 minutes of green glare and up to 5,553 minutes of yellow glare per year.⁴⁷

53. The Commission has previously stated that applicants should use a FOV of 25 degrees for local roads and use a FOV of 50 degrees for highways and railways for the Commission to better understand glare impacts from solar projects.⁴⁸ During the hearing, Jason Mah of GCR provided prediction results for Highway 22 within the 50-degree FOV, which were 4,781 minutes of green glare and 353 minutes of yellow glare per year. These predicted glare levels are similar to the results predicted for the 25-degree FOV in the solar glare assessment. The Commission is satisfied that incremental glare impacts between 25 and 50 degrees for Highway 22 are expected to be negligible.

³⁹ Exhibit 28295-0242, Appendix E - Landscape Renders, PDF page 1.

⁴⁰ Exhibit 28295-X0138, Attachment PACE-CCCG-2023DEC08-002(g) Landscape Renders.

⁴¹ Transcript, Volume 5, page 591, lines 4 to 5.

⁴² Exhibit 28295-X0432, Appendix A – Commitments List Caroline.

⁴³ Exhibit 28295-X0432, Appendix A – Commitments List Caroline, PDF page 13.

⁴⁴ Transcript, Volume 5, page 600, line 24 to page 601, line 5.

⁴⁵ Exhibit 28295-X0007, Caroline Solar Glare Assessment.

⁴⁶ The field-of-view (FOV) defines the view angle of observers traveling along the Route. An FOV of 180 degrees implies the observer sees glare in all directions. An FOV of 50 degrees implies the observer has a field-of-view of 50 degrees to their left and right (i.e., a total view angle of 100 degrees).

⁴⁷ Exhibit 28295-X0007, Caroline Solar Glare Assessment, PDF page 24.

⁴⁸ Decision 27842-D01-2024: Aira Wind Power Inc. – Aira Solar Project and Moose Trail 1049S Substation, Proceeding 27842, Applications 27842-A001 and 27842-A002, March 21, 2024, paragraph 224.

54. J. Mah explained that the solar glare assessment predicted glare for the worst-case scenario based on conservative assumptions, and therefore, the observed glare will likely be less than the predicted glare. In particular, the solar glare assessment does not account for visual obstructions between the solar panels and receptors, but vegetation, buildings, and other obstructions are present between receptors (e.g., dwellings and Highway 22) and project solar panels, and these obstructions are likely to reduce observable glare from the project. J. Mah added that although glare from the project has been predicted for Highway 22, only green glare has been predicted within drivers' 15-degree FOV and green glare is not generally considered a hazard.⁴⁹ The Commission accepts that glare impacts at a route receptor can be characterized by two FOVs: (i) a critical FOV to describe the region where a driver's vision will be most focused and glare may impact the driver's safety, and (ii) a conservative FOV to represent a driver's extended visual range.

55. Regarding mitigation measures that could be implemented in the event of concerns or complaints about project glare, J. Mah submitted that if glare is determined to be an issue during project operation, potential mitigation measures may include installing a sufficiently tall and opaque visual barrier along the route at impacted points, or installing road signs to warn motorists of the potential for glare at particular times of day and year.⁵⁰ In its reply evidence, PACE noted that the planned vegetation screen would mitigate project glare impacts to some degree. In addition, PACE indicated that it is willing to work with concerned parties to develop specific mitigation measures on a case-by-case basis (e.g., adding vegetative screening, placing berms, walls, or fencing) to resolve glare complaints.⁵¹

56. Given that glare is predicted on Highway 22 (a heavily travelled road) and that CCCG expressed concerns about potential glare impacts from the project on nearby roads, the Commission imposes the following conditions of approval:

- e. As part of the final project update, 2518397 Alberta Ltd. shall submit a final solar glare assessment based on the final project design, in which, 2518397 Alberta Ltd. shall identify mitigation measures that can eliminate yellow glare to Highway 22 within drivers' 25-degree field-of-view, and shall demonstrate the effectiveness of the mitigation measures via modelling.
- f. During project construction, 2518397 Alberta Ltd. shall implement the mitigation measures described in the final solar glare assessment. Within 30 days of completing project construction, 2518397 Alberta Ltd. shall submit a letter to the Commission confirming implementation of these mitigation measures.

57. In addition, the Commission expects PACE's final solar glare assessment will model the vegetation screen to demonstrate its effectiveness as a glare mitigation measure.

58. The Commission requires that any glare issues associated with the project be addressed by the applicant in a timely manner. Therefore, the Commission imposes the following condition of approval:

- g. 2518397 Alberta Ltd. shall file an annual report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the

⁴⁹ Exhibit 28295-X0371, 20241108 (F) Reply Evidence from PACE, PDF page 11.

⁵⁰ Exhibit 28295-X0007, Caroline Solar Glare Assessment, PDF page 25.

⁵¹ Exhibit 28295-X0371, 20241108 (F) Reply Evidence from PACE, PDF page 12.

project during the first three years of operation, with the first report due to the Commission no later than 13 months after the project becomes operational. The report shall also detail 2518397 Alberta Ltd.'s response to the complaints or concerns, and where applicable, describe the mitigation measures that 2518397 Alberta Ltd. has implemented.

59. Finally, the Commission notes that the predictions and associated conclusion in the solar glare assessment were premised upon the use of an anti-reflective coating on the project solar panels. Therefore, the Commission imposes the following condition of approval:

- h. 2518397 Alberta Ltd. shall use solar panels with anti-reflective coating for the project.

3.6 What are the project's environmental impacts?

60. PACE retained H3M Environmental and subsequently, McCallum Environmental Ltd. (McCallum; now Strum Consulting) to prepare the environmental evidence and assessment of environmental impacts. These outlined the existing environmental condition of the project area, the proposed mitigations for reducing environmental impacts, and the initial plans for decommissioning. The environmental evaluation concluded there were limited risks to the environment and subsequent submissions by McCallum and PACE corroborated this conclusion. As a general note, the Commission found that some of the submissions of McCallum and PACE, including information about wetlands on the project site, were contradictory, confused the record and could easily have been avoided. These required clarification through information requests and questioning at the hearing.⁵²

61. PACE's environmental conclusions were dependent on the project's location within the Village, adjacent to residential areas located to the south and southeast. This siting influences the applicability and consideration of the *Wildlife Directive for Alberta Solar Energy Projects* (Wildlife Directive).

62. Alberta Environment and Protected Areas (AEPA) produced the Wildlife Directive to limit the effects of solar projects on wildlife and wildlife habitat.⁵³ Siting of a project within a municipal boundary, like the Village, is encouraged by AEPA. The Commission accepts this project is sited in alignment with the goals expressed in the Wildlife Directive.

63. The Commission notes that AEPA's letter indicating that a referral report is not required supports PACE applying the standards and best management practices in the Wildlife Directive as much as possible.⁵⁴ With the exception of wetlands discussed below, the Commission finds that PACE has effectively avoided significant impacts to sensitive environmental features.

3.6.1 Are the proposed wetland setbacks appropriate?

64. The Commission must assess PACE's proposed avoidance measures and setbacks to wetlands within the project lands. PACE contracted H3M to complete the original environmental evaluation of the project. In this environmental evaluation, H3M documented 15 waterbodies

⁵² Exhibit 28295-X0035, AUC Information Request, pages 5-6: PACE filed multiple KML files and other documents that included different renderings of the wetlands within the project site.

⁵³ GOA. 2017. Wildlife Directive for Alberta Solar Energy Projects. AEP Fish and Wildlife No. 5. Fish and Wildlife Policy, Alberta Environment and Parks, PDF page 2.

⁵⁴ Exhibit 28295-X0009, Caroline AEP waiver letter, PDF page 1.

within the project lands, comprised of four ephemeral waterbodies, six temporary wetlands, four seasonal wetlands and one semi-permanent wetland.⁵⁵ In information request responses, PACE provided a revised map of wetlands, prepared by McCallum, that presented different boundaries compared to what was originally prepared by H3M.⁵⁶

65. The Commission takes issue with McCallum's delineation and classification of the seasonal wetlands, particularly wetlands 13 and 13a which McCallum and PACE considered as distinct wetlands applying a setback to one but not the other. Cottonwood Consultants Ltd., on behalf of the CCCG, also raised this issue.

66. The Commission expects that all environmental assessment methodologies are completed following the appropriate standards of practice, including wetland delineation following the *Alberta Wetland Identification and Delineation Directive*⁵⁷ and classification following the Alberta Wetland Classification System.⁵⁸ Considering this, the Commission does not accept that wetlands 13 and 13a are significantly distinct to warrant separate delineation and classification. Therefore, the setback for wetland 13 is to be extended to the entirety of wetland 13 (i.e., wetlands 13 and 13a) as that wetland is defined in the H3M environmental evaluation. The Commission accepts that the original wetland delineation provided by H3M in the environmental evaluation is accurate⁵⁹ and there is no compelling evidence to justify an update to this data.⁶⁰

67. Regarding the seasonal wetlands 1 and 13/13a, the Commission is satisfied that a 27.5-metre setback is appropriate for this project given it is located within a municipal boundary and on cultivated lands with limited habitat for wildlife. For these reasons, the Commission imposes the following condition of approval on wetland 13/13a:

- i. 2518397 Alberta Ltd. shall provide the total generating capability of the project and a revised site layout with the committed 27.5-metre setback applied to the entirety of wetland 13/13a, no later than May 31, 2025.

68. The Commission heard evidence from Cottonwood Consultants which criticized the proposed wetland impacts and recommended that PACE: follow the Wildlife Directive's best management practice to avoid ephemeral waterbodies (wetlands 14 and 15) and temporary wetlands (wetland 10); and follow the Wildlife Directive's standards to comply with 100-metre setbacks for seasonal wetlands (wetlands 1 and 13/13a).

69. The Commission accepts that all ephemeral waterbodies and temporary wetlands within the project have been disturbed by agricultural activities and offer limited habitat for wildlife.⁶¹ Given this, and the fact the project is sited within a municipal boundary, the Commission accepts the encroachments on the Wildlife Directive's recommended setbacks. However, the

⁵⁵ Exhibit 28295-X0008, Caroline environmental evaluation.

⁵⁶ Exhibit 28295-X0062, 20231027 (F) Response from PACE to AUC IR Round 1, PDF page 17.

⁵⁷ Government of Alberta. 2015. Alberta Wetland Identification and Delineation Directive. Water Policy Branch. Alberta Environment and Parks. Edmonton. Alberta. PDF page 27.

⁵⁸ Alberta Environment and Sustainable Resource Development (ESRD). 2015. Alberta Wetland Classification System. Water Policy Branch, Policy and Planning Division, Edmonton, AB.

⁵⁹ Exhibit 28295-X0407, SJV-0011E_03002_LT_Caroline_WetlandClassification_000.

⁶⁰ Transcript, Volume 1, page 171.

⁶¹ Exhibit 28295-X0379, Appendix G - Technical Memo from R. McCallum, PDF pages 8 and 9.

Commission expects PACE to obtain all required *Water Act* approvals and to comply with all associated wetland policies that are applicable for the project.

70. The Commission notes that the conflicting information and seemingly arbitrary changes to the wetland boundary information as submitted by McCallum confused the record and the efficiency of adjudicating this proceeding. While the Commission understands that environmental evidence may be complicated and subject to revision, that was not the case for this proceeding and the Commission views the complications on this record were a consequence of PACE's conflicting submissions.

3.6.2 Are there impacts to stormwater drainage on site and what are the risks for neighbouring homes?

71. While the siting of the project in a municipal boundary is recognized as a benefit for environmental impacts, the proximity may present specific risks to neighbouring properties. The Commission heard testimony from the CCCG and experts that water flows north through the project area, draining into wetland 13⁶² and ultimately to the ditch on 50th Street.⁶³

72. The Commission understands that the existing drainage in the area is adequate to limit flooding for properties in the area.⁶⁴ However, due to the potential consequences, the Commission is concerned about any increased risk of flooding in the area surrounding the solar project.

73. PACE intends to maintain the existing contours and drainage within the project area,⁶⁵ and committed to develop a stormwater management plan.⁶⁶ The Commission is satisfied that stormwater drainage will be adequately controlled with the implementation of a stormwater management plan. The Commission expects that plan will comply with applicable local bylaws.

3.6.3 Is PACE's agrivoltaics plan appropriate?

74. PACE indicated that the hosting landowner intends to graze sheep on the project lands. PACE engaged Tannas Conservation Ltd. to assess the agrivoltaics potential of the project. PACE noted several benefits of solar grazing which can support vegetation management, retaining some agricultural function, and improvements to soil health, biodiversity and habitat.⁶⁷

75. PACE initially reported lands as Class 3⁶⁸ and later reported lands as Class 4 and Class 5.⁶⁹ The Commission notes that the same locations are cited in both references, and this change in classification reflects an update to the Land Suitability Rating System class for the project lands.

76. The Commission does not control what modifications or updates are performed on the Land Suitability Rating System dataset and understands that changes to this dataset may be made by the system manager periodically. The Commission also understands that agricultural suitability may change over time due to changes in climate and therefore, this dataset is not expected to be

⁶² Exhibit 28295-X0379, Appendix G - Technical Memo from R. McCallum, PDF page 9.

⁶³ Transcript, Volume 4, page 493.

⁶⁴ Transcript, Volume 4, page 565.

⁶⁵ Transcript, Volume 2, page 305.

⁶⁶ Exhibit 28295-X0004, Caroline environmental protection plan, PDF page 14.

⁶⁷ Exhibit 28295-X0371, Reply Evidence from PACE, PDF pages 17-19.

⁶⁸ Exhibit 28295-X0057, Attachment 1 - Caroline Ag Requirements.

⁶⁹ Exhibit 28295-X0291, 2024-09-24 Response from PACE to CCCG IR3(2), PDF page 13.

static. The Commission accepts that the submission by PACE in Exhibit 28295-X0291 is accurate and the project lands are properly reported as Class 4 and Class 5.

77. With this rating, the Commission accepts that the project is sited on moderate quality farmland with severe limitations to sustainable agricultural production. The Commission also accepts that, given this rating, the impact of the solar power plant on high-quality agricultural lands is not an issue in this proceeding. However, the Commission finds the agrivoltaics proposal will serve as a method to manage vegetation on the project site.

78. The Commission highlights the concern of interveners regarding the potential attraction of predatory animals to the project area due to sheep being present. The Commission recognizes that predation is a possible challenge for any sheep operation and expects PACE to operate following best management practices as advised by the landowner (whom PACE advised currently keeps sheep)⁷⁰ or other retained expertise.

3.6.4 Does PACE have an acceptable plan to mitigate soil erosion and weeds?

79. The Commission recognizes that this project has a potential for soil erosion and increased weeds, the consequences of which could impact the surrounding areas. The Commission notes that PACE has completed a pre-disturbance site assessment (PDSA) but did not properly update the conservation and reclamation plan with the outcomes of this PDSA.⁷¹

80. The Commission expects that PACE will work proactively in mitigating soil erosion and weeds and imposes the following condition:

- j. As part of the final project update, 2518397 Alberta Ltd. shall submit an updated conservation and reclamation plan with the outcomes from the completed pre-disturbance site assessment that includes:
 - i. anticipated soil stockpile locations;
 - ii. approximate volumes anticipated for soil stripping activities;
 - iii. specific erosion and sedimentation control locations and methods;
 - iv. specific soil handling procedures for any soils requiring special handling; and
 - v. specific management plan for the creeping thistle observed in the project area.

3.7 Does the project pose a significant fire risk?

81. CCCG is concerned with the potential fire risks with siting the power plant so close to residences. Members of the CCCG worry that if a fire breaks out at the power plant, combined with prevailing winds from the northwest, this could present a serious danger to residents.⁷²

82. The Commission is satisfied with PACE's commitments related to fire and emergency response.⁷³ PACE has drafted an emergency response plan and has consulted with the local fire

⁷⁰ Exhibit 28295-X0056, 20231027 (F) Response from PACE to Bulletin 2023-05, PDF page 3.

⁷¹ Exhibit 28295-X0307, Appendix H_Dr. Osko_PACE Caroline Report_5Sep2024, PDF page 22.

⁷² Transcript, Volume 4, page 533, line 1 to page 534, line 25.

⁷³ Exhibit 28295-X0432, Appendix A - Commitments List Caroline, pages 12 and 15.

authority. PACE stated it will be finalizing the emergency response plan during the development permit stage and is committed to providing training to the local fire authority if requested. PACE also stated that it will manage vegetation at the site and maintain on-site storage of water. Other monitoring measures noted by PACE, including security cameras and monthly inspections, further limit the project's risks regarding fire and related emergencies.

3.8 Will the project have an impact on property values?

83. CCCG submitted that the presence of a solar power plant would decrease the value of their properties as the area's rural and scenic nature would be diminished by the industrial presence of solar panels.

84. CCCG retained Gettel Appraisals Ltd. to conduct a real estate impact assessment of the project. Brian Gettel's report identified six variables that could influence property values near the solar development: visual effects, electromagnetic fields, ecosystem damage, increased noise, traffic, and dust/weed issues. He concluded that properties closest to the project, including residences and mobile homes, could experience value reductions of 10 per cent or more, while properties farther away might see losses in the five to 10 per cent range. Despite these findings, the report overall characterizes the project's impact on property values as low.⁷⁴

85. PACE responded to B. Gettel's real estate impact assessment by highlighting several limitations and issues within his report. While the assessment identified various factors that could negatively impact property values near solar farms, it lacked strong evidence to support these claims.⁷⁵ Further, B. Gettel did not consider the project layout changes or landscape renderings that were submitted after he completed his report. Lastly, he identified visual impacts as the main concern for property values, but the vegetation screen proposed by PACE should help reduce this effect.⁷⁶

86. Assessing property valuations is a complex process and technical matter that is influenced by a wide variety of contextual and circumstantial factors. The Commission requires project-specific evidence to make findings; however, project-specific evidence may not always be readily available due to an absence of local sales data. While it is difficult to quantify property value impacts given the lack of objective and local market data, the Commission recognizes that the project may have a potential negative impact on property values between zero and 10 per cent. However, PACE's commitment⁷⁷ to planting and maintaining a vegetation screen to reduce visual impacts should mitigate property value concerns. These impacts are a consequence of the project to be balanced against the project's public benefits.

3.9 Is PACE's security and reclamation plan reasonable?

87. The Commission expects applicants to fully reclaim projects, and to bear the costs of doing so. Applicants are required to explain how they will ensure that sufficient funds are available to cover the cost of decommissioning and reclamation.

⁷⁴ Exhibit 28295-X0310, Appendix K_Brian Gettel Report_22651(0), PDF pages 45 and 46.

⁷⁵ Exhibit 28295-X0371, 20241108 (F) Reply Evidence from PACE, pages 19 to 22.

⁷⁶ Transcript, Volume 3, page 442, lines 6-22 and Transcript, Volume 5, page 608, lines 11-17.

⁷⁷ Exhibit 28295-X0432, Appendix A - Commitments List Caroline.

88. PACE stated it will use a letter of credit with a Tier 1 Canadian financial institution to fund the decommissioning costs starting at Year 2 of operation.⁷⁸ The hosting landowner will be the beneficiary of the letter of credit. PACE stated that it intends to fund portions of the letter of credit using its Generation Unit Owner's Contribution (GUOC) repayment expected from the Alberta Electric System Operator. Regardless of the source of funds, an applicant must ensure funding of its reclamation security plan. The Commission expects PACE will ensure that the required funds to fully reclaim the project are provided through the letter of credit, not in cash.

89. PACE retained SUNSET Renewable Asset Management Inc. to prepare a reclamation cost estimate report, which estimated a total reclamation cost of \$1,623,410. The salvage value is estimated at \$934,559 with a resulting estimated net reclamation cost of \$688,851.⁷⁹ The estimated salvage value accounts for 58 per cent of the reclamation costs.

90. On February 28, 2024, the Ministry of Affordability and Utilities indicated that it intends to develop a reclamation security regime for renewable energy projects. Specifically, the Minister provided a letter to the Commission indicating that the "Government of Alberta will develop and implement the necessary policy and legislative tools to ensure developers are responsible for reclamation costs via bond or security" and the "new requirements will apply [to] all approvals issued on or after March 1, 2024."⁸⁰

91. The Commission's understanding is that the intention of the Government of Alberta is to put a reclamation security regime in place to require appropriate security. The effective date of March 1, 2024, suggests that PACE would be captured by any such legislative/policy regime when it is issued. Should PACE not be subject to the Government of Alberta's regime, the Commission requires an updated third-party estimate that uses no more than 50 per cent of the estimated salvage value in the overall net reclamation cost estimate. Accordingly, the Commission imposes the following condition of approval:

- k. At least 60 days prior to the start of construction, 2518397 Alberta Ltd. shall submit an updated third-party reclamation cost estimate report that uses no more than 50 per cent of the estimated salvage value in the overall reclamation cost estimate. If the Government of Alberta's security regime is in place at that point, 2518397 Alberta Ltd. may alternatively file a letter confirming 2518397 Alberta Ltd. will be providing reclamation security directly to the Government of Alberta.

92. Other aspects of PACE's reclamation security program include using a third party to re-evaluate the decommissioning cost every five years from the date of operation. The Commission has reviewed PACE's specific commitments regarding reclamation security⁸¹ and given the condition imposed above, finds that PACE's approach to reclamation is sufficient to demonstrate that approval of the project is in the public interest.

⁷⁸ Exhibit 28295-X0001, Caroline AUC Application, page 15.

⁷⁹ Exhibit 28295-X0428, Caroline SUNSET Cost Calculator, November 20, 2024.

⁸⁰ Letter re Policy Guidance to the Alberta Utilities Commission (28 February 2024) from Nathan Neudorf, Minister Affordability and Utilities.

⁸¹ Exhibit 28295-X0432, Appendix A - Commitments List Caroline.

3.10 What are the benefits associated with the project?

93. Several benefits are associated with the project. PACE stated that the project will benefit the local community and economy by generating approximately 60 to 100 temporary construction jobs and two full-time operation and maintenance jobs over the life of the project.⁸² The project will annually provide over \$250,000 to the municipal tax base and create non-traditional farm income.

94. PACE also referenced environmental benefits of the project including the expected reduction carbon emissions every year over the life of the project. Additionally, PACE stated that intends to construct an interpretive centre at the south-east corner of the project site.⁸³ PACE indicated that this space would include picnic tables and information boards and would serve an educational purpose for local residents and visitors.

4 Decision

95. For reasons outlined in the decision, and subject to the conditions in this decision, the Commission finds that, in accordance with Section 17 of the *Alberta Utilities Commission Act*, approval of PACE Bang Energy LP's application is in the public interest having regard to the social, economic, environmental, and other effects of the project.

96. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants 2518397 Alberta Ltd. the approval set out in Appendix 1 – Power Plant Approval 28295-D02-2025 to construct and operate the 14.67-MW Caroline Solar Farm.

97. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants 2518397 Alberta Ltd. the approval set out in Appendix 2 – Connection Order 28295-D03-2025 to connect the 14.67-MW Caroline Solar Farm to the FortisAlberta Inc. electric distribution system.

98. The appendixes will be distributed separately at a later date, after 2518397 Alberta Ltd. provides the total generating capability of the project and a revised site layout reflecting a minimum 40-metre setback from residences and a 27.5-metre setback for the entirety of wetland 13, as directed above.

Dated on February 28, 2025.

Alberta Utilities Commission

(original signed by)

Renée Marx
Commission Member

⁸² Exhibit 28295-X0018, Public Information and Consultation Session Presentation January 10, 2023, PDF page 15.

⁸³ Transcript, Volume 1, page 86, line 15 to page 87, line 9.

Appendix A – Summary of Commission conditions of approval in the decision

This section is intended to provide a summary of all conditions of approval specified in the decision for the convenience of readers. Conditions that require subsequent filings with the Commission will be tracked as directions in the AUC's eFiling System. In the event of any difference between the conditions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

The following are conditions of Decision 28295-D01-2025 that require subsequent filings with the Commission and will be included as conditions of Approval 28295-D02-2025:

- 2518397 Alberta Ltd. shall provide the total generating capability of the project and a revised site layout with a minimum 40-metre setback from residences no later than May 31, 2025. The update shall also include updated construction and project completion dates.
- Once 2518397 Alberta Ltd. has finalized its equipment selection and project layout, it must file a final project update with the Commission to confirm that the project has stayed within the final project update allowances for solar power plants. The final project update must be filed at least 90 days prior to the start of construction.
- As part of the final project update, 2518397 Alberta Ltd. shall submit a final noise impact assessment based on the final project design, in which 2518397 Alberta Ltd. shall re-evaluate dwelling densities for all receptors and shall consider potential impacts from all noise-producing equipment associated with the project, including building heating and cooling units.
- 2518397 Alberta Ltd. shall file a report with the Commission detailing any complaints or concerns it receives regarding noise from the project during its first year of operation, as well as 2518397 Alberta Ltd.'s response to complaints or concerns. In particular, the report shall specify if any mitigation measures have been implemented in response to complaints/concerns. 2518397 Alberta Ltd. shall file this report no later than 13 months after the project becomes operational.
- As part of the final project update, 2518397 Alberta Ltd. shall submit a final solar glare assessment based on the final project design, in which 2518397 Alberta Ltd. shall identify mitigation measures that can eliminate yellow glare to Highway 22 within drivers' 25-degree field-of-view, and shall demonstrate the effectiveness of the mitigation measures via modelling.
- During project construction, 2518397 Alberta Ltd. shall implement the mitigation measures described in the final solar glare assessment. Within 30 days of completing project construction, 2518397 Alberta Ltd. shall submit a letter to the Commission confirming implementation of these mitigation measures.
- 2518397 Alberta Ltd. shall file an annual report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during the first three years of operation, with the first report due to the Commission

no later than 13 months after the project becomes operational. The report shall also detail 2518397 Alberta Ltd.'s response to the complaints or concerns, and where applicable, describe the mitigation measures that 2518397 Alberta Ltd. has implemented.

- 2518397 Alberta Ltd. shall provide the total generating capability of the project and a revised site layout with the committed 27.5-metre setback applied to the entirety of wetland 13/13a, no later than May 31, 2025.
- As part of the final project update, 2518397 Alberta Ltd. shall submit an updated conservation and reclamation plan with the outcomes from the completed pre-disturbance site assessments that includes:
 - i. anticipated soil stockpile locations;
 - ii. approximate volumes anticipated for soil stripping activities;
 - iii. specific erosion and sedimentation control locations and methods;
 - iv. specific soil handling procedures for any soils requiring special handling; and
 - v. specific management plan for the creeping thistle observed in the project area.
- At least 60 days prior to the start of construction, 2518397 Alberta Ltd. shall submit an updated third-party reclamation cost estimate report that uses no more than 50 per cent of the estimated salvage value in the overall reclamation cost estimate. If the Government of Alberta's security regime is in place at that point, 2518397 Alberta Ltd. may alternatively file a letter confirming 2518397 Alberta Ltd. will be providing reclamation security directly to the Government of Alberta.

The following are conditions of Decision 28295-D01-2025 that do not or may require subsequent filings with the Commission:

- As part of the final project update, 2518397 Alberta Ltd. shall submit a final noise impact assessment based on the final project design, in which 2518397 Alberta Ltd. shall re-evaluate dwelling densities for all receptors and shall consider potential impacts from all noise-producing equipment associated with the project, including building heating and cooling units.
- 2518397 Alberta Ltd. shall promptly address any complaints or concerns regarding solar glare from the project. In the event of complaints or concerns, 2518397 Alberta Ltd. shall file an annual report with the Commission detailing any complaints or concerns it receives regarding solar glare from the project during the first three years of operation, with the first report due to the Commission no later than 13 months after the project becomes operational. The report shall also detail 2518397 Alberta Ltd.'s response to the complaints or concerns, where applicable, describe the mitigation measures that 2518397 Alberta Ltd. has implemented, and demonstrate the effectiveness of the implemented mitigation measures.
- 2518397 Alberta Ltd. shall use solar panels with anti-reflective coating for the project.