



**Kinbrook Solar, GP Inc. and
Solar Krafte Utilities Inc.**

Rainier Solar Farm

March 22, 2024



Alberta Utilities Commission

Decision 28439-D01-2024

Kinbrook Solar, GP Inc. and Solar Krafte Utilities Inc.

Rainier Solar Farm

Proceeding 28439

Applications 28439-A001 and 28439-A002

March 22, 2024

Published by the:

Alberta Utilities Commission

Eau Claire Tower

1400, 600 Third Avenue S.W.

Calgary, Alberta T2P 0G5

Telephone: 310-4AUC (310-4282 in Alberta)

1-833-511-4AUC (1-833-511-4282 outside Alberta)

Email: info@auc.ab.ca

Website: www.auc.ab.ca

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

Contents

1	Decision summary	1
2	Introduction	1
	2.1 Application details	1
3	Legislative framework	4
	3.1 Role of the Commission.....	4
	3.2 How the Commission assesses the public interest.....	4
4	Discussion and findings	5
	4.1 What is the proposed project’s impact on native grasslands?.....	5
	4.2 Was the proposed project sited in accordance with guidance provided in the Wildlife Directive?	7
	4.3 Are the project impacts limited to the native grasslands areas within the permanent footprint?.....	8
	4.4 Are the applicants able to adequately mitigate the project’s impacts to native grasslands?	9
	4.5 Environmental conclusion	9
5	Decision	10

List of figures

Figure 1.	Proposed Rainer Solar Farm location	2
Figure 2.	Native grassland within the Rainier Solar Farm’s project area	6

1 Decision summary

1. In this decision, the Alberta Utilities Commission denies applications from Kinbrook Solar, GP Inc. and Solar Krafte Utilities Inc. to construct and operate a 450-megawatt solar power plant and the Rainier 1050S Substation. The Commission finds that approval of the project would not be in the public interest given its unmitigable negative effects on the environment and wildlife. As described further below, the Commission considers that:

- The Alberta Wildlife Directive states that appropriate site selection at the landscape level is the first and most critical factor in preventing significant negative effects on wildlife.
- The majority of the proposed project is sited on native grassland which was evaluated by AEPA to be a high risk to native and critical habitats.
- The applicants have failed to demonstrate that the amount of pre-existing human-made disturbance in the project area reduces the value of native and critical habitats or that this disturbance justifies a departure from the Wildlife Directive’s avoidance standard.
- Diverse wildlife, including multiple species of management concern, use the native and critical habitats on which the project is situated.
- Given the importance of site selection to avoid impacts to native and critical habitats, the applicants’ proposed mitigations are not adequate to reduce the environmental impacts on wildlife and the availability of native and critical habitats to an acceptable level.

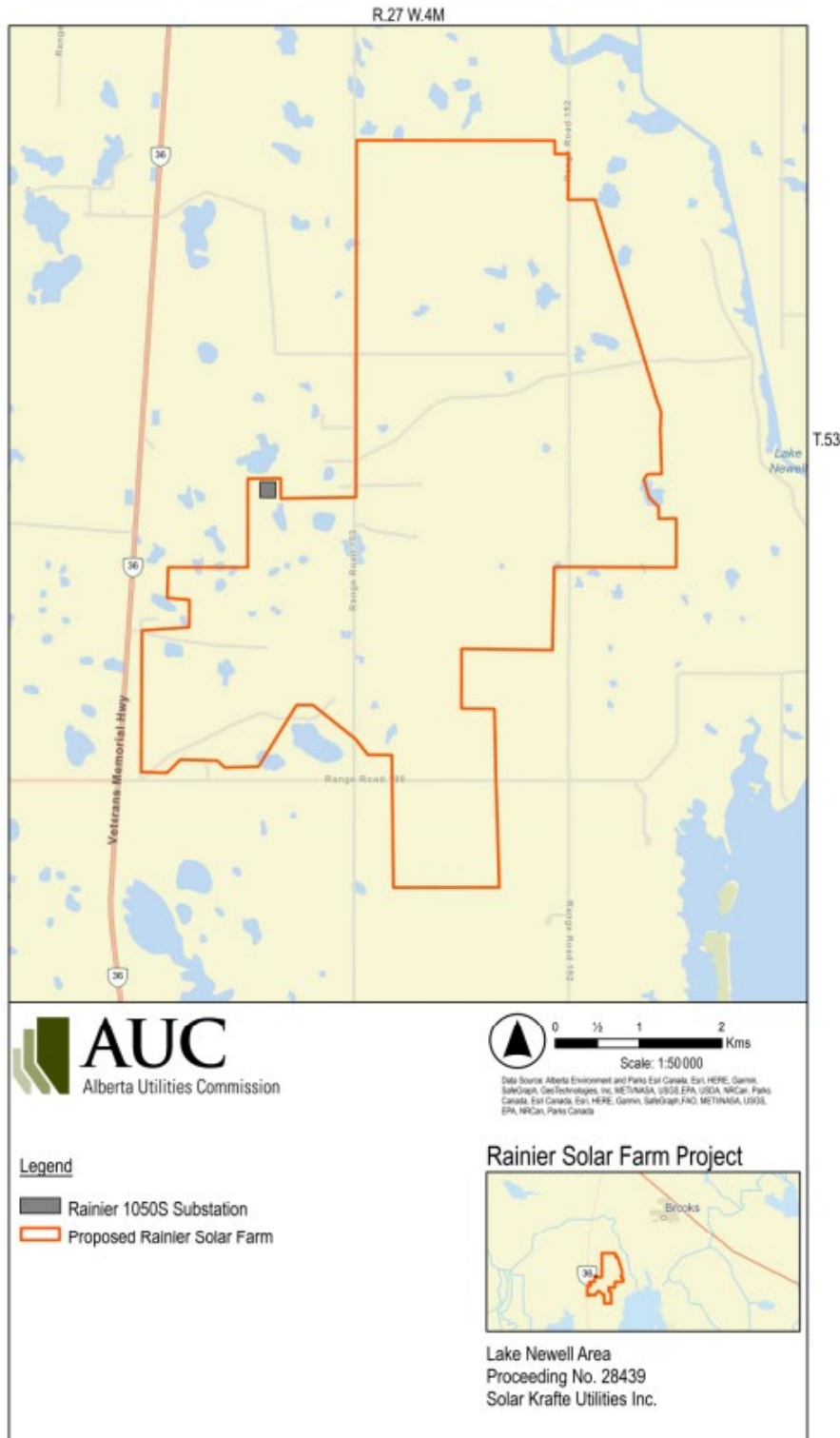
2 Introduction

2.1 Application details

2. Kinbrook Solar, GP Inc. and Solar Krafte Utilities Inc. (the applicants) filed applications to construct and operate a solar power plant (the power plant) that would generate up to 450 megawatts (MW), and a substation, designated as the Rainier 1050S Substation (collectively referred to as the Rainier Solar Farm, or the project). The applicants requested that approvals for the project be issued to Kinbrook Solar, GP Inc.

3. The project area is sited on 1,172.4 hectares of private land owned by the Eastern Irrigation District in the County of Newell, approximately six kilometres southwest of the city of Brooks, as shown on the map in Figure 1.

Figure 1. Proposed Rainier Solar Farm location¹



¹ In Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 15; and Exhibit 28439-X0043, Attachment Solar Krafte-AUC-2023OCT24-008(a) - Kinbrook_Layout rev C_SABR_20231120, the applicants submitted a revised site plan that removed the project's infringement into the Lake Newell Important Bird Area encroachment. This resulted in small modifications to the southeast portion of the project that are not depicted.

4. The applicants stated that while the project's equipment is not finalized, the power plant is expected to be comprised of 885,654 bifacial photovoltaic panels with a single-axis tracking system, inverter/transformer stations and access roads. The Rainier 1050S Substation would be located in Legal Subdivision 7 of Section 9, Township 18, Range 15, west of the Fourth Meridian. It would include two 240/34.5-kilovolt, 225/300-megavolt ampere transformers, two 240-kilovolt circuit breakers, a switchgear building and associated substation equipment.

5. The applications included:

- A main applications document² with the applicants' responses to the AUC's application requirements.
- An environmental evaluation³ prepared by Ausenco Sustainability Inc., which discussed the potential effects of the project on the environment.
- A renewable energy referral report⁴ completed by Alberta Environment and Protected Areas - Fish and Wildlife Stewardship (AEPA).
- Other documents and reports that address the AUC's application requirements.

6. The applicants planned to start construction on July 16, 2024, and requested a construction completion date of June 30, 2025.

7. The Commission issued a notice of applications and received one submission in response. The submission was subsequently withdrawn.

8. This application was subject to the approvals pause mandated by the *Generation Approvals Pause Regulation*. While the pause was in effect, the AUC conducted an inquiry (the Module A inquiry) into several land use impact issues in accordance with Order-in-Council 171/2023. The issues considered in the Module A inquiry included: reclamation security for power plants, the impact of the development of power plants on specific types or classes of agricultural or environmental land, provincial Crown land and Alberta's pristine viewscapes. The Commission provided its report on the Module A inquiry to the Minister of Affordability and Utilities on January 31, 2024, and the Module A report was publicly released on March 13, 2024.

9. On February 28, 2024, before the pause expired, the Government of Alberta signalled its intent to develop policy and legislative tools related to some topics in the Module A report and the Commission issued a bulletin confirming that each power plant application affected by the pause would be considered on its individual merits, and the Commission would assess each application to determine whether further process was required. This determination would be based on the circumstances of each application and the sufficiency of the existing evidentiary record. On March 6, 2024, the Commission issued a letter advising that no further process would be required for this proceeding.

² Exhibit 28439-X0001.01, Rule 007 Application (Rainier Solar Farm & Substation).

³ Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation. The environmental evaluation also included appendixes in exhibits 28439-X0010 to 28439-X0014.

⁴ Exhibit 28439-X0021, Attachment 14 – EPA Renewable Energy Referral Report.

10. The Commission's decision in this proceeding is based solely on the record of this proceeding and the Commission did not take into account or otherwise have regard for the Module A report in deciding this application.

3 Legislative framework

11. In this section of the decision, the Commission describes the legal landscape in which its decisions are made. First, the Commission explains its mandate and powers when considering a power plant application. Second, the Commission describes how it assesses the public interest.

3.1 Role of the Commission

12. The Commission is an independent, quasi-judicial agency of the province of Alberta. As a quasi-judicial agency, the Commission is similar in many ways to a court when it makes decisions. Like a court, the Commission bases its decisions on the evidence before it. However, unlike a court, the Commission has no inherent powers. Its powers are conferred on it by the provincial legislature and set out in legislation. Additionally, unlike a court proceeding, the Commission's proceedings are not matters between two or more competing parties to determine who wins and who loses. Instead, the Commission deals with specialized subject matters requiring it to assess and balance a variety of public interest considerations.

13. The applicant has the onus to demonstrate that approval of its application is in the public interest. It is the Commission's role to test the application and assess any concerns associated with the project to determine whether approval is in the public interest.

3.2 How the Commission assesses the public interest

14. The Commission holds written or oral proceedings to determine an outcome that meets the public interest mandate set out in its enabling legislation. When the Commission receives an application to construct and operate a power plant, Section 17(1) of the *Alberta Utilities Commission Act* is engaged. This provision states that, in addition to any other matters it may or must consider, the Commission must consider whether the proposed project is in the public interest, having regard to the social and economic effects of the project and its effects on the environment.

15. As a starting point, a power plant application filed with the Commission must comply with Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* and Rule 012: *Noise Control*.

16. The Commission must also take into consideration the purposes of the *Hydro and Electric Energy Act* and the *Electric Utilities Act*. These statutes provide for economic, orderly and efficient development of facilities and infrastructure, including power plants, in the public interest, and set out a framework for a competitive generation market, where decisions about whether and where to generate electricity are left to the private sector.

17. Conducting a public interest assessment requires the Commission to assess and balance the competing elements of the public interest in the context of each specific application before it. Part of this exercise is an analysis of the nature of the potential adverse impacts associated with a particular project, and the degree to which the applicant has addressed these impacts.

Balanced against this is an assessment of the project's potential public benefits. The assessment considers the positive and adverse impacts of the project, having regard to its social, economic and other effects, including its effects on the environment.⁵

18. The existence of applicable regulatory standards and guidelines, including those from municipal, provincial and federal authorities, and a proponent's adherence to these standards, are important elements in deciding if potential adverse impacts are acceptable. The Commission has previously affirmed that the public interest will be largely met if an application complies with existing regulatory standards, and the project's public benefits outweigh its negative impacts.⁶

4 Discussion and findings

19. While the project will provide both direct and indirect economic activity and local revenue to the area,⁷ the central issue for this proceeding is the impact of project infrastructure on native grassland within the project area and considerations set out in AEP's *Wildlife Directive for Alberta Solar Energy Projects* (the Wildlife Directive) Standard 100.1.1.

20. In this section of the decision, the Commission discusses the proposed project's impacts on native grasslands, whether the project was sited in accordance with guidance provided in the Wildlife Directive, what the ecological value of native grasslands are in the project area, and whether the applicants can adequately mitigate the project's impacts to native grasslands.

21. For the reasons that follow, the Commission finds that given the unmitigable negative effects that the project will have on the environment and wildlife, approval of the project is not in the public interest. Accordingly, the Commission denies the applications.

4.1 What is the proposed project's impact on native grasslands?

22. The applicants followed the native grassland assessment protocols provided in the Conservation Assessments in Native Grasslands documentation.^{8,9} The Commission accepts the applicants' definitions for native grassland and finds the definitions in the Conservation Assessments in Native Grasslands documentation are consistent with the *Rangeland Health Assessment for Grassland, Forest, & Tame Pasture*¹⁰ and the definitions provided in the Wildlife Directive.

⁵ Decision 24751-D01-2020: Akamihk Energy Incorporated - Montana First Nation Solar Facility, Proceeding 24751, Application 24751-A001, January 10, 2020, paragraph 26.

⁶ Alberta Energy and Utilities Board Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation - 490-MW Coal-Fired Power Plant, Application 2001173, December 21, 2001, paragraph 22.

⁷ Exhibit 28439-X0006, Attachment 5 - Participant Involvement Program (PIP) Report, PDF pages 3 and 14.

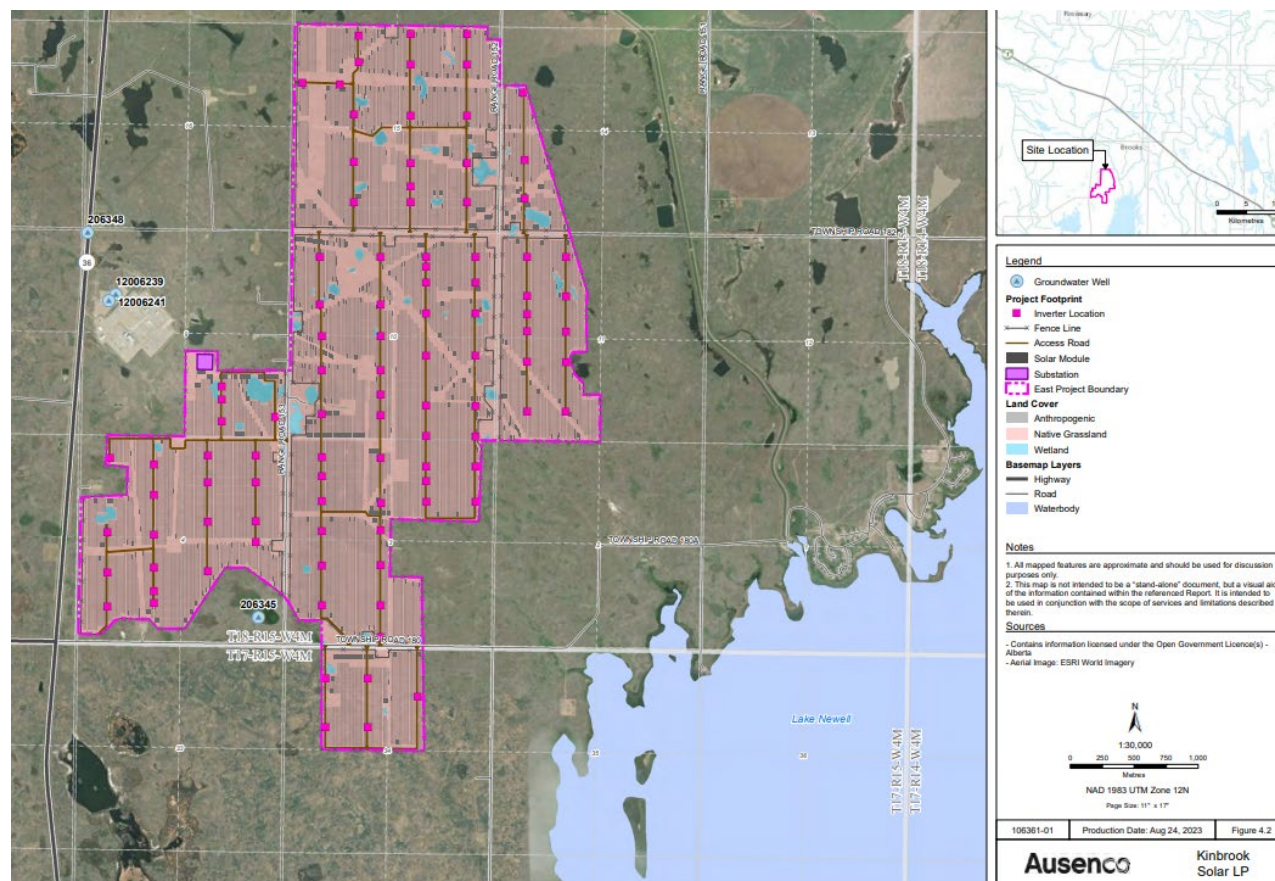
⁸ Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 10.

⁹ Alberta Environment and Parks. 2018. Conservation Assessments in Native Grasslands. June 2018. Edmonton. Alberta. <https://open.alberta.ca/dataset/5fd1e4b9-88d1-4dd5-bc9d-3ac4da4b8e4f/resource/041ced93-12e3-4644-97fb-042118925c3c/download/conservationassessnativegrassland-jun2018.pdf>.

¹⁰ Adams, B.W., G. Ehlert, C. Stone, M. Alexander, D. Lawrence, M. Willoughby, D. Moisey, C. Hincz, A. Burkinshaw, J. Richman, K. France, C. DeMaere, T. Kupsch, T. France, T. Broadbent, L. Blonski, A.J. Miller. 2016. *Rangeland Health Assessment for Grassland, Forest and Tame Pasture*. AEP, Rangeland Resource Stewardship Section. Fifth Edition.

23. The map below depicts the native grassland (in pink) within the project boundary:

Figure 2. Native grassland within the Rainier Solar Farm's project area¹¹



24. Based on evidence presented by the applicants, the Commission accepts that 1,143.6 hectares within the approximately 1,172.4-hectare project area qualifies as native grassland.¹² The Commission also accepts the project area land cover estimates provided on the record and that there are existing human-made disturbances within the project area. The applicants estimated that these human-made disturbances amount to 4.3 hectares of current disturbed land cover¹³ and 108.1 hectares of revegetated disturbance.¹⁴

25. The Commission observes that AEPAs' referral report states that "[a]lthough there are some existing disturbances in the project area, siting solar projects on native habitat does not

¹¹ Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation, PDF page 31. Note that in Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 15; and Exhibit 28439-X0043, Attachment Solar Krafte-AUC-2023OCT24-008(a) - Kinbrook_Layout rev C_SABR_20231120, the applicants submitted a revised site plan that removed the project's infringement into the Lake Newell Important Bird Area encroachment. This resulted in small modifications to the southeast portion of the project that are not depicted.

¹² Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation, PDF page 10.

¹³ Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation, PDF page 19.

¹⁴ Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 10.

align with the Directive, and therefore has been assessed as high risk to native habitat.”¹⁵ The Wildlife Directive provides the following definition of native grasslands:

Native Grasslands – An area of prairie in which natural vegetation consist primarily of perennial grasses. The native species composition must be greater than 30% (Adams et al. 2005).¹⁶

26. The definition of native grasslands in the Wildlife Directive references the *Rangeland Health Assessment for Grassland, Forest, & Tame Pasture*,¹⁷ which states that a plant grassland community is in a native state when native species compose greater than 30 per cent of the plant cover, and is in a modified state if the plant community is mostly non-native species (greater than 70 per cent of the plant cover is non-native).

27. Wildlife Directive Standard 100.1.1 states that solar energy projects must be sited to avoid or minimize their occurrence in important wildlife habitats and, generally, solar energy projects should not be sited in areas of native grasslands. The Commission understands that native grasslands function as important wildlife habitat.

28. The applicants identified that native grasslands in the project area were evaluated by the 30 per cent native plant species criteria¹⁸ and includes all areas classified as native grassland (which also includes revegetated¹⁹). Based on the evidence provided, the Commission finds that Wildlife Directive Standard 100.1.1 is applicable to this project for the 1,143.6 hectares of native grasslands.

29. It is the applicants’ responsibility to provide evidence for the Commission to consider in judging the public interest. If native land cover is disturbed in a material way to render it non-native or modified, and consideration of this state is essential for the Commission’s decision making, then adequate information must be provided. In this case, the Commission is not persuaded that the project area’s native grassland has been disturbed in such a way that it has been rendered non-native. The Commission does not accept that the existing human-made disturbances reduce the value of the native and critical habitat in the region.

4.2 Was the proposed project sited in accordance with guidance provided in the Wildlife Directive?

30. The Alberta Wildlife Directive states that appropriate site selection at the landscape level is the first and most critical factor in preventing significant negative effects on wildlife.²⁰ The Commission finds that the applicants did not make efforts to adhere to Wildlife Directive

¹⁵ Exhibit 28439-X0021, Attachment 14 – EPA Renewable Energy Referral Report, PDF page 3.

¹⁶ *Wildlife Directive for Alberta Solar Energy Projects*, Alberta Environmental and Parks, PDF page 24.

¹⁷ Adams, B.W., G. Ehlert, C. Stone, M. Alexander, D. Lawrence, M. Willoughby, D. Moisey, C. Hincz, A. Burkinshaw, J. Richman, K. France, C. DeMaere, T. Kupsch, T. France, T. Broadbent, L. Blonski, A.J. Miller. 2016. *Rangeland Health Assessment for Grassland, Forest and Tame Pasture*. AEP, Rangeland Resource Stewardship Section. Fifth Edition.

¹⁸ Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 10.

¹⁹ Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 8.

²⁰ *Wildlife Directive for Alberta Solar Energy Projects*, Alberta Environmental and Parks, PDF page 6.

Standard 100.1.1 and that the project's infrastructure presents a high risk to native and critical habitat identified by AEPA.²¹

31. The applicants assert that the project was sited with consideration for Wildlife Directive Best Management Practice 200.3.2, which states that "activities should be located adjacent to existing operations, existing access, or within anthropogenic clearing wherever practical to minimize the spatial extent of cumulative disturbance as well as to minimize the need for associated access."²²

32. With respect to how the Commission should weigh best management practices within the Wildlife Directive, the Commission notes that the Wildlife Directive provides the following:

It is the responsibility of the proponent to ensure that the Standards are implemented and that [best management practices (BMPs)] are given consideration and implemented where practical for the solar energy project.²³

33. The Commission considers that the public interest will be largely met if an application complies with existing regulatory standards and the project's public benefits outweigh its negative impacts, including those experienced by discrete members of the public.

34. The Commission finds that it is not in the public interest to prioritize Wildlife Directive Best Management Practice 200.3.2 at the expense of Wildlife Directive Standard 100.1.1. Furthermore, the Commission is not convinced that existing disturbance constitutes an adequate mitigating factor for a variance on Wildlife Directive Standard 100.1.1. The evidence before the Commission indicates the dominant land cover in the project area is functional native grasslands²⁴ that is providing ecological value for wildlife in the area.

35. Further, the applicants suggested that since the project area has existing and historical disturbances, the project's level of impacts to native grasslands should be considered lower. The Commission is not persuaded that the level of impact of the project on native grasslands is considered lower because of the presence of 4.3 hectares of current disturbance and 108.1 hectares of historical revegetated disturbance. The Commission finds the scale of impacts to native grassland proposed by the applicants is inconsistent with the Wildlife Directive and that the proposed project is not sited in accordance with the Wildlife Directive.

4.3 Are the project impacts limited to the native grasslands areas within the permanent footprint?

36. As set out earlier in this decision, approximately 1,143.6 hectares within the approximately 1,172.4-hectare project area qualifies as native grassland. The applicants submitted that no temporary footprint is anticipated and that the project impacts will be limited to the native grassland areas within the permanent footprint.²⁵ In addition to having concerns regarding the high amount of native grassland within the permanent footprint, the Commission

²¹ Exhibit 28439-X0011, Attachment 7, Appendix B – EPA Renewable Energy Referral Report, PDF page 3.

²² Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation, PDF page 19.

²³ *Wildlife Directive for Alberta Solar Energy Projects*, Alberta Environment and Parks, effective October 4, 2017, PDF page 5.

²⁴ Exhibit 28439-X0009, Attachment 7, Environmental Evaluation, PDF page 19.

²⁵ Exhibit 28439-X0038, 2023-11-24 - Applicants Responses to AUC IR Round 1 - Solar Krafte-AUC-2023OCT24-001 to 010, PDF page 3.

does not accept the applicants' submission that this is a reasonable estimate of project impacts. Some effects, such as wildlife avoidance and encroachment on native habitat by non-native species, are not limited to the explicit boundaries of the permanent footprint and have effects beyond the edge of the project footprint into the local surrounding areas.²⁶

37. The Commission is of the view that some potential impacts associated with a solar project sited on native grassland will not be limited to the explicit boundaries of a project's footprint.²⁷ Accordingly, some potential impacts need to be considered at a local scale. The Commission expects that the addition of photovoltaic panels, fences and other above-ground infrastructure on native grasslands would negatively impact the use of this critical habitat at a local scale by some wildlife.²⁸

4.4 Are the applicants able to adequately mitigate the project's impacts to native grasslands?

38. The applicants have proposed project-specific environmental mitigation measures, including the following measures to address native grassland impacts: efforts to minimize the impacts to native grasslands and plans for subsequent reclamation and revegetation of any disturbed native grasslands; avoiding or minimizing direct mortality to breeding birds and disturbance to nests; best management practices for weeds on all project infrastructure and implementation of weed control methods as appropriate; and best management practices to minimize soil disturbance, manage sensitive soil conditions and manage soil stockpiles.²⁹

39. Impacts to the condition and health of native grassland in the project area may be mitigable to some degree following the measures above and detailed in the applicants' environmental protection plan.³⁰ The Commission, however, finds that the project will cause an unacceptable impact to native grasslands and sensitive species.

40. While the potential exists for the habitat to still biologically function in some manner, it is the Commission's view that sensitive species may abandon the area and it is also expected that the habitat would be less functional in an essential way for any remaining sensitive species that would continue to rely on this native grassland habitat. Therefore, the Commission is not persuaded that the proposed mitigation measures are adequate to reduce the environmental impacts on wildlife and the availability of critical habitat to an acceptable level.

4.5 Environmental conclusion

41. The Commission accepts that the majority of the project area is native grassland, and the project presents high risks to wildlife and wildlife habitat. The Commission is not persuaded that the applicants' proposed mitigation measures are adequate to reduce the potential environmental impacts to wildlife and wildlife habitat to an acceptable level. The Commission considers that avoidance of native grasslands in accordance with the Wildlife Directive Standard 100.1.1 is the most effective way to reduce the risk to sensitive wildlife that depend on native habitats.

²⁶ Exhibit 28439-X0009, Attachment 7 – Environmental Evaluation, PDF page 16.

²⁷ Decision 26435-D01-2022: Solar Krafte Utilities Inc. – Brooks Solar Farm, Proceeding 26435, Applications 26435-A001 and 26435-A002, May 18, 2022, paragraph 31.

²⁸ Decision 26435-D01-2022: Solar Krafte Utilities Inc. – Brooks Solar Farm, Proceeding 26435, Applications 26435-A001 and 26435-A002, May 18, 2022, PDF page 13.

²⁹ Exhibit 28439-X0012, Attachment 7, Appendix C – Environmental Protection Plan.

³⁰ Exhibit 28439-X0012, Attachment 7, Appendix C – Environmental Protection Plan.

42. As a result, the Commission is not satisfied that the benefits of the project, including increased economic activity and local tax revenues,³¹ outweigh its negative impacts. The Commission finds that approval of the applications is not in the public interest and therefore denies the applications.

5 Decision

43. The Commission finds that approval of the applications is not in the public interest. In accordance with sections 11, 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission denies the applications.

Dated on March 22, 2024.

Alberta Utilities Commission

(original signed by)

Cairns Price
Panel Chair

(original signed by)

Doug Hawkins
Acting Commission Member

³¹ Exhibit 28439-X0006, Attachment 5 – Participant Involvement Program (PIP) Report, PDF pages 3 and 14.