AUC
Alberta Utilities Commission

Solar Krafte Utilities Inc.

Brooks Solar Farm

May 18, 2022

Alberta Utilities Commission
Decision 26435-D01-2022
Solar Krafte Utilities Inc.
Brooks Solar Farm
Proceeding 26435
Applications 26435-A001 and 26435-A002

May 18, 2022

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

Contents

List of figures

1 Decision summary

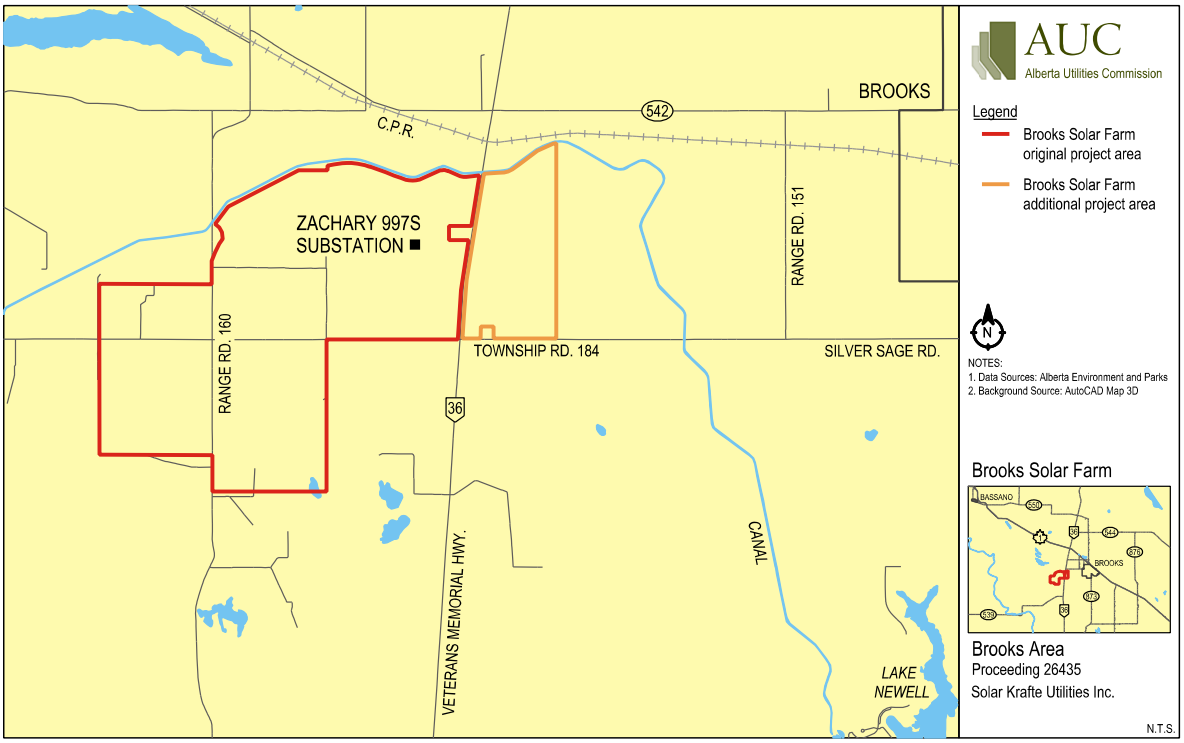
1. In this decision, the Alberta Utilities Commission approves applications from Solar Krafte Utilities Inc. to construct and operate a power plant, designated as the Brooks Solar Farm, and the Zachary 997S Substation, but does not approve construction and operation on Section 24, Township 18, Range 16, west of the Fourth Meridian (LD 24-18-16-W4).

2 Introduction

2.1 Application details

2. Solar Krafte Utilities Inc. applied to construct and operate the 400-megawatt Brooks Solar Farm and the Zachary 997S Substation (the project). The project is located in the county of Newell, Alberta, approximately 6.5 kilometres west of the city of Brooks. The project area is approximately 1,870 hectares (ha) (4,620 acres), as shown in the following figure.

Figure 1. Proposed Brooks Solar Farm



3. The Zachary 997S Substation is located in the northeast quarter of Section 29, Township 18, Range 15, west of the Fourth Meridian and includes two 240/34.5-kilovolt, 220-megavolt ampere transformers, three 240-kilovolt circuit breakers and other associated substation equipment.[1]

4. Solar Krafte originally proposed that the project would be located on approximately 1,578 ha (3,900 acres) of land within the red boundary in Figure 1. Solar Krafte initially did not obtain a renewable energy referral report from Alberta Environment and Parks (AEP) for the project. On June 22, 2021, the Commission placed the proceeding into abeyance to provide Solar Krafte with additional time to obtain the referral report from AEP and to submit it to the Commission for review. Later, Solar Krafte filed the AEP renewable energy referral report with the Commission. In its referral report, AEP determined that the project would pose an overall high risk to wildlife and wildlife habitat, based on siting and wildlife use in the area. On July 16, 2021, the Commission ruled that it would not be in the public interest to approve the project, as initially proposed by Solar Krafte. The applications remained in abeyance to give Solar Krafte an opportunity to reduce the potential environmental effects of the project.

5. On September 10, 2021, Solar Krafte submitted a project update, indicating that it secured the rights to approximately 291 ha (720 acres) of additional land immediately east of and abutting the original project area (i.e., the additional project area within the orange boundary in Figure 1). Solar Krafte submitted that the additional project area allowed Solar Krafte to site project infrastructure outside of areas of environmental concerns (such as ferruginous hawk nest setbacks and wetland setbacks) while maintaining the project's capability.

6. On November 1, 2021, Solar Krafte submitted an AEP referral report amendment. In the referral report amendment, AEP concluded that the overall project risk for the project has been reduced from an overall high risk to an overall moderate risk level; however, the project impact rating for native habitat/grassland remains high.

7. The Commission resumed its consideration of the applications on November 15, 2021.

8. Solar Krafte's applications, project update, reply evidence and undertaking responses included the following:

- A main application document that outlined Solar Krafte's responses to the AUC's application requirements for the Brooks Solar Farm.[2]
- A main application document that outlined Solar Krafte's responses to the AUC's application requirements for the Zachary 997S Substation.[3]
- An application document that described the project update and associated impact assessments.[4]

[1] Exhibit 26435-X0052, Attachment 1 – Draft AUC Permit & License.
[2] Exhibit 26435-X0001, Rule 007 Application (Solar Krafte Brooks Solar Farm).
[3] Exhibit 26435-X0051, Rule 007 Substation Application (Brooks Solar Farm).
[4] Exhibit 26435-X0099, Solar Krafte Brooks Solar Farm Project Amendment.

- A noise impact assessment (NIA) prepared by Green Cat Renewables Canada Corporation (Green Cat) for the initial project design, which concluded that the project will comply with Rule 012: *Noise Control*.[5]

- An NIA update prepared by Green Cat for the project update, which confirmed that the project update will not increase the predicted noise levels at any receptors and the project will remain compliant with Rule 012.[6]

- A solar glare assessment prepared by Green Cat for the initial project design, which concluded that no solar glare from the project is expected at nearby dwellings, roads or railways.[7]

- A solar glare assessment update prepared by Green Cat for the project update, which maintained the conclusion in the solar glare assessment.[8]

- A solar glare assessment prepared by Green Cat for a nearby helipad, which predicted that the helipad will experience solar glare from the project.[9]

- Manufacturer data sheets for the project solar panels, transformers and inverters.[10]

- An environmental evaluation prepared by Stantec Consulting Ltd. for the original project area.[11]

- An environmental evaluation prepared by Hemmera Envirochem Inc. for the additional project area.[12]

- A conservation and reclamation plan prepared by Stantec and in accordance with the *Conservation and Reclamation Directive for Renewable Energy Operations*.[13]

- A copy of *Historical Resources Act* approval for the original project area, granted on October 26, 2020.[14]

- A copy of *Historical Resources Act* approval for the additional project area, granted on September 3, 2021.[15]

---

5 Exhibit 26435-X0015, Attachment 13 – Green Cat Noise Impact Assessment.
6 Exhibit 26435-X0106, Attachment 7 – Green Cat Renewables Noise Impact Assessment Update Letter.
7 Exhibit 26435-X0014, Attachment 12 – Green Cat Solar Glare Hazard Analysis Report.
8 Exhibit 26435-X0107, Attachment 8 – Green Cat Renewables Solar Glare Hazard Analysis Report Update.
9 Exhibit 26435-X0193, Attachment 1 - Solar Glare Hazard Analysis Report (Solar Krafte-AUC-2022MAR11-001).
10 Exhibit 26435-X0009, Attachment 7 – Data Sheet Longi LR4-72HPH-455M. Exhibit 26435-X0010, Attachment 8 – Data Sheet SMA UPR5500-EV-US Transformer. Exhibit 26435-X0011, Attachment 9 – Data Sheet SMA SC-2750-EV-US Inverter.
11 Exhibit 26435-X0012, Attachment 10 – Stantec Environmental Evaluation.
12 Exhibit 26435-X0101, Attachment 2 – Hemmera Brooks Solar Farm Project Amendment, August 11, 2021.
13 Exhibit 26435-X0043, Attachment 2 – Brooks Solar Farm Conservation and Reclamation Plan.
14 Exhibit 26435-X0005, Attachment 3 – Historical Resources Act Clearance.
15 Exhibit 26435-X0105, Attachment 6 – Historical Resources Act Clearance, Additional Project Land.

- A renewable energy referral report from AEP for the original project area dated June 28, 2021.[16]

- A renewable energy referral report amendment from AEP for the additional project area dated November 1, 2021.[17]

- A participant involvement program report prepared by Green Cat, which detailed consultation with stakeholders within 800 metres of the project and notification to stakeholders within 2,000 metres of the project.[18]

- Visual simulations of the project from multiple viewpoints prepared by Green Cat.[19]

- A Transport Canada aeronautical assessment form dated April 7, 2021.[20]

- A NAV CANADA non-objection letter dated June 1, 2021.[21]

- A land value impact assessment for the project prepared by Serecon Inc.[22]

- A list of commitments that Solar Krafte made to stakeholders.[23]

9. Solar Krafte anticipated that construction of the project would be completed on February 28, 2023, with an in-service date of February 1, 2023.[24]

2.2 Interveners

10. The Commission issued two notices of application, one for the Brooks Solar Farm and the other for the Zachary 997S Substation, in accordance with Section 7 of Rule 001: *Rules of Practice*.[25] In response, the Commission received statements of intent to participate in opposition to the project from numerous stakeholders that formed the Cassilope Group (Cassilope) and two stakeholders (Peggy and Larry Springer) who represented themselves. The Commission granted standing to Cassilope and to P. and L. Springer. As a result of the statements of intent to participate filed, the Commission held a virtual hearing to consider the applications.

11. Cassilope requested that the project, as applied for, not be approved. In the alternative and should the Commission decide to approve the project, Cassilope recommended conditions of approval to the project. Cassilope submitted evidence and argument that included concerns related to environmental and wildlife impacts, agricultural impacts, property value impacts,

16 Exhibit 26435-X0091, AEP Referral Report_Brooks Solar_Solar Krafte_2021-06-28.
17 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01.
18 Exhibit 26435-X0003, Attachment 2 – Participant Involvement Program (PIP) Report.
19 Exhibit 26435-X0173, Appendix C - Part 1 - Project Visualizations w Explanatory Report and Curriculum Vitae of A. Warnock; Exhibit 26435-X0174, Appendix C - Part 2 - Project Visualizations (VP02 & VP03); Exhibit 26435-X0175, Appendix C - Part 3 - Project Visualizations (VP04 & VP05). Exhibit 26435-X0176, Appendix C - Part 4 - Project Visualizations (VP06).
20 Exhibit 26435-X0178, Appendix E - Transport Canada Aeronautical Assessment Form.
21 Exhibit 26435-X0179, Appendix F - NAV Canada Non-Objection Letter.
22 Exhibit 26435-X0181, Appendix H - Expert Report and Curriculum Vitae of G. Doll of Serecon.
23 Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses.
24 Exhibit 26435-X0041, Information Response (Round 1), PDF page 24.
25 Rule 001: *Rules of Practice* was amended effective May 17, 2021. The previous version of Rule 001 effective March 5, 2021, applies to this proceeding.

residential, social and visual impacts, health and safety issues, noise impacts, solar glare, consultation issues, and construction and reclamation.

3 Discussion and findings

12. The Commission is considering the applications under sections 11 and 18 of the *Hydro and Electric Energy Act*. These sections stipulate that no person can construct or operate a power plant or connect a power plant to the Alberta Interconnected Electric System without the Commission's approval.

13. In accordance with Section 17 of the *Alberta Utilities Commission Act*, where the Commission conducts a hearing on an application to construct or operate a power plant under the *Hydro and Electric Energy Act*, it shall, in addition to any other matters it may or must consider in conducting the hearing, give consideration to whether construction or operation of the proposed power plant is in the public interest, having regard to the social and economic effects of the power plant and the effects of the power plant on the environment.

14. The Commission has previously found that the public interest will be largely met if an application complies with existing regulatory standards, and the project's benefits to the public outweigh its negative impacts.[26] In determining if the application is in the public interest the Commission must take into account the purposes of the *Hydro and Electric Energy Act* and the *Electric Utilities Act*. The Commission must also determine whether an applicant has met the requirements of Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments* and Rule 012. An applicant must also obtain all approvals required by other applicable provincial or federal legislation.

15. The Commission's consideration of the above matters is detailed in the subsections that follow.

3.1 Native grassland

16. The impact of project infrastructure on native grassland is a central issue in this proceeding. In this section of the decision, the Commission explains the role of AEP renewable energy referral reports in the Commission's consideration of solar power plant proceedings generally and this proceeding specifically. AEP's impact rating for native habitat/grassland remains high for this project.

17. Then, the Commission assesses the impacts on Section 24 (LD 24-18-16-W4), which contains 217.4 ha (537.2 acres) of native grassland[27] within the project fenceline, and finds that it is not in the public interest to approve the portion of the project located on Section 24. Finally, the Commission finds that the north half of Section 18 does not qualify as native grassland.

[26] 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, page 4.

[27] AEP issued a referral report for the original project design, which indicates 216 ha of native grassland within the project fence. Later AEP issued a referral report amendment for the project update, which indicates 217.4 ha of native grassland within the project fence.

3.1.1 What is the role of AEP directives and referral reports?

18. AEP is responsible for the overall management and regulation of wildlife in Alberta, and the Commission is responsible for approving the construction and operation of solar power plants under the *Hydro and Electric Energy Act* and the *Alberta Utilities Commission Act*. Section 17 of the *Alberta Utilities Commission Act* requires the Commission to consider, in addition to any other matters it may or must consider in conducting the hearing, whether the project is in the public interest, having regard to its social and economic effects, and its effects on the environment.

19. AEP's assessment of a project's environmental effects is reflected in a referral report, which takes into account AEP's *Wildlife Directive for Alberta Solar Energy Projects* (the Directive)[28] and other related AEP guidelines and standards. The information in the AEP referral report provides an independent review conducted by a wildlife professional, with experience assessing the environmental impacts of solar projects in Alberta. The Commission, when assessing a project's environmental effects, takes into account the referral report. In the Commission's view, a relevant factor when assessing the information included in a referral report is that:

> i. AEP is responsible for the overall management and regulation of wildlife in Alberta, including establishing policies, directives, guidelines and similar administrative procedures (collectively, wildlife policies) under the *Wildlife Act* and the *Environmental Protection and Enhancement Act*. The legislation and wildlife policies include responsibilities for the designation, protection and recovery of wildlife, including endangered animals and other sensitive species, and wildlife habitat. The legislation and wildlife policies apply to the potential impacts caused by the construction and operation of wind and solar power plants.[29]
>
> ii. The role of … AEP… is to ensure that the development of solar energy projects include appropriate consideration and mitigation of potential negative effects on Alberta's wildlife and wildlife habitat.[30]

20. In addition to this, the Commission considers all of the evidence filed by an applicant and intervener(s) and any evidence provided in an oral hearing. The Commission weighs all of the evidence in its entirety when deciding if a project is in the public interest.

21. Accordingly, the Commission has weighed the AEP referral report, the AEP referral report amendment, the environmental evidence provided by Stantec and Hemmera and other evidence submitted by Solar Krafte, as well as the evidence submitted by Cottonwood Consultants Ltd. and Cassilope.

---

[28] Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, effective October 4, 2017.

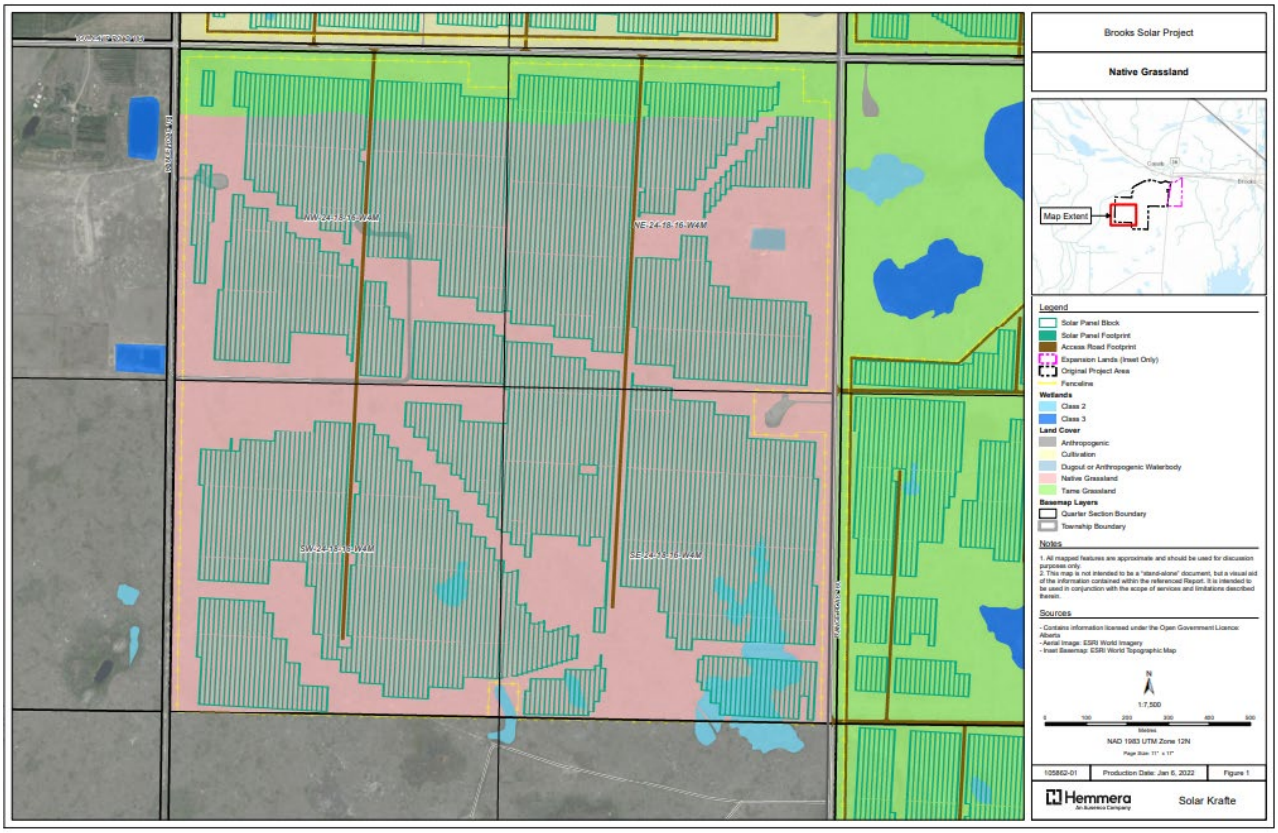
[29] Bulletin 2018-04, Roles and responsibilities of the Alberta Utilities Commission and Alberta Environment and Parks for applications to construct and operate wind and solar power plants, March 8, 2018.

[30] Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 1.

3.1.2 Section 24 (LD 24-18-16-W4)

22. Section 24 is in the southwest corner of the project area as shown on the map below.[31] Solar Krafte estimated that Section 24 will contain 279,126 of the 1,142,532 (24.4 per cent) solar panels planned for the project.[32]

Figure 2. Native grassland within Section 24



23. Section 24 qualifies as native grassland according to the AEP native grassland definition requiring a minimum 30 per cent cover of native grass and forb species.[33] The total area of native grassland within the project fence in Section 24 is 217.4 ha, which is 11.6 per cent of the entire project area (i.e., 1,870 ha).[34] As detailed in the following subsections, the Commission finds that it is not in the public interest to approve the construction and operation of the power plant on Section 24.

3.1.2.1 What portion of Section 24 is actually "impacted" under the Directive?

24. As noted, one of the factors that AEP considers is the applicant's adherence to the Directive. According to the AEP referral report, Solar Krafte did not follow the requirement in

[31] Exhibit 26435-X0140, Appendix A - Figure 1 Native Grassland.
[32] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 1; Exhibit 26435-X0001, Rule 007 Application (Solar Krafte Brooks Solar Farm), PDF page 11.
[33] Exhibit 26435-X0180, Solar Krafte Reply Evidence Submissions Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.
[34] Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF page 3.

the Directive to avoid or minimize the impact to native grassland habitat on Section 24.[35] Standard 100.1.1 of the Directive states:

> Solar energy projects and temporary work spaces must be sited to avoid or minimize their occurrence in important wildlife habitats (ASRD 2011). Generally, solar energy projects should not be sited in areas of native grasslands, native parkland, old growth forest stands, named water bodies, valley breaks (including coulees), valleys of large permanent watercourses and the eastern slopes region.

25. Solar Krafte, AEP and Cassilope disagreed on what constitutes an impact to native grassland under the Directive. Solar Krafte suggested that an impact only occurs where project infrastructure directly disturbs native grassland. Solar Krafte characterized directly disturbed native grassland as including the land physically and permanently disturbed by the project infrastructure (i.e., access roads, collector line routes, and photovoltaic (PV) module pilings),[36] and the land beneath the solar PV arrays that will not experience a physical ground disturbance.[37] By its calculation, the project results in 56.3 ha of impacted native grassland on Section 24.[38] AEP and Cassilope suggested that the impacts to native grassland occur more broadly and considered that the entire area of native habitat would be impacted by the project, which results in impacts to 217.4 ha of native grassland. For the reasons that follow, the Commission finds that 217.4 ha of native grassland on Section 24 is impacted.

26. Relying on the definitions of "disturbance," "footprint" and "solar energy project"[39] in the Directive, and the terminology in AEP's submission template form,[40] Solar Krafte submitted that only 56.3 ha of native grassland will have a direct ground disturbance.[41] Solar Krafte emphasized that when accounting for panel row spacing[42] and areas outside of array blocks, approximately 161 ha of native grassland within the project fenceline on Section 24 will not be covered by panel infrastructure and is not directly disturbed.[43] In Solar Krafte's view, defining disturbances as all areas within the project fenceline is not in alignment with the definitions in the Directive.

---

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

36 Transcript, Volume 1, page 40, lines 10-24 and page 100, lines 16-25.

37 Transcript, Volume 2, page 405, line 3 to page 406, line 8; Transcript, Volume 3, page 422, line 8 to page 423, line 7; Transcript, Volume 4, page 645, lines 22-25.

38 Exhibit 26435-X0128, Solar Krafte Information Response (Round 2), PDF pages 6-9. Solar Krafte-AUC-2021NOV16-002 (a) states "The updated Project footprint represents a project footprint of 56.3 ha in native grassland…" and (c) states "The rationale for including only the footprint of infrastructure (i.e., footprint of access roads, collector line routes, and PV module pilings) when assessing which areas of the Project would have direct impacts to native grassland is based on the requirements of the Submission Template (Government of Alberta 2020) and the Directive (Government of Alberta 2017)."

39 In the Directive, "disturbance" is defined as "any alteration of the natural landscapes by anthropogenic or natural processes," "footprint" is defined as "the surface area of land disturbed from its natural condition by human activity and the associated impact to or on related natural resources," and "solar energy project" is defined as "the inclusive term for the entire area of the solar energy project and all solar energy related infrastructure within the footprint, including the solar collectors/reflectors, buildings, inverter units, collection lines, roads, laydown areas, fences, temporary work spaces, and the substation."

40 Transcript, Volume 1, page 145, lines 24-25 and page 146, lines 1-5.

41 Exhibit 26435-X0128, Solar Krafte Information response round 2, Solar Krafte-AUC-2021NOV16-002 (b), PDF pages 6-8.

42 Transcript, Volume 4, page 646, lines 1-8. Solar Krafte submitted there is between 7.6 and 12 metres between the rows of solar panels, depending on the orientation of the tilt.

43 Transcript, Volume 4, page 646, lines 9-14.

27. In contrast, AEP found in its referral report that the siting of project infrastructure on native grassland within the fenceline does not align with the Directive.[44] AEP was not persuaded by Solar Krafte's submissions that the area of impact to native grassland was reduced to be 56.3 ha if the area that will be graded, stripped and trenched was limited to the footprint of access roads, collector line routes, and PV module pilings. AEP advised that "from a biological perspective, the entire area within the Project fence will no longer be functional native habitat so the entire fenced area will be impacted."[45] AEP explained that this was because the addition of PV panels, fences and other above-ground infrastructure would change the species assemblage and limit the ability of some wildlife to successfully breed, forage or shelter in the area. AEP cautioned that to avoid long-term consequences to multiple sensitive species, all project infrastructure and activity should not be sited on native habitat. AEP submitted that doing otherwise poses a high risk to wildlife habitat.

28. Consistent with AEP, Cliff Wallis of Cottonwood,[46] an independent witness retained by Cassilope, submitted that the prescribed mandatory avoidance of native grassland in the Directive, combined with AEP's high risk ranking to wildlife and wildlife habitat as a result of the project being partially sited on native grassland, cautions against the placement of facilities within native grassland.[47] In C. Wallis's view, the project would render all of the native grassland in the fenced-in area in Section 24 unsuitable for many native grassland plant and animal species. This is because the project would change the appearance, character and structure of the native grassland.[48] As an example, C. Wallis explained that certain species such as the Baird's sparrow and Sprague's pipit prefer native grassland and have higher breeding success in this type of habitat, but that these birds "do not do well when there's visual obstruction," which would include solar panels.[49] C. Wallis considered that avoiding siting the project on the native grasslands in Section 24 would be in accordance with the Directive.[50]

29. To understand the intent of the Directive, and AEP's reference to and reliance on the Directive in the referral reports, the Commission considers it necessary to review the wording, context and purpose of Standard 100.1.1. The Directive's introduction highlights that solar energy has both direct and indirect effects on wildlife. The Directive states that it provides information on the requirements and recommendations for solar energy projects in Alberta to avoid or mitigate the risk to wildlife and wildlife habitat.[51] It also states that if preliminary information for a potential site indicates a high risk to wildlife (i.e., presence of native grassland), alternative locations should be sought.[52]

---

44 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF pages 2-3 and 5.

45 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF page 4.

46 Exhibit 26435-X0154, Appendix D - CV of Cliff Wallis (Jan 2022).
According to his Curriculum Vitae, Cliff Wallis is a Professional Biologist, registered in the province of Alberta, who has 50 years' experience coordinating and undertaking environmental evaluation and biological surveys.

47 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF page 4.

48 Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF page 36; Transcript, Volume 3, page 513, lines 13-16.

49 Transcript, Volume 3, page 514 and pages 7-9.

50 Transcript, Volume 3, page 490, line 25 and page 491, lines 1-3.

51 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 5.

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

30. The Commission understands that the purpose of Standard 100.1.1 is to avoid or minimize effects to wildlife habitat, which the Directive specifies includes native grassland, as evidenced from its first sentence reproduced above.[53] Based on the second sentence of Standard 100.1.1, AEP considers native grassland to be an important wildlife habitat. The term "wildlife habitat" is defined in the Directive to mean "the terrestrial and aquatic environment and associated ecosystem elements that in combination provide the requirements of food, shelter, and space needed to support self-sustaining populations of wildlife."[54] In other words, it has a broad definition. The Directive also says that appropriate site selection, referring to the location of a solar project within a landscape-level or regional planning area, is the first and most critical factor in preventing significant effect on wildlife.[55] While the Directive is not determinative in how the Commission must assess impacts of project siting on native grassland, the Commission considers it helpful in understanding how broad and significant AEP considers the impacts of siting solar projects on native grassland may be on wildlife and wildlife habitat.

31. The Commission notes that the Directive outlines both "requirements (Standards)" and "recommendations (Best Management Practices)" to avoid or minimize impacts of a solar power project on wildlife and wildlife habitat. Facilities are required to meet the standards from the Directive, while implementation of the best management practices is not mandatory.[56] Criteria for wildlife habitats including native grassland are specified in a standard (Standard 100.1.1). Given that the purpose of the Directive is to avoid or mitigate risk to wildlife and wildlife habitat, that native grassland is identified as important wildlife habitat, and that clear language to avoid or minimize siting on native grassland is presented in the standard, the Commission finds that Solar Krafte's proposed interpretation of the terms "disturbance" and "footprint," as limiting the Directive's application of the terms to the surface area of land permanently and physically disturbed (i.e., access roads, collector line routes, and PV module piling) and land beneath the project solar panels, is unduly narrow and inconsistent with these other elements of the Directive. Rather, the Commission finds that the science behind the Directive requires consideration of the full impact as a result of a solar project sited on native grassland (i.e., the entirety of native grassland within the fenceline of the project as well as outside) in order to minimize effects to wildlife and wildlife habitat.

32. Furthermore, as entire array of solar panels, and not just limited sections of smaller and/or linear components (i.e., collector lines or access roads), were sited over large areas of native grassland, the Commission is of the view that Solar Krafte did not adequately avoid or minimize native grassland in the siting of either the original or updated project design.

33. Accordingly, in the sections below the Commission considers Solar Krafte's compliance with the Directive as it applies to the 217.4 ha.

3.1.2.2 What is the project's impact on native grassland?

34. The parties disagreed on the magnitude of the project's impacts to native grassland habitat on Section 24. For the reasons that follow, the Commission finds that there is a high negative impact to native grassland habitat.

---

53 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 6.
54 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 26.
55 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 6.
56 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 5.

35. The Commission accepts that siting the project on Section 24 will change the habitat on this area of land, but that the area will still be biologically functional. This finding is consistent with evidence provided by C. Wallis, Derek Ebner, and Tyler Reid.[57] D. Ebner of Stantec, an independent witness retained by Solar Krafte, testified that the habitat would be functional, just different.[58] T. Reid of Hemmera, an independent witness retained by Solar Krafte, confirmed that there would be indirect effects within the project area as to how wildlife used the habitat during and post-construction.[59] C. Wallis stated that the area would cease to function as native grassland. In his view, there may still be native species, but the area would not be a fully functioning or even an almost completely fully functional native grassland habitat.[60]

36. However, in the Commission's view, the purpose of Standard 100.1.1 of the Directive is to minimize effects to important wildlife habitat, which includes native grassland habitat. The Commission considers that the project will cause an unacceptable impact to a large area of native grassland (217.4 ha) if the habitat changes such that, while still biologically functional, it is less functional in an essential way, or not functional, for the sensitive species that rely on native grassland for suitable habitat.

37. The Commission finds in this case that if the project is sited on Section 24, it will no longer be native grassland habitat or will be less functional in an essential way for the species that rely on this habitat. In making this finding, the Commission places significant weight on the evidence of C. Wallis, which is consistent with AEP's referral report that, from a biological perspective, the area would no longer function as native grassland habitat.[61]

38. The Commission is not persuaded that the level of this impact to native grassland habitat is lower if species continue to use the area of native grassland between panel rows,[62] or if the addition of solar project infrastructure makes the area more desirable for other species. This is because the purpose of the Directive is to minimize impacts to wildlife that rely on important native grassland habitat. If the project results in the area being biologically functional, but no longer functional native grassland habitat, then the high risk to wildlife that rely on native grassland remains.

39. The Commission is also not persuaded that the level of impact may be lower because Section 24 is not "intact pristine grassland."[63] The Commission accepts that Section 24 has been previously and is currently disturbed by human activities, which includes the siting of industrial development and associated infrastructure.[64] In T. Reid's view, as an example, given these disturbances, there are other native grassland habitats that represent much higher quality.[65]

40. Despite this, the Commission finds that the impact of siting the project on Section 24 creates a high risk to wildlife and wildlife habitat. The Commission considers that Section 24 has a relatively large area of native grassland (217.4 ha), and that the native grassland is not merely

[57] Transcript, Volume 3, page 515, lines 8-11; Transcript, Volume 1, page 42, lines 16-21, page 46, lines 8-13, page 49, lines 2-4, page 151, lines 14-18, page 152, lines 3-8, page 157, lines 23-25, and page 158, line 1.
[58] Transcript, Volume 1, page 42, lines 16-21.
[59] Transcript, Volume 1, page 151, lines 14-18.
[60] Transcript, Volume 3, page 515, lines 8-18.
[61] Transcript, Volume 3, page 515, lines 8-18.
[62] Transcript, Volume 1, page 157, lines 23-25, and page 158, line 1.
[63] Transcript, Volume 1, page 43, lines 21-25.
[64] Transcript, Volume 3, page 431, lines 15-25, and page 432, line 1.
[65] Transcript, Volume 3, page 465, lines 7-10.

restricted to smaller pockets within this area. For example, the Commission previously approved the Tilley Solar Project,[66] which contained nine ha of impacted native grassland. While previous human disturbance of Section 24 has occurred, these disturbances are relatively small in comparison to the entire area in Section 24. In addition, the Commission accepts C. Wallis's opinion that Section 24 has a diversity in plant and animal species and microhabitats and siting the project infrastructure on Section 24 will degrade some of the native grassland qualities most at risk.[67] This evidence is also consistent with AEP's referral report that that this area of native grassland provides habitat to wildlife, including to multiple sensitive species, that rely on native grassland to successfully breed, forage or shelter.

41. Accordingly, even if this area of native grassland is not pristine, and even if some of the species currently using the habitat continue to do so after the project is built, the Commission finds that there is a high risk of significant negative effects to wildlife if the project is sited on the native grassland in Section 24.

3.1.2.3 Is Solar Krafte able to adequately mitigate the impact to native grassland?

42. In this section of the decision, the Commission finds that Solar Krafte is not able to adequately mitigate the high risk to native grassland habitat on Section 24.

43. According to AEP, avoidance of siting project infrastructure in areas of native grassland is the most critical factor in preventing significant negative effects on wildlife.[68] AEP also stated that given the nature of the impacts, there is little ability to mitigate the negative consequences of the project on Section 24 without a change in siting.[69] C. Wallis shared this view, recommending that the project strictly follow mandatory avoidance of native grassland, in order to address the potential loss of native species, habitat characteristics and ecological functions of native grassland.[70]

44. Solar Krafte submitted that it reduced permanent impacts to native habitat by 74 per cent (from 216.4 ha to 56.3 ha),[71] as evidenced in Hemmera's report.[72] During the hearing, D. Ebner from Stantec confirmed that the reduction was largely due to how impacts were calculated.[73] Specifically, Stantec assumed the *entire* 217.4 ha of native grassland within Section 24 was directly disturbed by the project.[74] Then, in the project update, Hemmera calculated direct project impacts as only the area that pilings connected with the ground and to any associated ground disturbances for access roads. This change in assumptions resulted in 56.3 ha of direct disturbance.[75]

---

66 Decision 25488-D02-2021, C&B Alberta Solar Development ULC, Reasons for Decision 25488-D01-2020: Decision on Application for Review and Variance of Decision 24434-D01-2020 Tilley Solar Project – Amendment, Time Extension, Ownership Transfer and Connection Order, January 21, 2021.

67 Transcript, Volume 3, page 475, lines 21-25; Transcript, Volume 3, page 474, lines 17-18.

68 Wildlife Directive for Alberta Solar Energy Projects, Alberta Environmental and Parks, PDF page 4.

69 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF page 4.

70 Transcript, Volume 3, page 490, lines 12-23, 25 and page 491, lines 1-3.

71 Exhibit 26435-X0099, Solar Krafte Brooks Solar Farm Project Amendment, PDF page 4.

72 Exhibit 26435-X0101, Attachment 2 – Hemmera Brooks Solar Farm Project Amendment, August 11, 2021, PDF page 6.

73 Transcript, Volume 1, page 39, lines 3-6.

74 Transcript, Volume 1, page 40, lines 10-14.

75 Transcript, Volume 1, page 146, lines 1-5; Transcript, Volume 2, page 403, lines 19-25 and page 404, lines 1-12; Exhibit 26435-X0101, Attachment 2 – Hemmera Brooks Solar Farm Project Amendment, August 11, 2021, PDF page 12.

45. The Commission is not persuaded that changing these assumptions demonstrates that Solar Krafte made material efforts to avoid or reduce the amount of impacted native grassland habitat in Section 24. As noted, the 74 per cent reduction largely resulted from a change in assumption underlying the calculation of impacted native grassland, not a significant reduction or change to actual project infrastructure.[76] Solar Krafte only reduced the total number of solar panels on Section 24 by approximately five per cent[77] in the project update. The Commission does not consider this to be a significant percentage, and insufficient to mitigate the impacts to this native grassland habitat. The Commission accepts that new and existing non-native species of wildlife may benefit from the environmental changes that the project infrastructure would introduce to the habitat on Section 24; however, the Commission remains concerned about the high risk to the wildlife that specifically relies on the native grassland in Section 24.

46. Solar Krafte proposed additional mitigation activities, including: (i) conducting all construction activities on Section 24 during dry or frozen ground conditions to avoid the restricted activity for breeding birds between April 1 and July 15; (ii) reclaiming and reseeding native grass disturbed by the project (including disturbance during construction) with native seed mix; (iii) controlling noxious and prohibited weed species in accordance with the law; and (iv) limiting grading, stripping and trenching to the footprint of access roads, collector line routes and PV module pilings.[78]

47. The Commission finds that the construction mitigation activities are temporary and last only as long as construction. Earlier in this decision, the Commission found that the current siting makes the native grassland habitat less functional in an essential way or not functional for the sensitive species that rely on this habitat. As the project is expected to operate for 30 years, this means that the native grassland would not function as it does now for this period. Solar Krafte also advised that it may consider re-negotiating the lease after this time,[79] meaning that the land may continue to host a solar power plant beyond 30 years. The Commission finds that the loss of native grasslands over this length of time will result in a significant negative impact to wildlife and wildlife habitat.

48. The Commission appreciates that some of the project's siting considerations that were important to Solar Krafte included the benefits of economies of scale, the large area of land they were able to secure from the Eastern Irrigation District landlord, and the desire to be near the substation in order to avoid additional transmission infrastructure.[80] Given these considerations, it was Solar Krafte's position that moving five per cent of the solar panels from Section 24 represented the best it could do to minimize the impact to native grassland.[81] However, the Commission is not persuaded that Solar Krafte has taken adequate steps to seek an alternative to locating the project on Section 24 and considers that the impacts to wildlife and wildlife habitat are unacceptably high.

---

[76] In the environmental evaluation for the initial project design, Stantec assumed 217.4 ha of native grassland within Section 24 was impacted by the project, while in the project update, Hemmera calculated 56.3 ha of direct disturbance as the area of impacted native grassland. 56.3 divided by 217.4 is equal to 26 per cent, which means a 74 per cent reduction in terms of impacts to native grassland.

[77] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 1.

[78] Transcript, Volume 4, page 654, lines 13-25 and page 655, lines 1-4.

[79] Transcript, Volume 2, pages 362, line 19 to page 364, line 17.

[80] Transcript, Volume 3, page 429, lines 13-25 and page 430, lines 1-17.

[81] Transcript, Volume 3, page 430, lines 23-25.

49. Overall, the Commission finds inadequate mitigation activities have occurred or would occur, considering the high risk to wildlife and wildlife habitat due to the project's siting of 279,126 solar panels on 217.4 ha of native grassland. In the Commission's view, these impacts can only be mitigated by avoiding Section 24.

3.1.2.4 How should the Commission weigh AEP's high risk ranking for wildlife and wildlife habitat as a result of siting the project on native grassland in the context of AEP's moderate risk ranking for the project overall?

50. The Commission finds that while AEP's overall risk ranking is an important factor, the Commission must also consider the extent of the project's effects to wildlife and wildlife habitat that result from siting the project on native grassland, which AEP has assigned a high risk ranking.

51. Solar Krafte submitted that the Commission should place greater weight on AEP's moderate risk ranking for the overall project as opposed to AEP's high risk to wildlife and wildlife habitat caused by siting the project on Section 24. Solar Krafte highlighted findings in prior Commission decisions specific to renewable power plant applications, where the Commission, despite a high AEP risk rating for a specific wildlife feature, placed greater reliance on a project's lower overall risk ranking, in approving the project in the public interest.[82]

52. The Commission continues to be of the view that a project's overall risk ranking from AEP is an important consideration when assessing a project in the public interest. However, the Commission must also take into account the specific evidence in a proceeding, which may require a determination on whether the impact on a specific wildlife feature is acceptable in the circumstances. The Commission has previously found that power plant applications are in the public interest, while also finding that aspects of those projects pose unacceptably high risks to specific wildlife features and did not approve those aspects of the project.[83] Solar Krafte acknowledged that the Commission has the authority to approve part of a power plant application that it determines to be in the public interest while rejecting those aspects of a project that it determines are not.[84] Accordingly, the Commission considers that it may, consistent with past practice and its legal authority, make determinations about specific environmental effects caused by the project even though the project may have received an overall moderate risk ranking by AEP.

53. With respect to this project, the Commission has found that siting the project on Section 24 creates high risks to wildlife and wildlife habitat and that the proposed mitigation activities do not adequately mitigate this risk.

---

82 Transcript, Volume 4, pages 641-643.

83 See for example Decision 2402-D01-2019: Enel Alberta Wind Inc., Alberta Electric System Operator and AltaLink Management Ltd., Riverview Wind Power Plant and Interconnection, Proceeding 2402, July 15, 2019.

84 Transcript, Volume 4, page 752, lines 21-25, page 753, lines 1-6, referencing Decision 2402-D01-2019: Enel Alberta Wind Inc., Alberta Electric System Operator and AltaLink Management Ltd., Riverview Wind Power Plant and Interconnection, Proceeding 2402, July 15, 2019.

3.1.2.5 Is siting the project on native grassland in accordance with the South Saskatchewan Regional Plan?

54. Under Section 8.1 of the *Alberta Utilities Commission Act*, the Commission shall act in accordance with any applicable *Alberta Land Stewardship Act* regional plan. The South Saskatchewan Regional Plan (SSRP) applies to the project area.

55. Cassilope submitted that the project should be denied because it does not comply with the SSRP's objectives and provisions. Specifically, the project would substantially alter the land use practices of wildlife, including sensitive species of wildlife that use the area.[85] Solar Krafte responded that the project complies with the SSRP; it explained that under the SSRP, private land conservation decisions are left to the private owners of the land, and that there is no requirement under the SSRP for strict compliance with the Directive.[86] The Commission notes that C. Wallis, in his evidence, advised that there is specific guidance in the SSRP with respect to public lands to maintain intact native grassland, but that private landowners may convert native grassland to other uses. Despite this, C. Wallis submitted that the SSRP highlights that areas with high biodiversity, such as intact native grassland, are important for connectivity and would benefit from remaining in a less disturbed condition.[87]

56. The Commission notes that the SSRP does not change or alter private property rights. The Eastern Irrigation District, which is a corporation, is the landowner of Section 24. The Commission finds that Section 24 is considered private lands in the circumstances. The specific requirements in the SSRP regarding native grasslands are limited to public land. Accordingly, the Commission finds that either approving or denying the siting of the project on Section 24 would be in accordance with the SSRP and Section 8.1 of the *Alberta Utilities Commission Act.*

3.1.2.6 Summary

57. The Commission has determined that the impacts to the large area of native grassland in Section 24 create a high risk to wildlife and wildlife habitat, and that there are inadequate mitigation measures proposed to reduce these environmental impacts to an acceptable level. In the Commission's view, avoidance in siting the project on Section 24 is the only way to reduce the high risk in the circumstances. Weighing the negative environmental impacts with the social and economic and other effects of the proposed project, as described below, the Commission finds that it is not in the public interest to approve the construction and operation of the power plant on Section 24.

3.1.3 Section 18 (LD 18-18-15-W4)

58. The issue in this section of the decision is whether the north half of Section 18 also qualifies as native grassland according to the AEP native grassland definition requiring a minimum 30 per cent cover of native grass and forb species.[88] The Commission finds that the north half of Section 18 does not qualify as native grassland.

---

85 Transcript, Volume 4, page 689, lines 10-14.
86 Transcript, Volume 4, page 749, lines 15-25, page 750, lines 1-12.
87 Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF page 13.
88 Exhibit 26435-X0180, Solar Krafte Reply Evidence Submissions Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.

59. In addition to the native grassland in Section 24, C. Wallis submitted that there is also 55.7 ha of native grassland in the north half of Section 18 (LD 18-18-15-W4).[89] Wallis described his methodology as a desktop review of available data, and historical and recent aerial imagery, in addition to a field assessment where he walked representative areas of habitat. The field assessment on the north half of Section 18 was conducted in January 2022.[90] C. Wallis advised that the cover of native plant species was over the percentage required to be considered native grassland in over 95 per cent of the areas surveyed.[91]

60. Stantec conducted the environmental surveys on the original project lands. In reply evidence, it explained that Dan Busemeyer (who prepared the reply evidence along with D. Ebner) conducted a vegetation survey for the lands in Section 18 identified by C. Wallis on June 19 and 20, 2020, during the active growing season.[92] Stantec indicated that this north half of Section 18 did not qualify as native grassland, based on the AEP definition (i.e., native species comprise less than 30 per cent).[93] In Stantec's view, the vegetation cover in the northeast quarter and northwest quarter of Section 18 was tame pasture dominated by Kentucky bluegrass, dandelion and crested wheatgrass.[94] D. Ebner submitted that it was unlikely for the north half of Section 18 to transition from tame pasture to native grassland between the time Stantec visited the project area in June of 2020 and the time C. Wallis visited in January of 2022.[95]

61. Accordingly, there is a factual disagreement between the two independent witnesses. Both professional biologists described their methodology, visited the project site and the lands at issue, and gathered photographic evidence to support their conclusions.

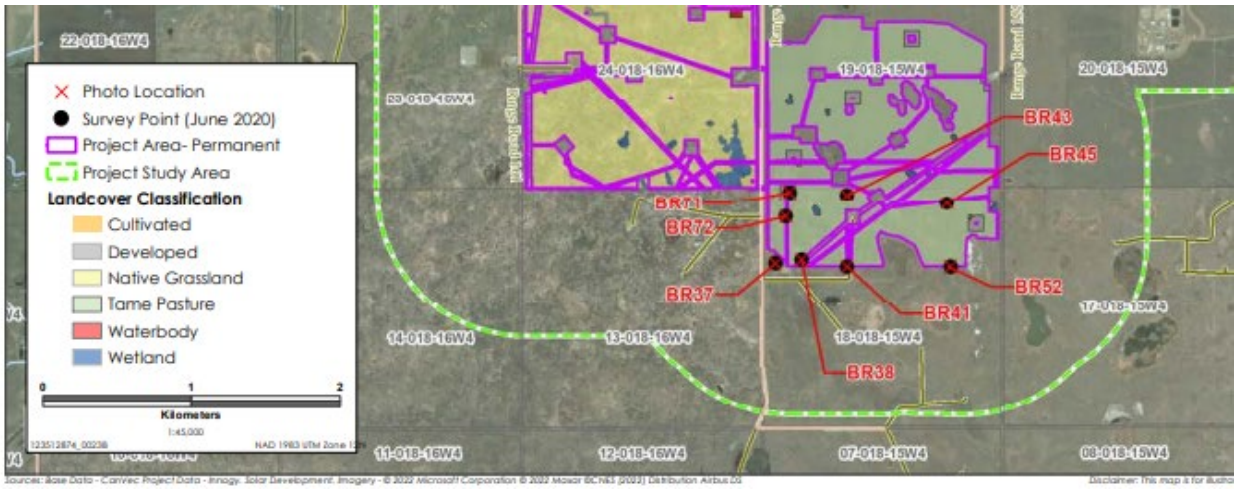
62. The survey methodologies applied by Stantec on June 19 and 20, 2020, and by C. Wallis in January 2022 both focus on qualitative data, which cannot accurately quantify the grassland composition (i.e., percentage of native and non-native cover). The lack of quantitative calculations to support either conclusion places additional weight on the need for appropriate survey conditions that support vegetation identification. The Commission notes that although C. Wallis is qualified and experienced in this area of expertise, the timing of his site visit to Section 18 (i.e., January 2022) was well outside the active growing season (i.e., approximately between mid-June and mid-September). This compromises the ability to accurately classify grassland vegetation species because survey conditions are not ideal (e.g., snow covered). Additionally, vegetation can be dormant and have degraded identifying features (e.g., inflorescence, blade, sheath), especially for graminoids (i.e., erect, rooted and herbaceous plants with a grass-like morphology). The standard for vegetation surveys is that they are

89 Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF pages 38-39.
90 Exhibit 26435-X0161, Cassilope Group Response to Solar Krafte Information Request Round 1, Cassilope-Solar Krafte-2022FEB03-001, PDF page 3.
91 Exhibit 26435-X0161, Cassilope Group Response to Solar Krafte Information Request Round 1, Cassilope-Solar Krafte-2022FEB03-001, PDF page 4.
92 Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.
93 Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 5.
94 Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.
95 Transcript, Volume 1, page 124, lines 11-23.

completed in the active growing season.[96] As stated above, Stantec's vegetation surveys were completed on June 19 and 20, 2020, when vascular plant species are readily identifiable.[97]

63. Cassilope's rationale for why its evidence should be preferred is that Stantec did not provide evidence that its expert actually walked in and along the native grassland on Section 18, which in its view likely led to the incorrect classification.[98] The Commission notes that Stantec provided evidence that it identified several survey points, and at each point recorded vascular plant species, and took four directional photographs.[99] The eight survey points are identified in the image below (i.e., BRXX):[100]

Figure 3. Survey points within Section 18



64. It is unclear to the Commission why these two witnesses arrived at different conclusions regarding classification of vegetation cover. The Commission finds that Stantec has provided sufficient evidence to show that it acted in a professional and diligent manner in classifying the vegetation cover in the north half of Section 18. Its surveys were conducted by a qualified biologist, consisted of a desktop assessment of available databases, field visit during the active growing season with defined survey points, and photographs of the area.

65. In addition, the Commission notes that prior to Solar Krafte filing an application with the AUC, it must provide a renewable energy project submission report including project details and an environmental evaluation as they pertain to wildlife and wildlife habitat to AEP for compliance with wildlife policies. AEP assesses the completeness and sufficiency of information provided and, if necessary, identifies any additional information that may be required.[101] AEP accepted Stantec's environmental evaluation, indicating that it was of the view that it had

[96] Conservation Assessments in Native Grasslands, Alberta Environment and Parks, June 2018, Edmonton Alberta. PDF page 11.
[97] Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.
[98] Transcript, Volume 4, page 700, lines 2-8.
[99] Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 4.
[100] Exhibit 26435-X0180, Appendix G - Expert Report and Curriculum Vitae of D. Busemeyer and D. Ebner, PDF page 6.
[101] Bulletin 2018-04, Roles and responsibilities of the Alberta Utilities Commission and Alberta Environment and Parks for applications to construct and operate wind and solar power plants, March 8, 2018, PDF page 2.

adequate information for its purposes. AEP did not identify issues with the determination of the north half of Section 18 as native grassland in its referral reports.

66. In consideration of the above, the Commission finds that the north half Section 18 does not qualify as native grassland. The Commission considers the project's environmental impacts to this section of land in Section 3.2 of this decision.

3.2 Other environmental impacts

67. In this section of the decision, the Commission discusses the project's impacts on wetlands, wildlife features and birds. The Commission finds that the environmental impacts of the project, aside from those related to siting the project on Section 24, can be appropriately mitigated if Solar Krafte adheres to its commitments.

68. Solar Krafte retained Stantec to prepare the environmental evaluation for the original project land, and retained Hemmera to conduct a further evaluation for lands added during the project update. Stantec's environmental evaluation for the original project lands concluded that the overall residual effects of the project are not predicted to be significant and that the potential adverse effects associated with the project can be mitigated with standard mitigation measures, industry best management practices and site- and species-specific mitigation.[102] As part of the project update, Solar Krafte relocated some project infrastructure onto the additional land. Hemmera's evaluation concluded that the project update has resulted in an overall reduction in potential environmental impacts.[103] AEP amended the referral report following the project update and concluded that the overall project risk has been reduced from a high risk to a moderate risk level; however, the project remains a high risk to wildlife and wildlife habitat as a result of the project being partially sited on native grassland.[104]

69. Cassilope raised concerns that the project would be sited in an area that is environmentally sensitive and home to large amounts of wildlife, including sensitive and threatened species. It questioned whether there is adequate protection for wildlife species and the environment. Cassilope retained C. Wallis of Cottonwood to prepare a report that addressed these concerns.

3.2.1 Are the project's impacts to wetlands acceptable?

70. The first environmental issue the Commission addresses is the project's impacts to wetlands.

71. The Commission accepts that Solar Krafte avoided all direct impacts to seasonal or higher class wetlands (Class III+) and that the associated 100-metre wetland setbacks will be implemented. The remaining issue is the impacts to Class I and Class II wetlands and the associated surveys.

72. C. Wallis raised concerns with encroachment of ephemeral (Class I) water bodies and temporary (Class II) wetlands. He submitted that federally listed species at risk or sensitive amphibians, including the Great Plains toad and plains spadefoot toad, could use these

[102] Exhibit 26435-X0012, Attachment 10 – Stantec Environmental Evaluation, PDF page 31.
[103] Exhibit 26435-X0101, Attachment 2 – Hemmera Brooks Solar Farm Project Amendment, August 11, 2021, PDF page 12.
[104] Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF page 5.

water bodies and wetlands. However, because no pre-construction amphibian or rare plant surveys were conducted, it is not clear if these species use the project land.[105]

73. T. Reid of Hemmera, retained by Solar Krafte, submitted that C. Wallis's concerns with Class I and Class II wetlands were unwarranted because the Directive does not require a setback from Class II wetlands, and that Solar Krafte reduced a direct impact on the number of Class II wetlands from 41 to 31. T. Reid added that the Alberta Wetland Classification System[106] does not recognize ephemeral water bodies as wetlands.[107]

74. The Commission finds that the project's impacts to wetlands are acceptable, given that Solar Krafte will implement the AEP required 100-metre setback from all seasonal and higher class wetlands (Class III+). AEP, after reviewing the project update, which included an assessment of impacts on all classes of wetlands, revised its risk ranking to wetlands and amphibians from high to low and concluded that the project aligns with the Directive from a wetlands perspective. With exception of following the *Alberta Wetland Policy* and requirements of the Alberta *Water Act* and code of practice, AEP added that its wetland mitigations, as previously proposed in the original referral report, are no longer required given Solar Krafte's adherence to the setbacks.[108] The Commission agrees with AEP's position and finds the avoidance of Class III+ wetlands and its associated setbacks aligns with the Directive and is protective of wetlands. The Commission finds that the project updates further reduced the impacts on Class II wetlands. This reduction demonstrates that the Directive's Best Management Practice 200.2.2, suggesting that a proponent should avoid temporary water bodies (i.e., Class II), was considered and implemented where practical by Solar Krafte. The Commission also finds that Solar Krafte's interpretation of Class I and Class II wetlands in the Directive is reasonable (i.e., the Directive does not require a setback from Class II wetlands and ephemeral water bodies do not qualify as wetlands). This finding is supported by Standard 100.1.9 in the Directive that explicitly states that a 100-metre setback applies to any wetland class, except for wetland classes listed as temporary in the Alberta Wetland Classification System (i.e., Class II). In addition, the Commission confirms that the Alberta Wetland Classification System does not recognize an ephemeral water body (Class I) as a wetland;[109] therefore, wetland setbacks do not apply.

75. C. Wallis requested, as a conditions of approval, that Solar Krafte conduct pre-construction surveys for amphibians and rare plants where the project's footprint overlaps with temporary wetlands and ephemeral water bodies.[110] The Commission finds that the requested surveys are not required for this project. The Directive does not have setback requirements from ephemeral water bodies (Class I) or temporary wetlands (Class II). The

---

105 Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF page 43.

106 Alberta Wetland Classification System, Alberta Environment and Sustainable Resource Development, effective June 1, 2015.

107 Exhibit 26435-X0172, Appendix B - Expert Report and Curriculum Vitae of T. Reid of Hemmera Envirochem Inc., PDF page 20.

108 Exhibit 26435-X0116, AEP-FWS Amendment Letter_Brooks Solar_Solar Krafte_2021-11-01, PDF pages 2 and 4.

109 Alberta Wetland Classification System, Alberta Environment and Sustainable Resource Development, PDF page 8.
According to the Alberta Wetland Classification System, ephemeral waterbodies are not considered a wetland because they are not affected by the water table long enough to promote the formation of water altered soils within 30 cm of the ground surface or a dominance of water tolerant vegetation.

110 Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF pages 3.

Commission also notes AEP's position that wetland mitigations are not required given the adherence to Class III+ wetlands.

76. C. Wallis also requested, as a condition of approval, that Solar Krafte avoid temporary wetlands under the best management practices outlined in the Directive, at least in areas of native habitat.[111] The Commission finds that condition is not required. As discussed in Section 3.1 of this decision, the Commission found that Section 24 contained native grassland in the project area and found that constructing and operating the project within Section 24 is not in the public interest. Therefore, the project avoids all areas of native grassland habitat. As a consequence, the Best Management Practice in the Directive for avoidance of temporary wetlands in the areas of native habitat has been met.

3.2.2 Are the project's impacts to wildlife features acceptable?

77. The second environmental issue the Commission addresses is the project's impacts to wildlife features (e.g., raptor nests, swallow colonies).

78. The Commission finds that, based on the project layout update, there are no wildlife features or wildlife setbacks that interact with the project. The updated project layout is now sited outside the 1,000-metre setback of two ferruginous hawk nests, and outside the 100-metre setback of two cliff swallow colonies and a coyote den that were previously reported.[112] The Commission notes that AEP reduced the project's risk ranking to ferruginous hawk nests from high to low and stated that the project complies with the Directive in respect of wildlife features. In the above subsection of the decision, the Commission agreed with AEP's determination that the risk to sensitive amphibians has been adequately reduced through the implementation of the wetland setbacks.

79. Consistent with AEP, the Commission finds that Solar Krafte has applied the principles of avoidance and mitigation appropriately in these circumstances and that the avoidance of these wildlife features and their associated setbacks minimizes the potential effects from the project to an acceptable level.

3.2.3 Are the project's impacts to birds acceptable?

80. The third environmental issue the Commission addresses is the project's impacts to birds.

81. C. Wallis submitted that there is a known mortality risk for birds as a result of collisions with solar panels. Cassilope members provided evidence that the area is a major bird migration route,[113] and referring to the recommendation of C. Wallis,[114] Cassilope requested that white edges be added to the solar panels to minimize bird collisions.[115] Solar Krafte committed to discuss this potential mitigation measure with the manufacturer and to work with AEP to implement additional mitigations should avian mortalities be determined excessive by AEP.[116]

[111] Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF page 3.
[112] Exhibit 26435-X0101, Attachment 2 – Hemmera Brooks Solar Farm Project Amendment, August 11, 2021, PDF page 10.
[113] As examples: Transcript, Volume 3, page 530, lines 10-15; Exhibit 26435-X0150, Appendix A - Landowners Evidence, PDF page 18.
[114] Exhibit 26435-X0148, Appendix C - Evidence of Cliff Wallis, PDF page 3.
[115] Transcript, Volume 4, page 711, lines 11-14.
[116] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 9.

82. The Commission acknowledges that Solar Krafte committed to investigate with the manufacturer the use of white edges on the solar panels to reduce the risk of bird mortality. The Commission notes that AEP may require implementation of additional mitigation measures if it finds that bird mortalities are an issue. The Commission expects Solar Krafte to uphold its commitments to consult the manufacturer and AEP about the effectiveness and feasibility of potential mitigation measures, including installation of white edges on the solar panels. For clarity, regardless of AEP's determination on additional mitigation measures, Solar Krafte may add white edges to the solar panels at the construction stage if it chooses.

83. Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* requires approval holders to submit to AEP and the AUC annual post-construction monitoring survey reports. Consequently, the Commission imposes the following as a condition of approval for the project:

a. Solar Krafte shall submit a post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission no later than December 31 of the year following the mortality monitoring period, and on or before the same date every subsequent year for which AEP requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

3.2.4 Summary

84. The Commission finds that the environmental impacts of the project, aside from those related to siting the project on Section 24, can be appropriately mitigated if Solar Krafte adheres to the commitments made, including abiding by all pertinent provincial and federal environmental legislation and guidelines, diligent implementation of the mitigation measures proposed in the environmental evaluation report, and adherence to the environmental condition of approval imposed by the Commission. The Commission notes that AEP reached a similar conclusion when it assigned the project an overall moderate risk level.

3.3 Agricultural impacts

85. The majority of the project land is owned by the Eastern Irrigation District, which it typically leased for cattle grazing. The primary agricultural concern raised by Cassilope was the loss of grazing land for cattle as a result of the proposed project.[117]

86. In this section of the decision, the Commission finds that with the exception of issues related to native grassland, which are addressed in subsection 3.1 of this decision, the Eastern Irrigation District, a private landowner, has authority to make decisions regarding the use of its land. This authority, however, is subject to the regulatory scheme under which the Commission and applicant operate as discussed in paragraph 89 below. The Commission also finds that while the land within the project fenceline will be unavailable for cattle grazing for the lifespan of the project, Solar Krafte's vegetation management plan is acceptable and will likely mitigate the loss of grazing land to a certain degree.

[117] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF page 15, paragraph 50.

3.3.1 Does the Eastern Irrigation District have the authority to change land use from grazing to hosting the project?

87. Cassilope submitted that the project land is a ideal site for cattle grazing, because it is close to landowners who use the Eastern Irrigation District land and it has access to irrigated water.[118] They expressed concerns about the decline of grazing land in the county of Newall as agriculture is one of the most important industries in the county and also a primary source of income for many Cassilope members.[119] They explained that a reduction in available grazing lands means that producers will change from cattle production to crop production because cattle production will no longer be profitable or sustainable.[120]

88. The Commission acknowledges Cassilope's concern that grazing land will be reduced as a consequence of the project; however, the Eastern Irrigation District is a private landowner and voluntarily entered into a lease with Solar Krafte knowing of the potential impacts of the project including the reduction of available grazing lands.[121]

89. The Commission finds that in the absence of legal or government policy restrictions that affect a private landowner's ability to take agricultural land out of production, that choice remains with the landowner. Certainly, given the statutory regime that the Commission and project proponents must operate under, the Commission's decision to deny a project or a portion thereof will prevent a landowner's preferred use of their lands but the initial decision to host a project is for the landowner alone.

3.3.2 What is the potential loss of grazing land?

90. The Commission has decided not to approve the project portion on Section 24. Therefore, the Eastern Irrigation District's ability to lease Section 24 for cattle grazing remains the same, and there will be no loss of grazing land in Section 24 because of the project. In addition, the Commission notes that the additional project area that Solar Krafte secured in the project update is cultivated land, and therefore there will be no loss of grazing land in the additional project area. In this subsection of the decision, the Commission considers the potential loss of grazing land in the project area that excludes Section 24 and the additional project area.

91. In Solar Krafte's view, the project would result in very little grazing land being removed from productivity because: (i) only the area within the project fenceline is being leased from the Eastern Irrigation District, and the land outside of the project fence enclosure (approximately 607 ha or 1,500 acres) will remain available to the Eastern Irrigation District for cattle grazing; and (ii) within the project fenceline, Solar Krafte proposed to use sheep grazing to manage vegetation.[122] Solar Krafte explained that the actual area that will be taken entirely out of forage[123] is relatively small and is comprised of the land that directly impacts with the ground (e.g., pilings, access roads and inverter pads). Solar Krafte submitted that forage will continue to

[118] Exhibit 26435-X0164, 2022 02 16 Cassilope Group Information Response to the AUC IRs, PDF page 11.
[119] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF page 15, paragraph 50.
[120] Exhibit 26435-X0164, 2022 02 16 Cassilope Group Information Response to the AUC IRs, PDF pages 9-10.
[121] Exhibit 26435-X0003, Attachment 2 – Participant Involvement Program (PIP) Report, PDF page 8.
[122] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 8, paragraph 26; Transcript, Volume 4, page 660, lines 11-15.
[123] Forage is a plant material (mainly plant leaves and stems) eaten by grazing livestock.

grow underneath the project solar panels for sheep grazing and the area within the project fence enclosure will remain productive land.[124]

92. The Commission finds that since no member of Cassilope grazes sheep, the impacts to the local cattle industry resulting from the reduction of reliable, irrigable cattle grazing land is not fully mitigated. However, the Commission notes that the land outside of the project fence will remain available for cattle grazing.

3.3.3 Is Solar Krafte's vegetation management plan acceptable?

93. Solar Krafte advised that it considered two potential measures for vegetation management: (i) grazing with sheep; and (ii) mechanical harvesting. Solar Krafte submitted that with the implementation of these mitigation measures, the project land will continue to "produce very close to the same amount of productive forage if that's what the land is used for."[125] Solar Krafte submitted these mitigation measures (i.e., grazing with sheep and mechanical harvesting) are acceptable because: (i) Solar Krafte intends to maintain vegetation height in the project area such that vegetation will not cast shadows on the bottom of the solar panels and reduce electricity production; and (ii) Solar Krafte is required to maintain vegetation height in the project area to coincide with potential breeding bird periods.[126]

94. Cassilope questioned the feasibility of Solar Krafte's suggested vegetation management plans, noting that Solar Krafte has no experience with sheep grazing, and that if mechanical harvesting is used, then herbicides will also be used to control weeds.[127] Solar Krafte submitted that it has been approached by a number of farmers proposing sheep grazing for vegetation management in the project area.[128] During the hearing, Solar Krafte testified that it has successfully implemented mechanical harvesting at its other solar power facilities, referencing the Vauxhall Solar Farm.[129]

95. The Commission accepts Solar Krafte's explanation that the area within the project fence enclosure will produce forage for sheep grazing or mechanical harvesting between solar arrays and underneath the solar panels because a gap of approximately 7.6 metres between each solar array is open to sky and the solar panels do not totally block the sun.[130] Solar Krafte is obliged to implement a management plan to maintain vegetation height in the project area, and the Commission is persuaded that vegetation management methods being considered by Solar Krafte, including sheep grazing and mechanical harvesting, will mitigate the loss of forage production. Given that Solar Krafte has been approached by farmers proposing sheep grazing for vegetation management and Solar Krafte has experience mechanically harvesting forage at its other solar power facilities, the Commission accepts that the vegetation management methods proposed by Solar Krafte appear to be feasible and should be effective. The Commission therefore finds Solar Krafte's vegetation management plan to be acceptable and should be effective to reduce the loss of grazing land resulting from the project to a certain degree.

---

124 Transcript, Volume 4, page 660, lines 16-20.
125 Transcript, Volume 2, page 253, lines 13-18.
126 Transcript, Volume 2, page 270, lines 16-20; Transcript, Volume 2, page 399, lines 18-25, page 400, lines 1-9, page 401, lines 23-25, and page 402, lines 1-5.
127 Transcript, Volume 4, page 721, lines 6-19.
128 Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 8, paragraph 26.
129 Transcript, Volume 2, page 253, lines 19-22.
130 Transcript, Volume 2, page 252, lines 17-24 and page 253, lines 3-12; Transcript, Volume 2, page 268, lines 11-19; Transcript, Volume 4, page 660, lines 16-20.

3.4 Property value impacts

96. In this section of the decision, the Commission assesses the impacts of the project on property values. The Commission finds that the project would be unlikely to affect property value of agricultural lands, but may negatively impact the value of residential properties. The Commission recognizes that the project's impact on property values is a factor that needs to be balanced against the project's public benefits.

97. The Commission has previously affirmed that property valuation is a complex and technical matter that is influenced by a wide variety of contextual and circumstantial factors. For this reason, the Commission has historically required that findings about property value impacts be based on project-specific evidence that is provided by experts and tested or made available for testing in a hearing. More recently, the Commission has acknowledged that project-specific evidence may not always be readily available due to an absence of local sales data. The Commission also considered testimony from landowners in that proceeding regarding negative public perception of a project's effects on viewscapes.[131] In this proceeding the Commission issued a letter to parties signaling its interest in receiving expert, site-specific, technical evidence on property valuation based on different skills, knowledge, expertise and/or methodologies than has historically been filed and that will contribute to the assessment of a project's impact on property values.[132] While the Commission has broadened its view of what types of evidence can potentially be used to demonstrate property value impacts, the Commission will continue to evaluate whether evidence adduced in a proceeding is reliable and relevant.

98. Cassilope retained Brian Gettel of Gettel Appraisals Ltd. to assess the impact of the project on property values, while Solar Krafte retained Glenn Doll of Serecon Inc. to do the same. B. Gettel anticipated a negative two to five per cent property value impact, while G. Doll anticipated no impact. The Commission finds that the overall impacts found by B. Gettel and G. Doll are somewhat in a similar range.

99. Both B. Gettel and G. Doll considered empirical methodologies that could be used to measure property value. B. Gettel stated there was not enough information for an empirical analysis. In contrast, G. Doll found four Alberta properties to use as data in a paired sales analysis, which include an agricultural land and three residential properties. During the hearing, B. Gettel explained that, in his view, G. Doll was able to find data because he went back further in time, and B. Gettel commended G. Doll on his efforts.[133] Accordingly, the Commission finds that both witnesses are in agreement that G. Doll found valid Alberta-specific data to use in an empirical analysis to assess property value impacts.

100. The Commission finds that G. Doll's methodology for identifying the four paired sales is reasonable. It is important that B. Gettel agreed that G. Doll found valid local sales data for an empirical analysis. While Cassilope raised concerns with how G. Doll assessed the impact of the four paired sales, there is necessarily some discretion that must be applied in a paired sales analysis, and the Commission accepts that G. Doll reasonably applied professional judgment and expertise in his analysis, as demonstrated by the explanations provided in his report and during cross-examination. The overall conclusions of both B. Gettel's report and G. Doll's report

[131] Decision 26214-201-2022: Buffalo Plains Wind Farm Inc. – Buffalo Plains Wind Farm, Proceeding 26214, February 10, 2022, PDF page 70, paragraph 347.
[132] Exhibit 26435-X0138, Property Valuation Evidence.
[133] Transcript Volume 3, page 511, lines 22-25, and page 512, lines 1-7.

(although different methodologies were used in both) are also similar, ranging from a negative two to five per cent impact to no impact to property values, which also supports a finding that G. Doll's methodology was reasonable. Given this, the Commission places greater weight on the Alberta project-specific empirical evidence on property values that G. Doll has provided than on B. Gettel's summaries of literature reviews, paired sales in other jurisdictions, case studies, and professional experience to categorize value impacts caused by external nuisances.

101. Both sides testified that the project will not impact the values of vacant agricultural properties (i.e., vacant lands that do not have residences)[134] because property value impacts are largely associated with visual impacts of the project on residential viewscapes., The Commission accepts the conclusion from B. Gettel and G. Doll that the project would be unlikely to affect the value of agricultural lands.

102. With respect to country residential properties, the Commission finds that there is potential for some property value impact, the degree of which depends on the size of the project and its visibility to people's homes. This is because viewscapes are one factor that will influence an individual's perception of the area as a place to reside. Cassilope members agreed that the project will have a negative impact on the values of their properties due to visual impacts and proximity of the project. As examples, Margaret Klassen submitted that she would not have bought her property if she was aware of the project. Elizabeth and David Houseman stated that they purchased their lands to enjoy the beauty and peace of the countryside, and that not many people would want to live next to a solar power plant.[135] Accordingly, the Commission finds sufficient evidence to establish that there is a negative public perception of the project's effects on viewscapes, and this may translate into a negative effect on property value for some properties, in the range of zero to five per cent, in the circumstances.

103. The Commission recognizes that the project's potential negative impact on property values is a consequence of the project that needs to be balanced against the project's public benefits. In particular, the Commission notes this balancing exercise is consistent with testimony of B. Gettel and G. Doll that close proximity to a solar project may have a neutral impact on property values when project benefits, such as increased employment, are taken into consideration.[136]

104. Cassilope requested that the Commission direct Solar Krafte to develop mitigation strategies to reduce the impacts on property values for residences within one kilometre of the project as a condition of approval. The Commission finds that such a condition is not required because the project's potential negative impact on agricultural or residential property value only ranges from zero to five per cent.

[134] Transcript, Volume 4, page 713, lines 8-11.
[135] Exhibit 26435-X0150, PDF pages 25-26.
[136] Transcript, Volume 4, page 659, lines 19-24.

3.5 Safety issues

105. In this section of the decision, the Commission considers safety issues associated with the project. First, the Commission considers potential solar glare impacts to a nearby helipad and finds that Solar Krafte's commitment to mitigate potential solar glare impacts to the helipad is reasonable. Second, the Commission finds Solar Krafte's commitment to develop a site-specific emergency response plan mitigates Cassilope's concerns about fire risks to an acceptable degree.

3.5.1 Is Solar Krafte's commitment to mitigate potential solar glare impacts reasonable?

106. There are no existing provincial or federal regulations imposing criteria for solar glare impacts. Rather, the Commission requires an applicant to consult nearby landowners about potential solar glare impacts at the pre-application stage, and to promptly address complaints or concerns from residents regarding solar glare from the project if the applicant receives any at the post-construction stage.

107. Solar Krafte's solar glare assessment identified nine dwellings, Highway 36, two local roads and a railway as receptors, and concluded that no solar glare is expected at any receptors. Cassilope noted that the solar glare assessment did not consider a helipad owned by Alan Jones and located on his home quarter (northwest quarter of Section 22, Township 18, Range 16, west of the Fourth Meridian) approximately 2.5 kilometres west of the project boundary.[137]

108. Solar Krafte explained the solar glare assessment did not include A. Jones's helipad, because it was not aware of the helipad until January 2022 when A. Jones mentioned it in its direct evidence. More specifically: (i) A. Jones had not previously mentioned the helipad or helicopter operations in any submissions filed with the AUC or in the participant involvement program; and (ii) the helipad was not identified during Solar Krafte's consultation with Transport Canada and NAV CANADA. Solar Krafte explained that if the helipad located on A. Jones's property was a certified heliport, this would have been raised in consultation with Transport Canada and NAV CANADA.[138] The Commission accepts Solar Krafte's explanation that it made reasonable efforts to identify all relevant receptors for is solar glare assessment and did not include A. Jones's helipad because information about the existence of the helipad was not available to it.

109. The Commission finds that A. Jones's helipad qualifies as a solar glare receptor for the project because:[139]

- The definition of "aerodrome" in Rule 007 includes "airports, heliports and registered and unregistered airstrips."[140] This means that A. Jones's heliport, whether certified or not, is captured in the definition of aerodrome.

[137] Exhibit 26435-X0150, Appendix A - Landowners Evidence, PDF page 4; Exhibit 26435-X0164, 2022 02 16 Cassilope Group Information Response to the AUC IRs, PDF page 3; Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 10, paragraph 38.

[138] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF pages 10-11, paragraphs 36-39.

[139] Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*, effective April 25, 2022.

[140] Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*, PDF page 114.

- Rule 007 requires the applicant to "Submit a solar glare assessment report that predicts the solar glare at receptors within 800 metres from the boundary of the project and registered aerodromes and known unregistered aerodromes within 4,000 metres from the boundary of the project where the potential for glare is possible."[141] A. Jones's heliport is within 2.5 kilometres of the project boundary, and therefore a solar glare assessment for the heliport is required.

110. The Commission requested that Solar Krafte model and assess potential glare impacts to A. Jones's heliport.[142] In response, Solar Krafte updated its solar glare model to include A. Jones's helipad as a receptor. Results from the updated model are summarized below.[143]

- Flight paths following approach angles between 225 degrees and 315 degrees (i.e., west-southwest to west-northwest) may observe up to 1,097 minutes (or 18.3 hours) of yellow glare per year (or up to 13 minutes per day) for solar panel resting angles between zero degrees and three degrees.[144] Glare for these flight paths is predicted to occur at sunrise between January and April and between August and November.

- Solar panel resting angles greater than or equal to four degrees do not produce glare for any approach angles to A. Jones's helipad.

- Flight paths following approach angles between zero degrees and 210 degrees and between 330 degrees and 360 degrees will not experience any yellow glare for any solar panel resting angle.

111. Predicted solar glare results for A. Jones's helipad are also shown in the figure below.[145]

[141] Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*, PDF page 26.

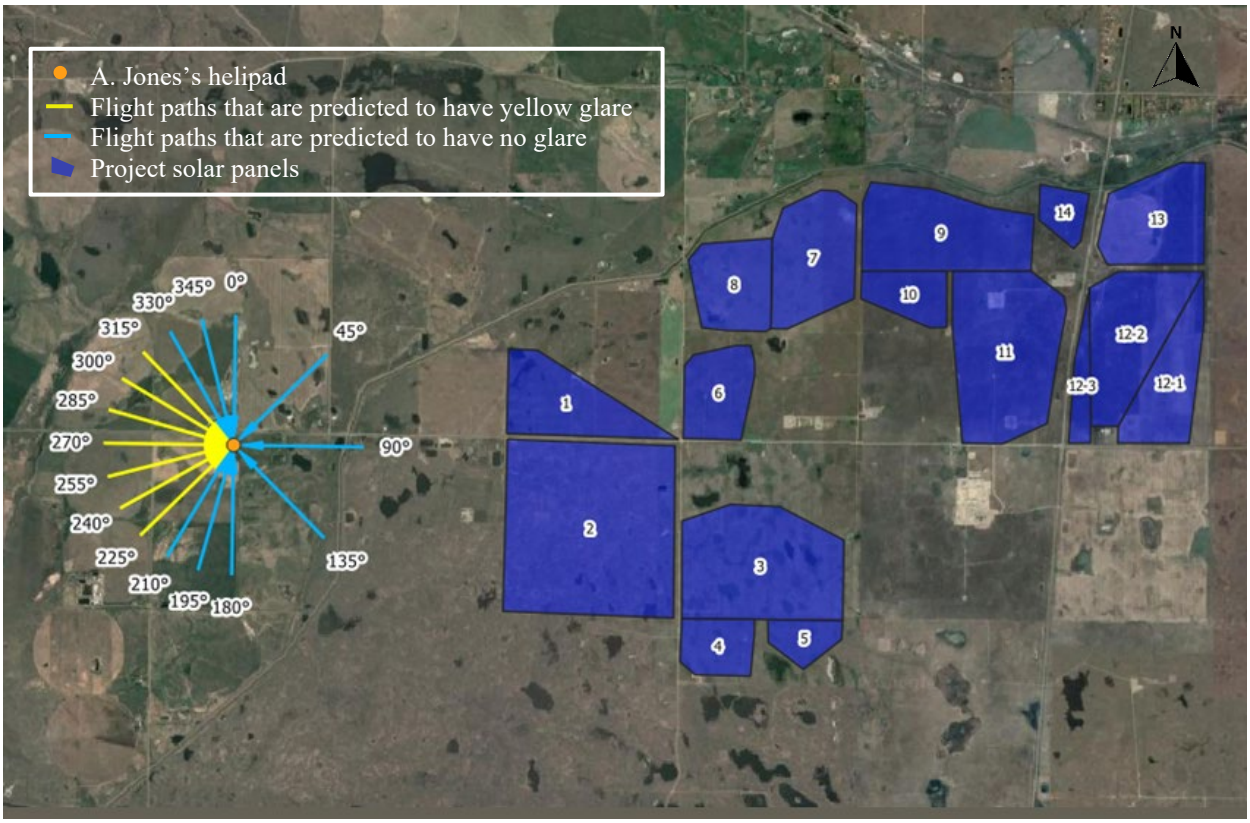
[142] Exhibit 26435-X0182, AUC information request round 3 to Solar Krafte (Solar Krafte-AUC-2022MAR03-001).

[143] Exhibit 26435-X0193, Attachment 1 - Solar Glare Hazard Analysis Report (Solar Krafte-AUC-2022MAR11-001), PDF pages 5 and 6.

[144] The solar glare assessment used colour codes to categorize effects of glare to a person's eyes. Green glare: glare with low potential for temporary after-image; Yellow glare: glare with potential for temporary after-image; Red glare: glare with potential for permanent eye damage.
The project solar panels will use a single-axis tracking system that includes a backtracking function. During backtracking period (i.e., near sunrise or sunset when the sun is at low elevation angles), the trackers will gradually tilt away from the sun back toward horizontal. Resting angle is an angle measured from flat ground or horizon to solar panel, which is the angle the solar panels rest at during backtracking period.

[145] Exhibit 26435-X0193, Attachment 1 - Solar Glare Hazard Analysis Report (Solar Krafte-AUC-2022MAR11-001), PDF page 6.

Figure 4. Predicted solar glare impacts to A. Jones's helipad



112. Solar Krafte committed to work with A. Jones and other helipad users to minimize the potential impact of the project on helicopter operations on a case-by-case basis and, if required, explore potential mitigations such as determining alternative flight paths or limiting the resting angle of solar arrays.[146]

113. The Commission considers that the impact of solar glare to A. Jones is not material. A. Jones advised that he has not flown or owned a helicopter for 2.5 years, although he expressed an intent to buy one in the future. A. Jones also provided evidence that commercial helicopter companies sometimes use the helipad;[147] in the Commission's view, this usage could continue. Given this evidence, the Commission finds that the helipad is currently used, but infrequently. In addition, the most impacted flight path is anticipated to have 18.3 hours of yellow glare per year (or 13 minutes of yellow glare per day), when a resting angle of one degree is used, at sunrise between January and April and August and November. The Commission does not consider this to be a material amount of time, per day, or per year.

114. The Commission also considers that the impact of solar glare to A. Jones is manageable. Solar Krafte committed to work with A. Jones and other helipad users to minimize the potential impact of the project on helicopter operations on a case-by-case basis and, if required, explore potential mitigations such as determining an alternative flight path or limiting the resting angle of solar arrays to mitigate glare (i.e., adjust the solar panels' resting angles to be greater than

[146] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 3.
[147] Exhibit 26453-X0187, Cassilope Group Info Response Round 2 to Solar Krafte 2022 03 08, SK-Cassilope-2022-MAR08-001.

four degrees).[148] Solar Krafte indicated that if A. Jones notified Solar Krafte that he intended to use the heliport before 9 a.m., and provided information about flight operations, it would be feasible for Solar Krafte to adjust the resting angles. The Commission considers this commitment to be a reasonable mitigation measure that further reduces the impact to helipad usage.

115. The Commission finds that other receptors, including residential and route receptors, are predicted to have no glare from the project. There are no existing provincial or federal regulations imposing criteria for solar glare impacts. The Commission iterates that at the post-construction stage, Solar Krafte is required to promptly address complaints or concerns from residents regarding solar glare from the project if it receives any. Accordingly, the Commission imposes the following condition of approval:

b. Solar Krafte shall file a report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as its response to the complaints or concerns. In particular, the report shall describe consultation with Alan Jones about glare mitigation for his helipad. Solar Krafte shall file this report no later than 13 months after the project becomes operational.

116. In addition, the Commission notes the solar glare modelling was premised upon the use of anti-reflective coating, and therefore imposes the following condition of approval:

c. Solar Krafte shall use anti-reflective coating on the project solar panels.

3.5.2 Is Solar Krafte's emergency response plan able to address Cassilope's concerns?

117. Cassilope questioned the ability of Solar Krafte and local responders to respond to emergencies associated with the project, such as fires. Cassilope members also questioned if Solar Krafte would have any local office or contacts during project construction and operations. In addition, Cassilope requested that Solar Krafte prepare a full hazard and risk assessment and make it be available to residents for review and consideration.[149]

118. Solar Krafte provided a summary of site-specific risks in relation to project construction and operation and identified emergency mitigation measures, and site monitoring and communication protocols.[150] Solar Krafte confirmed that it will develop a site-specific emergency response plan for construction and operation of the proposed power plant between 30 and 90 days before the start of construction.[151] Solar Krafte indicated the emergency response plan will include a description of fire hazards and will identify appropriate mitigation measures. Solar Krafte advised that it will consult with local authorities and incorporate feedback from local authorities into the site-specific emergency response plan. Solar Krafte further submitted that it would include input from interested stakeholders and local residents on the emergency response plan.[152] In addition, Solar Krafte committed to provide a copy of the final emergency response plan to Cassilope members who request a copy, and to notify the Commission if any

[148] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 3; Transcript Volume 2, page 395, lines 6-13.
[149] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF pages 13-14, paragraphs 42-44.
[150] Exhibit 26435-X0041, Information Response (Round 1), PDF pages 16-18.
[151] Transcript, Volume 4, page 662, lines 12-17; Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF pages 13-14, paragraph 52.
[152] Transcript, Volume 2, page 381, lines 24-25 and page 382, lines 1-3; Transcript, Volume 4, page 662, lines 23-25 and page 662, line 1.

comments or concerns are raised in respect of the emergency response plan or fire-related risks.[153] The Commission finds that these measures adequately mitigate emergency risks.

119. Solar Krafte testified that there will be a local contact during construction and there will be well-posted contact information on the project fence during operations; further, Solar Krafte submitted that project operations will be monitored for public safety, fire and other hazards in real-time using remote cameras.[154] Given these measures, the Commission accepts that the project will be appropriately monitored during the construction and operations phases.

120. The Commission requires Solar Krafte to follow-through on its commitment to develop a site-specific emergency response plan that complies with county requirements, consult local authorities, incorporate input from interested stakeholders and local residents, and provide a copy of the final emergency response plan to interested parties before the commencement of construction. Accordingly, the Commission imposes the following condition of approval:

d. Solar Krafte shall provide the Commission a confirmation letter regarding its emergency response plan no later than 30 days before the commencement of construction. The letter shall confirm that Solar Krafte has developed a site-specific emergency response plan in accordance with requirements of the county of Newell and in consultation with local first responders, and that Solar Krafte has incorporated input from interested stakeholders and local residents and provided a copy of the final plan to the county of Newell and the Cassilope Group.

3.6 Consultation issues

121. In this section of the decision, the Commission finds the participant involvement program conducted by Solar Krafte meets the requirements of Rule 007. The Commission also finds that the steps Solar Krafte took to lease land for the project were acceptable and generally consistent with Rule 007 requirements for a participant involvement program. Finally, the Commission accepts that Solar Krafte's visual simulations are reasonable but with some reservations, and finds that visual impacts from the project are expected to be minimal.

3.6.1 Does Solar Krafte's participant involvement program meet the requirements of Rule 007?

122. Cassilope questioned whether Solar Krafte's consultation process was adequate. It had the following concerns regarding Solar Krafte's consultation process or participant involvement program:[155]

- Some Cassilope members were not given the opportunity for face-to-face consultation with Solar Krafte.

- Some Cassilope members had difficulties contacting Solar Krafte representatives. In particular, Cassilope pointed out that Solar Krafte did not have a physical office in the area and only provided a mailing address.

[153] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 5.
[154] Transcript, Volume 2, page 377, lines 9-25, page 378, lines 1-9, page 379, lines 1-9, and page 380, lines 3-14.
[155] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF page 17, paragraphs 57-59.

- Some Cassilope members questioned whether the information provided by Solar Krafte was sufficient, especially in relation to the environmental evaluation.

123. Solar Krafte submitted that as directed by the AUC bulletins 2020-13 and 2020-30,[156] it communicated with stakeholders using phone, email, video conferencing or other means that avoided face-to-face contact wherever possible. In addition, Solar Krafte hosted a virtual community open house that was attended by a number of Cassilope members. While Solar Krafte acknowledged the preference of some Cassilope members for face-to-face consultation and in-person meetings, such means of consultation were not welcomed by all stakeholders in light of concerns related to the COVID-19 pandemic and were restricted by the Commission's direction and applicable government orders.[157]

124. Solar Krafte believed that stakeholders were provided with sufficient information to: (i) understand the details of the project and potential impacts on them, and (ii) provide early feedback that could be incorporated into project design where feasible. Specifically, Solar Krafte noted that:[158]

- The participant involvement program was responsive to stakeholder concerns and led to the integration of stakeholder feedback in a number of instances, including increased residential setbacks of between 140 and 440 metres for some residences and updates to the project layout to address potential impacts to wildlife and wildlife habitat.

- Consultation with local stakeholders was completed in collaboration with the Eastern Irrigation District prior to Solar Krafte leasing the project land.

125. Overall, the Commission is satisfied that Solar Krafte's participant involvement program for the project meets Rule 007 requirements, especially in light of the COVID-19 pandemic. The Commission notes that Solar Krafte mailed multiple project information packages to stakeholders, conducted consultation meetings with stakeholders via phone and email, and provided project-specific information regarding siting and associated environmental, noise and solar glare impacts. Solar Krafte also consulted the Eastern Irrigation District before entering into a lease agreement. The Commission acknowledges that some stakeholders may prefer face-to-face discussions; however, the Commission finds that replacing in-person consultation with phone/email is consistent with AUC bulletins 2020-13 and 2020-30 and is generally appropriate during the pandemic period.

126. The Commission acknowledges that where feasible, Solar Krafte incorporated mitigation measures into the project design to address concerns raised by stakeholders. For example, Solar Krafte increased setbacks from some residences to address concerns about visual impacts, and updated the project layout to avoid setbacks from environmental features (e.g., a ferruginous hawk nest). While Solar Krafte was unable to resolve all outstanding concerns raised by stakeholders, the Commission is satisfied, on the basis of the consultation records and the evidence in this proceeding, that Solar Krafte's participant involvement program generally achieved the purposes of consultation set out in Rule 007. This is because, through Solar Krafte's

[156] Bulletin 2020-13, Interim changes to AUC participation involvement program and related information requirements, issued on April 7, 2020. Bulletin 2020-30, Revised draft version of AUC Rule 007 and interim changes to AUC participation involvement program, issued on August 7, 2020.

[157] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 5, paragraphs 11-12.

[158] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF pages 5-6, paragraphs 12-14.

participant involvement program, Cassilope members were given sufficient information to understand the nature of the project, identify areas of concern, and engage in dialogue with Solar Krafte with the goal of eliminating or minimizing those concerns.

3.6.2 Should Solar Krafte have consulted local residents before it started negotiations to lease the project land?

127. The Commission notes a specific comment from Katie McLean, a Cassilope member, that landowners should have been consulted before negotiations to purchase and/or lease the project land from the Eastern Irrigation District. K. McLean was concerned that Solar Krafte finished all its negotiations with the project landowners before it discussed the project with the other members of the community. She believed that this caused conflict amongst residents in the local community.[159]

128. In response, Solar Krafte clarified that it reached out to the Eastern Irrigation District in early 2018, started its participant involvement program in February 2021,[160] and completed consultation with local stakeholders in collaboration with the Eastern Irrigation District prior to leasing the project land, which also occurred in February 2021.[161]

129. Rule 007 states that a participant involvement program must be conducted before a facility application is filed with the Commission. Rule 007 also states that "In its participant involvement program, the applicant is expected to consider how to effectively communicate and interact with persons whose rights may be directly and adversely affected by the proposed project."

130. The Commission expects an applicant to conduct a participant involvement program as soon as it has enough information about the project to engage in meaningful discussion with local stakeholders. In most cases, sufficient information for meaningful discussion would include a preliminary project boundary and details on the project equipment and layout.

131. The Commission finds that it was reasonable for Solar Krafte to start lease negotiations with the Eastern Irrigation District before starting consultation with local residents. This is because a preliminary project boundary and layout are essential to advance effective consultation. It would not have been practical for Solar Krafte to conduct its participant involvement program before at least initiating discussions to secure land for the project. The Commission recognizes that the time that the participant involvement program started, and concluded, and the time that the lease was entered into, all occurred in the same month. Proponents should not time their acquisition of project lands so as to restrict or limit a fulsome consultation about the project's impacts on landowners and the incorporation of landowner input into the final design of a project. However, in the Commission's view, Solar Krafte's timeline is acceptable, since entering into a lease did not prevent Solar Krafte from adjusting project design in response to stakeholders' concerns.

[159] Exhibit 26435-X0150, Appendix A - Landowners Evidence, PDF page 74.

[160] Transcript, Volume 2, page 384, lines 15-17; Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 5, paragraph 12.

[161] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 5, paragraph 12; Transcript, Volume 2, page 384, lines 21-22.

3.6.3 Are Solar Krafte's visual simulations reasonable?

132. Cassilope members expressed concerns that the project would be "an eye sore," would "destroy the beauty of natural prairie view," and would "affect all residents close enough to look at it daily and for residents forced to drive past daily."[162]

133. In response to these concerns, Solar Krafte retained Green Cat to produce visualizations for seven Cassilope member residences located closest to the project to help those members understand what they would see (i.e., visual impacts) following the installation of project solar panels.[163] Solar Krafte submitted that photographs for the visual simulations were taken from the most open view closest to the proposed project and that the visualizations represent the worst-case scenario for visual impacts with the panels resting at their most elevated position or most prominent tilt.[164]

134. Some of the Cassilope members submitted that the visualizations provided by Green Cat did not depict the most representative view. Gerald Huber testified the photos were taken from his balcony and driveway; however, he did not believe these locations were representative of the worst-case visual impact because he owns a quarter section of land, which spans a half mile north and south towards the project (i.e., this land is closer to the project than his residence). He stated that "no matter where you stand on our property, we will be visually impacted by this proposed solar operation."[165] M. Klassen testified that the photos were taken from the entrance to her driveway; however, she believed that photos should be taken from the east windows of her residence, which would have a clear view of the project solar panels.[166]

135. The Commission finds that Green Cat did not consider all landowner preferences when selecting photo sites to depict typical views. Given that Solar Krafte produced these photomontages as a tool for consultation and specifically to address visual concerns from the Cassilope members, the Commission observes that incorporating the members' recommendations for photo sites may have been a more effective way to address their concerns.

136. Despite this, the Commission accepts Solar Krafte's position that the goal of the visual simulations was not to capture every possible viewpoint, but rather to select specific visual simulation locations for the Cassilope members in order to provide the best balance between the most impacted view and the most representative view that the member would experience on a daily basis.[167] The Commission finds that in circumstances where Solar Krafte was unable to obtain landowner permission to access to their properties, it was reasonable to take photos from publicly accessible roads at the nearest point to these properties.[168] Overall, the Commission

---

[162] Exhibit 26435-X0150, Appendix A - Landowners Evidence, PDF pages 4, 26, 44, 67, 73, 83.

[163] Exhibit 26435-X0173, Appendix C - Part 1 - Project Visualizations w Explanatory Report and Curriculum Vitae of A. Warnock, PDF page 1. "Mr. Gettel specifically referenced seven residences within a distance of 779 metres of the Project, and it is understood that these seven residences would be the ones which may, in B. Gettel's opinion, be most likely to experience a potential loss in value. The Cassilope Group Response to Solar Krafte Information Request Round 1 (Exhibit 26435-X0161) provides a table identifying the owners of these seven residences."

[164] Transcript, Volume 4, page 667, lines 16-24.

[165] Transcript, Volume 3, page 554, lines 8-23.

[166] Transcript, Volume 3, page 582, lines 15-18.

[167] Exhibit 26435-X0173, Appendix C - Part 1 - Project Visualizations w Explanatory Report and Curriculum Vitae of A. Warnock, PDF page 2.

[168] Exhibit 26435-X0173, Appendix C - Part 1 - Project Visualizations w Explanatory Report and Curriculum Vitae of A. Warnock, PDF page 1.

finds the visualizations provide a reasonable representation of the visual impact of the solar panels and project layout, and the visualizations are able to reasonably demonstrate the qualitative visual impacts to the Cassilope members.

3.6.4 How does the Commission consider potential visual impacts from the project?

137. Cassilope members raised concerns about potential visual impacts from the project. They were worried that they would "experience new, increased, and adverse visual aesthetics impacts, an unwanted visual burden, as a result of the development of the Project."[169]

138. Solar Krafte suggested the Commission consider the presence of other industrial activity and extensive oil and gas and transmission infrastructure in the area when evaluating visual impacts from the project. Solar Krafte emphasized that compared to the heights of existing transmission infrastructure, the project would have very little incremental visual impact to local residents.[170]

139. Further, Solar Krafte submitted that it incorporated substantial residential setbacks along the northern and western boundary of the project, which provides a visual buffer, in addition to the raised berm running along a large portion of the northern project boundary.[171] Especially, during the participant involvement program, Solar Krafte considered feedback from the residents in closest proximity to the project and incorporated setbacks of 140 to 440 metres to mitigate potential visual impacts of the project.[172]

140. During the hearing, G. Doll confirmed that visual impacts to residences are dependent on a number of factors, including existing topography and screening, as well as the distance between a residence and the project. G. Doll testified that visual impacts would be expected to decrease significantly with distance due to the low profile nature of the solar panels proposed for the project.[173] B. Gettel also noted that there is some existing electrical transmission infrastructure in the area, which exerts a negative impact on visual aesthetics, and that the industrial landscape of the project would not carry for a significant distance given the topology of the area and the fact that the project will have a low profile.[174]

141. Based on the following considerations, the Commission finds that visual impacts from the project to local residents would be minimal and do not warrant additional mitigation or significant weight from the Commission in determining whether the project is in the public interest.

- The Commission is satisfied that Solar Krafte has mitigated potential visual impacts by implementing setbacks based on feedback collected from local residents during the participant involvement program. The Commission notes the minimum distance between the Cassilope residences and the project infrastructure will be 226 metres.[175]

[169] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF pages 8-9, paragraph 22.
[170] Transcript, Volume 4, page 667, lines 8-15; Transcript, Volume 4, page 668, lines 1-5.
[171] Transcript, Volume 4, page 668, lines 15-20.
[172] Exhibit 26435-X0003, Attachment 2 – Participant Involvement Program (PIP) Report, PDF pages 8 and 13.
[173] Transcript, Volume 2, page 232, lines 6-24; Transcript, Volume 4, page 668, lines 6-14.
[174] Exhibit 26435-X0149, Appendix E - Evidence and CV of Brian Gettel, PDF page 28.
[175] Exhibit 26435-X0144, Appendix E - Distances to Cassilope Lands; Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF pages 4-5.

- The Commission notes that the height of the proposed solar panels at their maximum tilt is approximately 3.6 metres about the ground.[176] Given the height of the project solar panels, the Commission agrees with B. Gettel and G. Doll that visual impacts from the project would be expected to decrease significantly with distance.

- The Commission finds that the project solar panels will be minimally visible or not visible at all Cassilope residences, with the exception of the closest residence.

- A described in Section 3.1 of the decision, the Commission has decided not to approve construction and operation of the project on Section 24. As a consequence, visual impacts from the project will be reduced for landowners and residents close to Section 24 (i.e., on the west, south and southwest sides of the project).

3.6.5 Summary

142. The Commission is satisfied that Solar Krafte's participant involvement program for the project generally meets Rule 007 requirements. In particular, the Commission finds that steps taken by Solar Krafte to lease land for the project were reasonable for a participant involvement program and are consistent with Rule 007 requirements. In addition, the Commission finds the visualizations are able to reasonably demonstrate the qualitative visual impacts to residences, and also finds that visual impacts from the project to most local residents would be minimal.

3.7 Construction, maintenance and reclamation

143. In this section of the decision, the Commission finds that Solar Krafte's management plan for construction noise should comply with Rule 012: *Noise Control*, and that traffic and dust impacts during construction and maintenance periods will be appropriately mitigated. Further, the Commission does not require Solar Krafte to create a reclamation or decommissioning fund.

3.7.1 Will Solar Krafte's management plan for construction noise be compliant with Rule 012?

144. Cassilope expressed concerns that construction and maintenance activities associated with the project would bring increased noise, traffic and dust impacts, and these impacts would extend in time from initial surveying through to construction.[177]

145. With respect to construction noise, Solar Krafte committed to limit construction activities to daylight hours, with additional limitations on unnecessary idling of equipment or project-related traffic, as well as limited use of noise-producing signals or alarms.[178] Solar Krafte submitted that it will log and track any complaints that it receives, including noise complaints, and ensure they are addressed.[179]

146. Given these commitments, the Commission is assured that Solar Krafte will generally be in compliance with Section 2.11 of Rule 012, which deals with the management and mitigation of construction noise. The Commission expects Solar Krafte to uphold its commitment to limit

[176] Exhibit 26435-X0001, Rule 007 Application (Solar Krafte Brooks Solar Farm), PDF pages 12-13.
[177] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF page 14, paragraph 45.
[178] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 9, paragraph 32, PDF page 12, paragraph 46; Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 4.
[179] Transcript, Volume 4, page 664, lines 8-10.

construction activities to the daylight hours where practical and to take prompt action to address noise complaints from residents.

3.7.2 Will project traffic and dust impacts be appropriately mitigated?

147. Cassilope was concerned about dust impacts from construction and maintenance of the project. In particular, Michelle Schuett questioned if there would be an increase of sand being blown into the county's ditches, and who would be responsible for cleaning the sand.[180]

148. With respect to road use during the project construction and maintenance periods, Solar Krafte committed to prepare and implement a traffic control plan, which would minimize peak period truck trips, and require that most trucks approach the project site from the east (Veterans Memorial Highway), as opposed to from the west (county roads). Solar Krafte also committed to develop dust abatement plans with local authorities as part of the road use agreement with the county, and Solar Krafte confirmed responsibility for ensuring contractors adhere to best practices including dust suppression on site.[181]

149. Given these commitments, the Commission is persuaded that Solar Krafte will work with the county of Newall to appropriately mitigate traffic and dust impacts from the project construction and maintenance activities.

3.7.3 Should Solar Krafte be required to set aside funds for reclamation and decommissioning?

150. Cassilope raised concerns about the lack of reclamation plans or information from Solar Krafte regarding how the project will be reclaimed at the end of its useful life or in the event that Solar Krafte becomes bankrupt. Cassilope also questioned whether Solar Krafte was financially able to reclaim the project at the end of life.[182] Further, Cassilope requested that the Commission require Solar Krafte to post a bond to cover future reclamation and decommissioning costs.[183]

151. Solar Krafte submitted that requirements for the conservation, reclamation and decommissioning of the project are outlined under the *Conservation and Reclamation Directive for Renewable Energy Operations* and the *Environmental Protection and Enhancement Act*. Solar Krafte committed to decommissioning and reclaiming the project in accordance with all applicable rules and regulations at the end of the project's useful life. In addition, Solar Krafte explained that its funding capacity and mechanisms for funding the costs of decommission and reclamation of the project are governed under a private contractual obligation to reclaim project lands in accordance with the terms of its confidential lease agreements, including agreements with the Eastern Irrigation District. Solar Krafte submitted that it has a positive track record of developing projects and that reclamation cost is factored into the project budget.[184]

152. The Commission is satisfied that existing reclamation requirements, including Solar Krafte's lease agreements with project landowners and applicable directions and legislation, adequately address Solar Krafte's reclamation responsibilities at the project's end of

[180] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF page 14, paragraph 45.
[181] Exhibit 26435-X0208.02, Solar Krafte March 16 Undertaking Responses, PDF page 4.
[182] Exhibit 26435-X0155, 2022-01-24 Cassilope Group Submissions, PDF pages 14, paragraph 47.
[183] Transcript, Volume 4, page 735, lines 21-25, and page 736, line 1.
[184] Exhibit 26435-X0170, Solar Krafte Reply Evidence Submissions, PDF page 13, paragraphs 49-50.

life. Given that the legislature has afforded AEP with the authority to designate the construction and operation of renewable power generation facilities as activities requiring security to be posted,[185] as well as the authority over the process and actual physical remediation and reclamation of power generation facilities,[186] the Commission is not persuaded that it should require Solar Krafte to create a reclamation or decommissioning fund.

4 Conclusion

153. The Commission explained the legislative scheme in place for the consideration and approval of power plants in Alberta in Section 3 of this decision. In this conclusion, the Commission summarizes its findings made above, and applies the legislative scheme in light of those findings. In doing so, the Commission weighs the benefits of the project against its negative impacts.

154. In accordance with Section 17 of the *Alberta Utilities Commission Act*, in addition to any other matters it may or must consider, the Commission must give consideration to whether approval of the project is in the public interest having regard to its social and economic effects and effects on the environment. 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 more discrete members of the public.

155. The Commission has determined that the impacts to the native grassland in Section 24 create a high risk to wildlife and wildlife habitat, and that there are inadequate mitigation measures proposed to reduce these environmental impacts to an acceptable level. In the Commission's view, avoidance in siting the project on Section 24 is the only way to reduce the high risk in the circumstances. Weighing the negative environmental impacts with the social and economic and other effects of the proposed project, as described below, the Commission finds that it is not in the public interest to approve the construction and operation of the power plant on Section 24. Accordingly, the Commission does not approve the construction and operation of the power plant on Section 24.

156. The Commission has determined that, with the exception of impacts to wildlife and wildlife habitat as a result of the project being partially sited on native grassland in Section 24, many of the negative impacts associated with the project are minimal in nature and have been adequately addressed through mitigation.

157. With respect to environmental impacts, the Commission is satisfied that the other environmental impacts of the project, including impacts to wetlands, wildlife features and birds, can be adequately mitigated. The Commission notes that Solar Krafte will implement the AEP required 100-metre setback from all seasonal and higher class wetlands (Class III+), that there are no wildlife features or wildlife setbacks that interact with the project, and that Solar Krafte committed to work with AEP to implement additional mitigations should avian mortalities be determined excessive by AEP. In the Commission's view, the environmental impacts of the

[185] *Conservation and Reclamation Regulation*, Alta Reg 115/1993, s 18(1)(a-d).
[186] *Environmental Protection and Enhancement Act*, RSA 2000, c E-12 and associated regulations.

project can be appropriately mitigated if Solar Krafte adheres to the commitments made, and adheres to the environmental condition of approval imposed by the Commission.

158. With respect to agricultural impacts, the Commission places a significant amount of weight on the Eastern Irrigation District's decision regarding its desired use of its land, as the project host, rather than for cattle grazing. The Commission finds that with the exception of issues related to the native grassland in Section 24, the Eastern Irrigation District, a private landowner, has authority to make decisions regarding the use of its land. This authority, however, is subject to the regulatory scheme under which the Commission and applicant operate. In addition, the Commission accepts that the vegetation management methods proposed by Solar Krafte appear to be feasible and should be effective to reduce the loss of grazing land resulting from the project.

159. With respect to safety issues, the Commission finds that the project is expected to have zero solar glare at residential and route receptors and to result in a not-material and manageable amount of solar glare at a nearby helipad. The Commission requires Solar Krafte to develop a site-specific emergency response plan that complies with county of Newall requirements and incorporates feedback from local authorities. Overall, the Commission finds that safety issues associated with the project will be adequately addressed by mitigation measures proposed by Solar Krafte and the emergency response plan Solar Krafte has committed to develop.

160. The Commission finds that the project is expected to be compliant with Rule 012 at all receptors, and that Solar Krafte will generally adhere to mitigation measures for construction noise set out in Rule 012. The Commission is also satisfied that a municipal road use agreement and the proposed dust control measures will adequately address Cassilope's concerns about construction dust and traffic impacts.

161. The Commission is satisfied that Solar Krafte's participant involvement program for the project generally meets Rule 007 requirements. The Commission is satisfied that existing reclamation requirements, including Solar Krafte's lease agreements with project landowners and applicable directions and legislation, adequately address Solar Krafte's reclamation responsibilities at the project's end of life.

162. With respect to property value impacts, the Commission finds that the project would be unlikely to impact agricultural use land value, but there is a negative public perception of the project's effects on viewscapes, and this may translate into a negative effect on property value for some properties, in the range of zero to five per cent. The Commission also recognizes that, while a landowner in Alberta may be faced with situations where development (industrial or commercial) nearby potentially results in their property being devalued, this is a risk borne by all landowners in general. In these circumstances, the potential for one person's property to devalue does not generally override or sterilize the ability for their neighbouring landowners to choose how to lawfully use their land.

163. Having determined that the project will result in some negative impacts, the Commission must weigh these impacts against the project's public benefits, in order to determine whether the project is in the public interest. The benefits of the project include its ability to generate emissions-free electricity and to contribute to the diversification of Alberta' energy resources. As described by Solar Krafte, the project is expected to generate over $3.2 million in local tax

revenues. The project will create jobs during construction, as well as permanent local jobs to support its ongoing operation and maintenance.

164. Overall, for the reasons outlined in this decision and subject to the conditions in Appendix C, the Commission finds that Solar Krafte has satisfied the requirements of Rule 007 and Rule 012, that it is not in the public interest to approve the construction and operation of the power plant on Section 24, and that for the remaining project land, the other negative impacts of the project can be mitigated to an acceptable degree and are outweighed by the benefits of the project.

165. The Commission finds that approval of the project (with the exception of Section 24) is in the public interest.

5 Decision

166. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 26435-A002 and grants Solar Krafte Utilities Inc. the permit and licence set out in Appendix 1 – Permit and Licence 26435-D02-2022, to construct and operate the Zachary 997S Substation.

167. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 26435-A001, in part, and grants Solar Krafte Utilities Inc. the approval set out in Appendix 2 – Approval 26435-D03-2022, to construct and operate the Brooks Solar Farm, but excludes construction or operation of the power plant facilities on Section 24 (LD 24-18-16-W4).

168. The Commission directs Solar Krafte Utilities Inc. to provide the total generating capability of the project without the portion on Section 24, no later than **May 24, 2022**.

169. The appendixes will be distributed separately, but Appendix 2 – Approval 26435-D03-2022 will not be issued until Solar Krafte Utilities Inc. provides the total generating capability of the project without the portion on Section 24, as directed above.

Dated on May 18, 2022.

Alberta Utilities Commission

(original signed by)

Douglas A. Larder, QC
Vice-Chair

(original signed by)

Cairns Price
Commission Member

Appendix A – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
Solar Krafte Utilities Inc. Terri-Lee Oleniuk Elyse Bouey
Cassilope Group Richard Secord Ifeoma Okoye Peggy Springer Larry Springer

Alberta Utilities Commission Commission panel Douglas A. Larder, QC, Vice-Chair Cairns Price, Commission Member Commission staff Jaimie Graham (Commission counsel) Joan Yu Victor Choy

Appendix B – Oral hearing – registered appearances

Name of organization (abbreviation) Name of counsel or representative	Witnesses
Solar Krafte Utilities Inc. Terri-Lee Oleniuk Elyse Bouey	Jeff Thachuk Mark Burgert Tyler Reid Derek Ebner Glen Doll Cameron Sutherland Alasdair Warnock
Cassilope Group Richard Secord Ifeoma Okoye	Cliff Wallis Brian Gettel Ben Commodore Gerald Huber Alan Jones Margaret Klassen Crystal Mulvey Julie Sewall Cliff Sewall

Appendix C – 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 26435-D01-2022 that require subsequent filings with the Commission and will be included as conditions of Power Plant Approval 26435-D03-2022:

a. Solar Krafte shall submit a post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission no later than December 31 of the year following the mortality monitoring period, and on or before the same date every subsequent year for which AEP requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

b. Solar Krafte shall file a report with the Commission detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as its response to the complaints or concerns. In particular, the report shall describe consultation with Alan Jones about glare mitigation for his helipad. Solar Krafte shall file this report no later than 13 months after the project becomes operational.

d. Solar Krafte shall provide the Commission a confirmation letter regarding its emergency response plan no later than 30 days before the commencement of construction. The letter shall confirm that Solar Krafte has developed a site-specific emergency response plan in accordance with requirements of the county of Newell and in consultation with local first responders, and Solar Krafte has incorporated input from interested stakeholders and local residents and provided a copy of the final plan to the county of Newell and the Cassilope Group.

The following is a condition of Decision 26435-D01-2022 that does not require subsequent filings with the Commission:

c. Solar Krafte shall use anti-reflective coating on the project solar panels.