AUC
Alberta Utilities Commission

Dolcy Solar Inc.

Dolcy Solar + Energy Storage Project

September 12, 2024

Alberta Utilities Commission
Decision 28723-D01-2024
Dolcy Solar Inc.
Dolcy Solar + Energy Storage Project
Proceeding 28723
Applications 28723-A001 to 28723-A003

September 12, 2024

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Contents

List of figures

1 Executive summary

1. In this decision, the Alberta Utilities Commission approves the applications from Dolcy Solar Inc. to construct and operate the Dolcy Solar + Energy Storage Project (the project), which consists of a 300-megawatt (MW) solar power plant; the Dolcy 1148S Substation; and a 100-MW, 200-megawatt-hour (MWh) energy storage facility (ESF).

2. The Commission's reasons include the following:

- Dolcy has sufficiently demonstrated that agricultural impacts are adequately mitigated.
- The Alberta Environment and Protected Areas (AEPA) renewable energy referral report for the project identified an overall low risk to wildlife and wildlife habitat. The Commission accepts that the project is appropriately sited with respect to most Wildlife Directive standards. The Commission finds the environmental impacts of the project are reasonable.
- The Commission accepts that Dolcy's approach to reclamation is reasonable. Dolcy is required to fully reclaim the project and bear the costs of doing so.
- Fire risks associated with the project are limited and will be mitigated by Dolcy's monitoring systems and emergency response plan (ERP) to an acceptable level.
- Dolcy's participant involvement program (PIP) with stakeholders generally achieved the objectives of consultation and notification set out in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* requirements.
- The project is expected to have minimal visual impacts. The project is not likely to create hazardous glare conditions for drivers on nearby transportation routes nor have an unacceptable glare effect on residential receptors.
- The project is predicted to comply with the permissible sound levels as defined in Rule 012: *Noise Control*.
- The project will generate emissions-free electricity, generate municipal tax revenue and create job opportunities.

2 Background

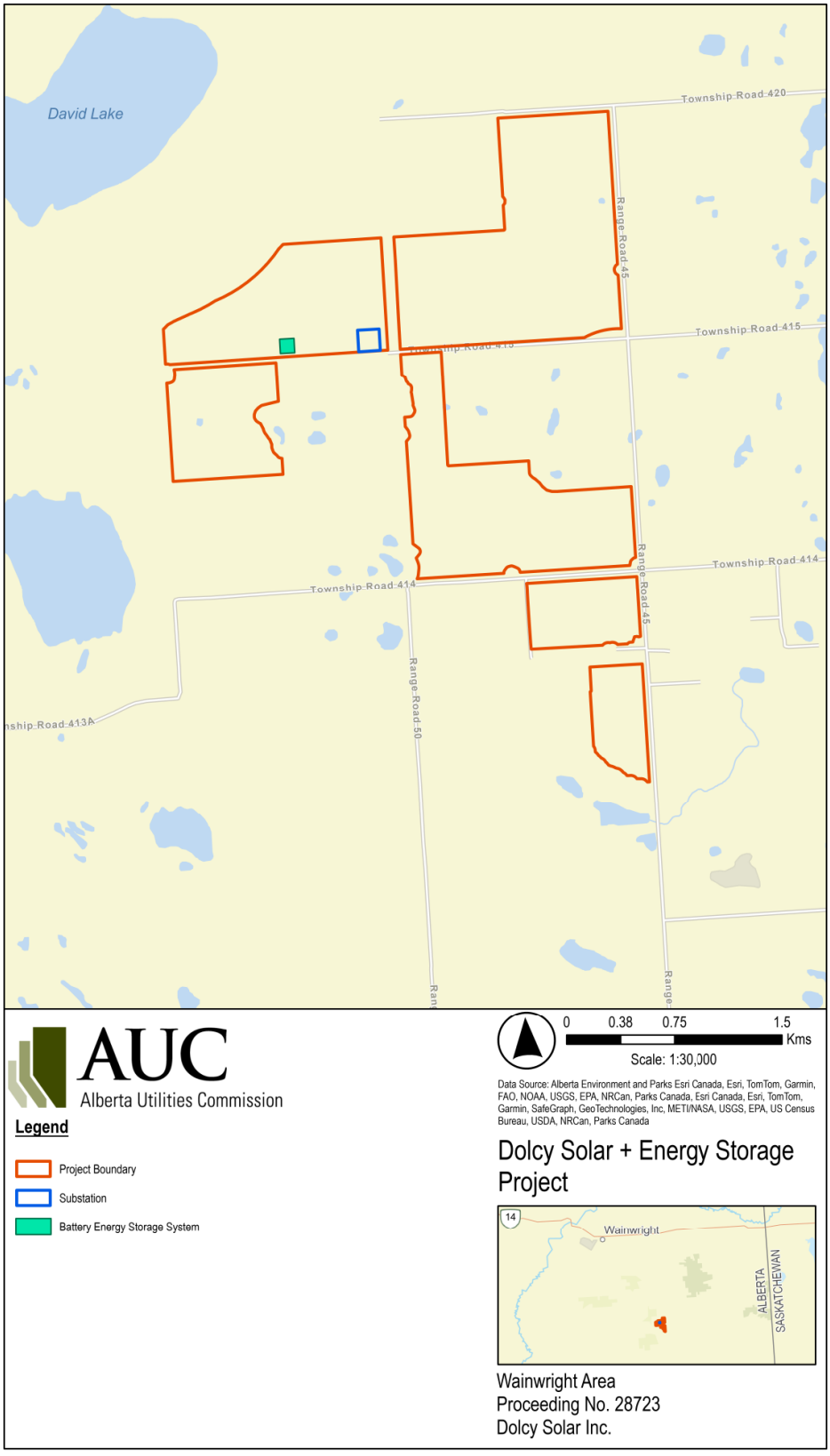
3. The project will be located on approximately 404 hectares (or 998 acres) of agricultural land in the Municipal District (MD) of Wainwright, Alberta, approximately 20 kilometres north of Metiskow and 20 kilometres southwest of Edgerton,[1] as shown in Figure 1.

4. The power plant will consist of approximately 625,000 Longhi 600-watt bifacial solar panels/modules on a fixed-tilt racking system and 76 SMA SC4000 inverter/transformer units. The substation will be enclosed by a chain-link fence and will include two 240/34.5-kilovolt (kV), 167-megavolt ampere (MVA) transformers, one 240/34.5-kV, 111-MVA transformer, and a control building. The ESF will consist of 62 Tesla Megapack 2XL battery modules and integrated inverters, and 16 associated transformer stations. In addition, the project will include access roads, fences, temporary workspaces and a 34.5-kV underground collection system to connect the power plant to the substation and ESF.[2]

[1] Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF pages 10 and 11.

[2] Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF pages 2, 9, 25 and 26.

Figure 1. The proposed Dolcy Solar + Energy Storage Project area



5. Dolcy plans to start construction for the power plant in the first quarter of 2026, start construction for the substation in the fourth quarter of 2026, and anticipates the construction will be completed by the third quarter of 2027, with an in-service date of December 1, 2027. Dolcy requested a construction completion date of July 15, 2028, for the power plant approval and the substation permit and licence to provide a contingency for unexpected delays.[3]

6. Dolcy plans to start construction for the ESF in the third quarter of 2028 and anticipates that construction will be completed by the second or third quarter of 2029, with an in-service date in the third quarter of 2029. Dolcy requested a construction completion date of December 31, 2029, for the ESF approval. Dolcy explained that the completion date for the ESF is to reduce the likelihood of a future extension request due to market design or tariff changes impacting the ability to make a final investment decision.[4]

7. Dolcy is 100 per cent owned by Westbridge Renewable Energy Corp. Although there is a pending sale of Dolcy shares by Westbridge to a third party, Dolcy would continue to be the approval holder and the owner of the project, and responsible for all commitments made in respect of the project.[5]

8. The Commission issued a notice of applications and received statements of intent to participate from members of the David Lake Concerned Citizens Group (DLCC), who oppose the project. The Commission granted standing to members of DLCC in two rulings.[6,7] DLCC requested that the Commission deny the applications or alternatively add conditions to its approval. The Commission held an oral hearing from June 10 to 13, 2024.

3 How the Commission assesses the proposed project

9. The Commission is an independent regulator tasked with considering the approval of applications such as this one for power plants, substations and energy storage facilities.[8] The Commission must consider whether the proposed project is in the public interest, having regard to its social, economic, environmental and other effects.[9]

10. In fulfilling this mandate, the Commission balances a variety of public interest considerations, also taking into account the purposes of the *Hydro and Electric Energy Act* and the *Electric Utilities Act*. These statutes provide for the economic, orderly and efficient development of facilities and infrastructure, including power plants and ESFs, that are in the public interest. They also set out a framework for a competitive generation market, where decisions about whether and where to generate electricity are left to the private sector.[10]

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3 Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF page 12. Exhibit 28723-X0041, Round 1 Information Responses, PDF page 36.
4 Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF page 12. Exhibit 28723-X0041, Round 1 Information Responses, PDF page 36.
5 Transcript, Volume 1, page 36, lines 11-20 and line 25; page 37, lines 1-4; page 38, lines 7-8, lines 12-15, lines 17-21. Transcript, Volume 2, page 202, lines 7-16.
6 Exhibit 28723-X0072, AUC letter - Ruling on standing and other matters.
7 Exhibit 28723-X0198, AUC letter - Ruling on standing regarding new interveners.
8 *Hydro and Electric Energy Act*, sections 11, 13.01, 14, 15 and 19.
9 *Alberta Utilities Commission Act*, Section 17.
10 *Hydro and Electric Energy Act*, sections 2 and 3; *Electric Utilities Act*, Section 5.

11. The applicant bears the onus of demonstrating that approval of its project is in the public interest. Interveners may attempt to show the applicant has not met its onus by demonstrating the effects of the project on their interests, and explaining what a better balancing of the public interest might be. The Commission's role is to test and assess the evidence before it and engage in a multifaceted analysis established by the regulatory regime, to determine if the project should be approved, and if so, whether any conditions should apply.

12. On February 28, 2024, the Government of Alberta advised the Commission of its intention to advance various policy, legislative and regulatory changes before the end of 2024. The Commission filed the letter on the record of this proceeding and provided Dolcy and the interveners an opportunity to submit comments about the letter.[11]

13. The parties' submissions differed. Dolcy later filed a motion seeking to exclude some matters related to the February 28 letter from the scope of this proceeding. Among others, Dolcy submitted that the agricultural first approach and the best use of agricultural lands assessment discussed in the February 28 letter, were not in scope for this proceeding.[12] Conversely, DLCC submitted these agriculture related issues were in scope for this proceeding, and that DLCC would be pursuing these issues.[13]

14. The Commission denied Dolcy's motion to exclude these matters. The Commission confirmed that it would not treat the February 28 letter as binding the Commission, or fettering its discretion, but that it would consider the policy statements in the February 28 letter as part of its overall public interest determination.[14] That is the approach the Commission applies in this decision.

4 Discussion and findings

15. The Commission considers the power plant, substation and ESF to be in the public interest in accordance with Section 17 of *the Alberta Utilities Commission Act* and other applicable enactments, subject to the conditions described below.

16. Power plant, substation and ESF applications filed with the Commission must comply with Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* and Rule 012: *Noise Control*. These rules set out a comprehensive set of requirements that a facility application must contain. The Commission has reviewed the applications and has determined that the information requirements specified in Rule 007 and Rule 012 have been met.

17. In the following sections of this decision, the Commission considers the project's agricultural impacts, environmental impacts and Dolcy's decommissioning and reclamation commitments. The Commission then addresses issues related to ESF fire risks and mitigations, and Dolcy's ERP. Finally, the Commission assesses Dolcy's participant involvement program (PIP) and the project's visual and noise impacts, residential and social impacts, and benefits.

[11] Exhibit 28723-X0061, AUC letter - Policy guidance from the Government of Alberta.
[12] Exhibit 28723-X0076, Dolcy Solar Submissions on Scope of Hearing Issues; Exhibit 28723-X0080, Dolcy Solar Submissions on Scope of Hearing Issues.
[13] Exhibit 28723-X0079, DLCC LT AUC re Scope of Hearing.
[14] Exhibit 28723-X0083, AUC letter - Procedural ruling.

4.1 Agricultural impacts

18. Within this section, the Commission will discuss the proposed project's impacts in relation to agricultural land. Ultimately, the Commission concludes that subject to certain conditions, Dolcy has sufficiently demonstrated that the project is not inconsistent with an agriculture first policy, or with the best use of the agricultural lands, and the project sufficiently mitigates any agricultural impacts.

19. As noted above, the Commission will consider statements in the February 28 letter as part of its overall public interest assessment in this section. The February 28 letter advised of the Government of Alberta's intention to advance certain policy, legislative and regulatory changes before the end of 2024, including:

> **Agricultural Lands**
> Government of Alberta will bring forward the necessary policy and legislative tools to direct the AUC to take an "Agriculture First" approach and, when making decisions, evaluate the best use of agricultural lands proposed for renewables development. In support of this "Agriculture First" approach, Alberta will no longer permit renewable generation developments on Class 1 and 2 lands, unless a proponent can demonstrate the ability for both crops and/or livestock and renewable generation to co-exist.
>
> In addition, and to further promote the Agriculture First approach, the Government of Alberta will establish the necessary tools to ensure Alberta's native grasslands, irrigable lands and productive lands continue to be available for agricultural production, especially in situations where renewable generation is proposed.[15]

20. While this language contemplates changes to the regulatory regime in the future, the Commission has always had the discretion to consider agricultural impacts. As a result, the Commission's assessment of the public interest will include weighing agricultural issues.

21. In the following sections, the Commission will explore issues and evidence related to agricultural impacts as follows:

- The Commission determines approximately 28 per cent of the project lands are Class 2, and notes approximately 32 per cent of the fenced project area is used for tame pasture.
- The Commission determines Dolcy has sufficiently demonstrated the co-existence of agricultural activities and renewable power generation.
- The Commission weighs the evidence and arguments regarding best use advanced by the parties.
- The Commission determines that impacts to agricultural lands associated with the management of weeds, pests and soil erosion are reasonable and do not warrant further conditions.
- The Commission articulates its conclusions regarding agricultural impacts, to be considered in the broader public interest analysis.

[15] Exhibit 28723-X0061, AUC letter - Policy guidance from the Government of Alberta, PDF pages 4-5.

4.1.1 What is the classification of the project lands?

22. One indication of the value of land for agricultural purposes is its ranking in land classification tools such as the Land Suitability Rating System (LSRS). The February 28 letter contemplates a requirement for the proponent to demonstrate the potential for agricultural activities and renewable power generation to co-exist on Class 1 and Class 2 land, which the Commission has taken into account among many other factors in this decision. In this section of the decision, the Commission finds that some of the project lands are Class 2 lands.

23. The LSRS is a Canada-wide rating system that evaluates the suitability of land to produce crops and considers soil, climate and landscape factors in this evaluation. The LSRS ranks land according to the degree of agricultural limitations for specific crops specified in the LSRS manual, from Class 1 (land having minimal agricultural limitations) to Class 7 (land which is unsuitable for agricultural production).[16] Within these classes, there are also subclasses that identify the nature of the limitation.

24. The LSRS is provided as a component of the Agricultural Regions of Alberta Soil Information Database which is represented at a scale of 1:100,000 (one centimetre on the map corresponds to one kilometre on the earth).[17] At this scale, the Commission expects that the LSRS classification of the project will not be perfect, but will provide an adequate description of the agricultural suitability of the project for the purpose of assessing Dolcy's applications.

25. Dolcy identified that portions of the project were Class 2M, which means these lands present a slight limitation to production of spring-seeded small grains mainly because crops would be adversely affected by lack of water due to inherent soil characteristics.[18] Dolcy submitted a summary of soil information for the project lands and following the approximate proportions provided in the LSRS rating of Table 1-1 in Exhibit 28723-X0016, roughly 100 hectares is Class 2.[19]

26. Dolcy used "ideal fenced area" to refer to the proposed perimeter fence location for an agrivoltaics plan to allow additional space for equipment movement to farm around the panels and between the rows of panels.[20] Dolcy confirmed that the total hectares of land used for cropping within the ideal fenced area of the project was approximately 347.6 hectares (68 per cent of ideal fenced area) while the total area of tame pasture was approximately 162.5 hectares (32 per cent of ideal fenced area).[21]

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16 Exhibit 28723-X0116, PDF page 3-4; Agronomic Interpretations Working Group. 1995. Land Suitability Rating System for Agricultural Crops: 1. Spring-seeded small grains. Edited by W.W. Pettapiece. Tech. Bull. 1995-6E. Centre for Land and Biological Resources Research, Agriculture and Agri-Food Canada, Ottawa. 90 pages, 2 maps.

17 Alberta Agriculture and Irrigation, Government of Alberta. 2024. Agricultural Regions of Alberta Soil Information Database Version 4.1 (AGRASID 4.1). https://geodiscover.alberta.ca/geoportal/rest/metadata/item/db848869ef74446e93fd0d9622d5b259/html#identificationInfo.

18 Exhibit 28723-X0014, Attachment 13 - Environmental Evaluation, PDF page 21; Land Suitability Rating System (LSRS), The Government of Alberta. https://open.alberta.ca/dataset/dc0e6b58-b9d9-45d4-8d68-9d9dbd21687a/resource/f339217e-c4ae-4dc3-b619-883023350199/download/lsrs-explained.pdf.

19 Exhibit 28723-X0016, Attachment 15 - Agri-voltaic Plan, PDF page 7.

20 Exhibit 28723-X0097, DOLCY-DLCC-2024APR16-016-021 Attachment 1, PDF page 10.

21 Exhibit 28723-X0106, Letter to AUC re Dolcy Crop Area Information, PDF page 2.

27. The Commission recognizes there are limitations to the LSRS analysis.[22] Nevertheless, based on this information, the Commission finds that the area of Class 2M is approximately 28 per cent of the project, while the remaining areas have higher degrees of agricultural limitation (Classes 3 to 5).[23] The lands that are used for cropping but that do not qualify as Class 2 lands have a moderate value, and the other lands being used as pasture have a lower value.

4.1.2 How do agricultural activities and renewable power generation co-exist?

28. In this section of the decision, the Commission will consider whether Dolcy sufficiently demonstrated the ability of agricultural activities and renewable power generation to co-exist.

29. Dolcy submitted that co-existence and best use, as referenced in the February 28 letter, are distinct concepts.[24] Dolcy submitted that co-existence contemplates simultaneous agricultural production and renewable power generation, not an equivalent agricultural output as that which is currently realized on the project lands.[25] Dolcy filed an agrivoltaics plan prepared by Dr. Steven Tannas of Tannas Conservation Services Ltd.,[26] which Dolcy submits demonstrates co-existence.[27]

30. The Commission considers that co-existence and best use are related but distinct concepts. The Commission considers the concerns raised by DLCC, such as diminished agriculture revenue from the lands, are generally related to the best use of the agricultural lands rather than co-existence. As such, the Commission will focus on co-existence in the remainder of this section and will consider DLCC's concerns regarding best use in the following section.

31. The agrivoltaics plan considered spatial constraints caused by the project infrastructure and recommended forage production and grazing as a feasible measure to maintain agricultural production in the project area. The agrivoltaics plan explained that forage production is suitable to the areas between panel rows and grazing with sheep will also support the necessary management of vegetation under the panels and around infrastructure. The agrivoltaics plan is applicable to the whole project.

32. The Commission considers that the agrivoltaics plan identifies actionable and essential considerations for co-locating agricultural operations within renewable power generation development, including:

- suitable equipment, in this case, for haying;[28]
- sustainable estimates of livestock numbers (stocking rates), in this case, sheep;[29] and,
- necessities for the health of livestock (water, fencing and lambing).[30]

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22 Exhibit 28723-X0092.02, Dolcy Response to DLCC IR No. 1, PDF page 9.
23 Exhibit 28723-X0014, Attachment 13 - Environmental Evaluation, PDF page 21.
24 Transcript, Volume 4, page 468, lines 11-17.
25 Transcript, Volume 4, page 469, lines 4-10.
26 Exhibit 28723-X0016, Attachment 15 - Agri-voltaic Plan.
27 Transcript, Volume 4, page 465, lines 15-19.
28 Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 17.
29 Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 20.
30 Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF pages 20 and 21.

33. While DLCC raised concerns with the feasibility of the agrivoltaics plan, the Commission finds the detail in the agrivoltaics plan reflects a reasonable understanding of agriculture, grazing and constraints posed by the project and sufficiently demonstrates the ability of livestock activities to meaningfully co-exist with the proposed renewable power generation facilities on the project lands.

34. Dolcy indicated that the project design has not been finalized yet. Therefore, as the current agrivoltaics plan does not necessarily reflect the final project layout, Dolcy committed to file a project-specific agrivoltaics plan with its final project update with the Commission.[31]

35. Dolcy is required to file finalized versions of the project equipment and layout. Dolcy committed to submit a final project update at least 90 days before the start of construction, assuming that the project remains within the final project update requirements and allowances specified in Rule 007 for solar power plants.[32] Consequently, the Commission imposes the following condition of approval for the power plant and energy storage facility:

a. Once Dolcy Solar Inc. has finalized its equipment selection for the project, it must file a final project update to the Commission to confirm that the project has stayed within the final project update allowances for solar power plants and energy storage facilities specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*. The final project update must be filed at least 90 days prior to the start of construction.

4.1.3 How is best use of the agricultural lands considered?

36. Having found that co-existence has been sufficiently demonstrated, in this section of the decision the Commission will evaluate the best use of agricultural lands, pursuant to an agriculture first approach. The parties had different views, and presented different evidence, as to how the best use of lands should be assessed in the context of Dolcy's applications. The Commission ultimately determines that best use contemplates a broad evaluation of different proposed land uses and considers all the evidence filed regarding best use as part of its public interest analysis.

37. Dolcy submitted that the concept of the best use of agricultural lands could not be restricted to comparing agricultural production between lands with or without renewable power generation facilities, but rather, best use should also consider the benefits of the renewable generation facility. Dolcy reasoned that renewable power generation would always diminish agricultural output to some degree, and so a consideration of best use that is restricted to relative agricultural output would unfairly favour crop production and would functionally prohibit development on Class 2 lands for renewable power generation. Dolcy submitted this is not the intent of the government's best use policy and would be inconsistent with the legislative scheme and the public interest test.[33]

38. Dolcy further submitted that the Commission has previously found that when considering impacts of a project, in the absence of a law to the contrary, it is the landowners' choice how to use their land, unless it is clearly demonstrated that the public interest requires the Commission

[31] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 2.
[32] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3.
[33] Transcript, Volume 4, page 471, lines 1-14.

to intervene.[34] Dolcy submitted that there was no reason to interfere with the decisions of hosting landowners regarding the best use of their lands in relation to its applications. Dolcy also noted that some of the hosting landowners are engaged in agricultural business and would be using funds obtained from the project to expand and enhance their agricultural operations.[35]

39. DLCC acknowledged that the Commission has previously found that evidence about the volume and value of crops that could be grown on the proposed project lands was not helpful but emphasized that these findings were made without regard for the best use of agricultural lands in light of an agriculture first policy.[36] DLCC submitted that an agriculture first policy and best use evaluation requires the Commission to treat such evidence differently than it had prior to the policy statement.[37]

40. DLCC submitted that based on the evidence regarding the agricultural value of the land in this proceeding, the Commission should deny approval of the project on Class 2 lands in the same way it has denied the approval of some solar projects on native grasslands.[38] Further, DLCC submitted that it could not be consistent with an agriculture first policy to approve solar projects on Class 2 lands simply because an applicant proposes some form of future agricultural activity on the lands.[39] DLCC submitted that the Commission should adopt a tiered approach that requires a greater degree of agricultural lands to be preserved for agricultural use proportional to the classification of the agricultural lands.[40] DLCC submitted that if the Commission does approve solar power plant projects on agricultural cropland, it should require an annual report to be filed for the life of the project detailing the agricultural activities undertaken on the lands.[41]

41. As noted above, in this proceeding the Commission is considering Dolcy's application under the existing regulatory regime in light of the policy statements in the February 28 letter. Under this framework, the Commission will evaluate the best use of agricultural lands as a component of its broader analysis of whether the proposed project is in the public interest. The Commission considers that the appropriate evaluation is a broad consideration of best use, having regard to all relevant matters and the specific context of this application. Some relevant factors in this case, as discussed below, include: (i) the agricultural value of the land; (ii) the proponent's proposed use of the land, including any concurrent agricultural uses; (iii) economic considerations; and (iv) any other relevant considerations.

42. DLCC filed a report prepared by Brandon Green, Sheilah Nolan and Thomas Jensen (Green Report).[42] The Green Report submitted that the agrivoltaics plan provided by Dolcy is inadequate because of losses in agricultural revenue and food production, while also providing specific concerns about soil erosion.[43] The Green Report estimated a 99 per cent decrease in agricultural revenue if the project lands were converted from crop production to grazing, as proposed in Dolcy's agrivoltaics plan.[44] The Green Report relied on average market prices for

[34] Transcript, Volume 4, page 474, lines 13-21.
[35] Transcript, Volume 4, page 474, lines 9-12.
[36] Transcript, Volume 4, page 500, lines 11-16.
[37] Transcript, Volume 4, page 506, lines 4-5.
[38] Transcript, Volume 4, page 507, lines 4-11.
[39] Transcript, Volume 4, page 508, lines 20-25.
[40] Transcript, Volume 4, page 510 lines 8-14.
[41] Transcript, Volume 4, pages 511, lines 15-24.
[42] Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report.
[43] Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 3.
[44] Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 9.

calculating the pre-development crop revenue, and the Government of Alberta minimum public lands grazing rent charge for calculating the grazing income the agrivoltaics plan.[45] The Green Report opined that the best use of the lands was "to remain agricultural cropland producing grains using soil conserving minimum or zero till direct seeding cropping systems."[46]

43. Dolcy filed a report prepared by Tannas Conservation Services Ltd. that responded to the Green Report.[47] This report criticizes the methodology employed in the Green Report, and opined that the Green Report undervalued livestock production value and included other discrepancies, such that its conclusion regarding the loss in agricultural value is overstated. Dr. Tannas suggested this loss should only be 44 per cent, rather than 99 per cent as suggested in the Green Report.[48]

44. The Commission considers that evaluating the sale of harvested crops at 10-year average market prices[49] against the minimum public lands grazing rent charge in the Green Report is not a fair comparison of the potential loss of revenue for an agrivoltaics operation. The Commission accepts that the co-location of livestock, estimated at 2,102 lambs annually,[50] would likely generate more revenue than what could be obtained through land rentals alone. The Commission finds the Green Report underestimates the potential revenue from this agrivoltaics operation.

45. Dolcy also filed a report prepared by Glen Doll of Serecon Inc. (Serecon Report), that referred to the highest and best use of lands from an appraisal perspective, and criticized the Green Report analysis of best use.[51] The Serecon Report explained that the principle of highest and best use from an appraisal perspective generally contemplates the use that would provide the landowner the greatest economic value for their property in the marketplace, having regard to uses that are legally permissible, physically possible, reasonably probable, financially feasible and maximally productive. The Serecon Report opined that the Green Report uses a subjective approach to assessing best use that focused solely on agricultural productivity. In other words, the Green Report provided an opinion on "best agricultural use" rather than "best use." The Serecon Report also considered the basis of the calculations in the Green Report. The Serecon Report opined that the combined use of the lands as a solar facility with agrivoltaics was the highest and best use.[52]

46. The Commission notes that the Serecon Report offered no quantitative calculations or substantive economic analysis of agrivoltaics or renewable power generation in arriving at its conclusion regarding highest and best use.

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45 Public land grazing rent and assignment fee, The Government of Alberta. https://www.alberta.ca/public-land-grazing-rent-and-assignment-fee. Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 9.
46 Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 17.
47 Exhibit 28723-X0178, Attachment 1 - Tannas Consulting Services Ltd. Reply Evidence (TCS Report).
48 Transcript, Volume 1, page 96, line 20.
49 Exhibit 28723-X0116, Appendix I. Green Nolan & Jensen Report, PDF page 9.
50 Exhibit 28723-X0016, Attachment 15 - Agri-voltaic Plan, PDF page 19.
51 Exhibit 28723-X0179, Attachment 2 - Serecon Inc. Reply to Green et al. – Best Use Report.
52 Exhibit 28723-X0179, Attachment 2 - Serecon Inc. Reply to Green et al. – Best Use Report, PDF page 2.

47. The Commission considers that relative agricultural production can be relevant to assessing best use, but that a best use evaluation should focus on a comparison of the potential agricultural productivity of the land, with the actual proposed use of the land on a holistic basis – including benefits associated with renewable power generation.

48. Dolcy stated that some of the hosting landowners are agriculture professionals that made the decision to lease the project lands for renewable power generation development as part of a broader agricultural business strategy.[53] The Commission considers that choices made by hosting landowners may be taken into account when considering the best use of land.

49. As noted above, the Commission has evaluated the best use of agricultural lands having regard to all relevant considerations. The Commission has noted certain limitations in the evidence regarding the best use. The Commission will consider this information when conducting its overall evaluation of agricultural impacts of the project, and its final consideration of whether the project is in the public interest, including whether any conditions are necessary.

4.1.4 What are the weed, pest and soil erosion impacts and mitigations?

50. DLCC expressed concerns about the indirect impacts of weeds, pests and dust from the project.[54] In response to these concerns, Dolcy submitted weed and soil erosion mitigations within its environmental protection plan[55] and an initial conservation and reclamation plan.[56] Dolcy is also subject to obligations to manage weeds, conserve soil and manage pests under the *Weed Control Act*,[57] the *Soil Conservation Act*,[58] the *Agricultural Pests Act*[59] and related enactments.

51. The Commission finds that the mitigations provided for weeds and soils are adequate. The Commission expects that with the mitigations committed to, and compliance with the applicable regulations, will sufficiently address any impacts from the project, such that no further conditions are necessary.

52. During the hearing, the Commission heard concerns about grasshopper and gopher management and the perceived inadequacy of these plans.[60] The Commission finds that the environmental protection plan[61] and initial conservation and reclamation plan[62] do not adequately address the concerns relating to grasshoppers and gophers as presented by DLCC. The Commission expects that grasshoppers and gophers will be managed in accordance with the Government of Alberta best practices and no further conditions are required.[63]

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53 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 8.
54 Exhibit 28723-X0107, DLCC Group Submissions, PDF page 18.
55 Exhibit 28723-X0012, Attachment 11 - Environmental Protection Plan.
56 Exhibit 28723-X0013, Attachment 12 - Preliminary Conservation and Reclamation Plan.
57 *Weed Control Act*, SA 2008, c W-5.1.
58 *Soil Conservation Act*, RSA 2000, c S-15.
59 *Agricultural Pests Act*, RSA 2000, c A-8.
60 Transcript, Volume 2, page 82, lines 18-21.
61 Exhibit 28723-X0012, Attachment 11 - Environmental Protection Plan.
62 Exhibit 28723-X0013, Attachment 12 - Preliminary Conservation and Reclamation Plan.
63 Government of Alberta. Managing Richardson's Ground Squirrels, 6188857-2012-agri-facts-managing-richardsons-ground-squirrels-revised-684-2-2012-07.pdf (alberta.ca); Government of Alberta. Grasshopper – Best management practices. Grasshopper – Best management practices | Alberta.ca.

4.1.5 Conclusion regarding agricultural impacts

53. The Commission found that Dolcy's agrivoltaics plan has sufficiently demonstrated the ability for livestock (and potentially haying) and renewable power generation to co-exist. The Commission has also evaluated the best use of the agricultural lands, having regard to the agrivoltaics plan and other relevant matters. Finally, the Commission considered other agricultural impacts, including potential impacts associated with weeds, soil conservation and pests, and determined no further conditions are necessary regarding these impacts.

54. While the February 28 letter discussed future regulatory and policy changes, the Commission reiterates that the findings in this decision are made based on the current regulatory framework. The Commission can, and did, consider the policy statements in the February 28 letter as one of multiple factors in its overall public interest assessment, weighed and assessed in light of the parties' submissions and the evidence on the record of this proceeding. The Commission accepts that some agricultural value of lands will be lost during the life of the project, but is satisfied the agrivoltaics plan reduces the project's impact on agricultural value and is consistent with the broad policy guidance in the letter.

55. The Commission considered the best use of the project lands having regard to the agrivoltaics plan, and expects Dolcy will implement this plan to mitigate agricultural impacts due to the project. The Commission requires Dolcy to update its agrivoltaics plan once equipment and project layouts are finalized during the final project update process. Specifically, the Commission expects this update will provide a refinement of the conclusions provided in the agrivoltaics plan. The Commission cautions that significant changes to the project layout may require the Commission to reconsider the agricultural impacts of the project in light of the changes. Further, since the Commission relied on the agrivoltaics plan in assessing the best use of the agricultural lands, the Commission also requires Dolcy to provide an annual update about the actions it has taken in furtherance of the plan, and the effectiveness of those actions for the first three years of the agrivoltaics program. The Commission considers that if these reports demonstrate the effectiveness of the operation of the plan, further reports will not be necessary.

56. Having regard to the evidence and all relevant considerations, including the policy statement, the Commission finds that the applicant has sufficiently mitigated any agricultural impacts, subject to the following conditions of approval for the power plant:

b. As part of the final project update, Dolcy Solar Inc. must file an updated agrivoltaics plan that reflects the final project layout, and incorporates the best available knowledge and best practices for initiating the agrivoltaics program.

c. Dolcy Solar Inc. must file an annual agricultural report that documents the production realized from the agrivoltaics program. This report must be filed with the AUC no later than January 31 for the first three years of the agrivoltaics program.

4.2 Environmental impacts

57. DLCC expressed concerns about the environmental impacts of the project and the adequacy of mitigation measures proposed by Dolcy to address such impacts. These concerns are

related to the impacts on wildlife, environmental sensitive land and natural habitats as well as the biodiversity of David Lake and Wainwright Dunes Ecological Reserve.[64]

58. Within this section, the Commission will discuss the project's impacts on the environment. Central to this discussion is the review from Alberta Environment and Protected Areas (AEPA) for the project under the *Wildlife Directive for Alberta Solar Energy Projects* (Wildlife Directive).[65]

59. The AEPA referral report identified an overall low risk to wildlife and wildlife habitat.[66] The Commission accepts this as an indication that the project is appropriately sited with respect to most Wildlife Directive standards.

60. In the following sections, the Commission will explore these key issues concerning setbacks to named waterbodies, wetlands and project fencing:

- Which sources of information are appropriate for lake boundaries.
- Whether the setback for David Lake is acceptable.
- If the setbacks for seasonal, semi-permanent and permanent wetlands are adequate to protect wildlife habitat.
- What the impacts of fencing to wildlife are.
- If there are any project impacts to the Wainwright Dunes Ecological Reserve.

4.2.1 Which sources of information are considered appropriate for lake boundaries?

61. Standard 100.1.8 of the Wildlife Directive states that a solar energy project must not be constructed within 1,000 metres of a named lake "as per NRCAN (2016)." Parties identified that there are various sources of information that define the boundary of a named lake and the Commission understands the Wildlife Directive does not expressly identify what information source to use.

62. Michael Sveen of Western EcoSystems Technology, ULC (WEST) submitted that the Wildlife Directive expects applicants to use the Natural Resources Canada[67] information source for defining a lake boundary. However, the Commission considers that the reference to NRCAN serves to identify the registrar of named waterbodies, rather than specifying the spatial information to use for defining the boundaries of a named lake. Regardless, M. Sveen further submitted that Dolcy exceeded the expectations of the Wildlife Directive by using lake boundaries defined in Alberta's Fisheries and Wildlife Management Information System

[64] Exhibit 28723-X0107, DLCC Group Submissions, PDF page 17; Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 4.
[65] Exhibit 28723-X0010 Attachment 9 - AEPA Renewable Energy Referral Report.
[66] Exhibit 28723-X0010 Attachment 9 - AEPA Renewable Energy Referral Report, PDF page 2.
[67] Transcript, Volume 2, page 211, line 8-14.

(FWMIS)[68] and submitted that this approach is more conservative.[69] Dolcy's position is that the project is 1,000 metres from David Lake.

63. Cliff Wallis of Cottonwood Consultants Ltd. submitted that the boundary of the lake should be defined by a desktop review of topography as captured by LiDAR.[70] C. Wallis submitted that if a source other than LiDAR is used, the Alberta Base Waterbody Polygon Arc (base waterbody) was similar to his analysis and should be used preferentially to FWMIS (which is derived and modified from the Alberta base waterbody).[71] The rationale being that the Alberta base waterbody is public spatial data that is maintained by the Government of Alberta and provides the outlines of waterbodies in the province.[72]

64. The Commission acknowledges that AEPA found the named lake setback was not infringed based on the documentation provided by WEST, but accepts the evidence of C. Wallis that there is a subsequent discrepancy in the FWMIS dataset WEST relied on. The Commission finds that for this proceeding, the base waterbody dataset provides the most authoritative boundary for David Lake because it is the primary database for lake boundaries that both FWMIS and the Alberta Merged Wetland Inventory are derived from.[73] Based on this data, C. Wallis estimated that the project is approximately 915 metres from the boundary of David Lake.[74]

4.2.2 Is the provided setback for David Lake acceptable to the Commission?

65. Given the above, a relatively small portion of the project infrastructure will encroach the 1,000-metre setback described in the Wildlife Directive. The Commission considers that in this particular case, the encroachment is acceptable provided additional mitigation is implemented as described below.

66. Dolcy is required to comply with post-construction monitoring requirements. Based on this monitoring and the application of management options presented in the Wildlife Directive (Standard 100.4.9), the encroachment of David Lake will be sufficiently mitigated.

67. The Commission acknowledges that C. Wallis recommended that all mortalities be reported annually and publicly.[75] The Commission finds that with respect to birds, this recommendation does not significantly deviate from the requirements already committed to under the AEPA post-construction survey protocols.

[68] Exhibit 28723-X0188, Attachment 12 - WEST Reply to Cliff Wallis Report – Wildlife, Wetlands and Habitat (Sveen Report), PDF page 8.
[69] Exhibit 28723-X0188, Attachment 12 - WEST Reply to Cliff Wallis Report – Wildlife, Wetlands and Habitat (Sveen Report), PDF page 8.
[70] Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 41.
[71] Transcript, Volume 3, page 357, lines 10-24.
[72] Government of Alberta. (n.d.). Base waterbody polygon arc. GeoDiscover Alberta. Retrieved from https://geodiscover.alberta.ca/geoportal/rest/metadata/item/27af6a3ebc9f4a449a9fe7dfc992f428/html
[73] Transcript, Volume 3, page 356, line 3 to page 357, line 23.
[74] Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 41.
[75] Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 79.

68. AEPA requested that post-construction monitoring occur for the project.[76] Therefore, the Commission imposes the following condition of approval for the power plant:

d. Dolcy Solar Inc. shall submit an annual post-construction monitoring survey report to Alberta Environment and Protected Areas beginning no later than January 31 of the year following the mortality monitoring period and submit the annual post-construction monitoring survey report and the Alberta Environment and Protected Areas' post-construction monitoring response letter to the Commission within one month of its issuance to Dolcy Solar Inc. These reports and response letters shall be subsequently filed with the same time constraints every subsequent year for which Alberta Environment and Protected Areas requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

69. The Commission recognizes that the post-construction monitoring protocols are limited to the first three years of operations while unexpected mortality events could occur at subsequent years after monitoring. Because of this, the Commission requires Dolcy to report any high bird mortality events involving more than 10 birds at a time at any time during project operations to AEPA and the AUC. The Commission highlights that post-construction monitoring will expire after three years (unless extended at AEPA's discretion) and detecting any high mortality events will be conducted by routine operational and agrivoltaics staff. For this reason, the Commission expects Dolcy to amend its environmental protection plan to describe a protocol for detecting high mortality events that can be completed by non-experts.

4.2.3 Are the setbacks for seasonal, semi-permanent and permanent wetlands adequate to protect wildlife habitat?

70. Wetlands are classified in part by the duration of flooding within the wetland boundary. Under Standard 100.1.9 of the Wildlife Directive, any wetlands that are typically flooded for most of the summer (seasonal) or longer (semi-permanent / permanent)[77] are subject to a 100-metre setback. This setback has been established to avoid impacts to wildlife.

71. The landcover within the project footprint is mostly annually cultivated (262.3 hectares; 65 per cent) and tame pasture (130.0 hectares; 32 per cent).[78] The Commission accepts that wetlands within these landcover types have ongoing cultivation and grazing impacts that diminish the habitat quality of the setback areas. The Commission also recognizes that annual cultivation likely contributes to more intense and frequent disturbance to wildlife than the impacts of grazing cattle.

72. Three amphibian species (wood frog, boreal chorus frog and Canadian toad) were observed in the project area, and these species depend on wetland habitat.[79] C. Wallis noted "… that water associated and water obligate birds made up higher percentages of the birds

[76] Exhibit 28723-X0010 Attachment 9 - AEPA Renewable Energy Referral Report, PDF page 5.
[77] Alberta Environment and Sustainable Resource Development. 2015. Alberta Wetland Classification System. Water Policy Branch, Policy and Planning Division, Edmonton, AB. https://open.alberta.ca/dataset/92fbfbf5-62e1-49c7-aa13-8970a099f97d/resource/1e4372ca-b99c-4990-b4f5-dbac23424e3a/download/2015-alberta-wetland-classification-system-june-01-2015.pdf
[78] Exhibit 28723-X0014, Attachment 13 - Environmental Evaluation, PDF page 16.
[79] Exhibit 28723-X0009, Attachment 8 - Renewable Energy Project Submission, PDF page 20.

during bird surveys conducted for the Dolcy Solar Project"[80] and similarly, these bird species depend on wetland habitat.

73. Of these species, the Government of Alberta has assigned detailed species rankings to Canadian toads, sandhill cranes, trumpeter swans, black terns and common yellowthroats as stated in the provincial general status provided in the renewable energy project submission.[81] Given provincial status, these species are prioritized in the Commission's review of this proceeding for mitigations from project impacts. The Commission finds that a wetland setback is the most effective means for avoiding impacts to these species while recognizing that ongoing cultivation and grazing in the project area are likely already impacting these species.

74. For this project, the Commission finds that the wetland setbacks provided for cultivated areas are adequate and expects a minimum 30-metre setback from primary infrastructure is provided for the wetlands within tame pasture. The Commission agrees with WEST concerning the reduced ecological function of these wetlands due to ongoing cultivation and grazing impacts in the area.[82] The Commission also accepts Dolcy's wildlife surveys and 100-metre setback provided for the two Canadian toad breeding ponds identified during these surveys as reasonable measures to avoid amphibian impacts.[83]

75. The Commission finds that the project was reasonably sited. While the AEPA referral report identifies a high risk to wetlands, it provides a low overall ranking for the project. The Commission accepts Dolcy's commitments to comply with the Alberta *Water Act* and the Alberta Wetland Policy[84] as reasonable measures for limiting and mitigating wetland and waterbody impacts.

4.2.4 What are the impacts of fencing to wildlife?

76. Project fencing is recognized by AEPA to cause wildlife impacts and is considered in the Wildlife Directive Standard 100.2.7. This standard is evaluated by AEPA based on the fence's potential risks to wildlife movement, wildlife entrapment and collision.[85]

77. AEPA identified that "…the fence design does not create increased collision or entrapment risk, but the unmarked barbed wire creates a collision risk for birds, therefore EPA-FWS has assessed the fencing risk as moderate."[86] Cottonwood Consultants disagreed with this assessment and provided evidence suggesting the project fencing may increase the movement, entrapment and collision risks for wildlife.[87]

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80 Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 69.
81 Exhibit 28723- X0009, Attachment 8 - Renewable Energy Project Submission; Wild Species Status Search, The Government of Alberta. https://www.alberta.ca/lookup/wild-species-status-search.aspx.
82 Exhibit 28723-X0186, Attachment 10 - WEST Reply Evidence – Weeds, Soil Erosion, and Reclamation, PDF page 11.
83 Exhibit 28723-X0041, Round 1 Information Responses, PDF page 17; Exhibit 28723-X0044, IR Attachment 3 - AEPA Amendment - Figure 1 - Wildlife Features (Project Footprint).
84 Exhibit 28723-X0012, Attachment 11 - Environmental Protection Plan, PDF page 5.
85 Renewable Energy Risk Framework, The Government of Alberta. Renewable Energy Risk Framework (alberta.ca).
86 Exhibit 28723-X0010 Attachment 9 - AEPA Renewable Energy Referral Report, PDF page 5.
87 Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 71.

78. In constructing the project, Dolcy is obligated to satisfy the Canadian Electrical Code, which specifies the requirements and design of fencing for guarding electrical equipment.[88] The Commission finds that because of the need to encompass the project and limit the contouring of the fencing (which may trap wildlife), the options for Dolcy are limited. While movement and entrapment are challenging to mitigate with the current fencing requirements, there are opportunities to prevent collisions of wildlife with the barbed wire.

79. Considering this, the Commission imposes a condition of approval for the power plant to install bird strike diverters on the fencing near David Lake within the southwest quarter of Section 36 of the project lands to reduce the risk of birds colliding with the fencing.

e. Dolcy Solar Inc. shall install bird strike diverters on the project fencing and any additional mitigation measures recommended by Alberta Environment and Protected Areas near David Lake within the southwest quarter of Section 36 of the project lands to prevent collisions of birds with the fencing.

80. Overall, the Commission finds that the project meets most Wildlife Directive standards and is appropriately sited. The environmental impacts of the project are acceptable. Residual environmental impacts from the operation of the project can be mitigated through Dolcy's proposed end-of-life management including decommissioning and reclamation commitments, which are discussed in Section 4.2.6.

4.2.5 Does the project impact the Wainwright Dunes Ecological Reserve?

81. The Commission has reviewed the evidence provided within C. Wallis's report and accepts that the project is near several environmentally sensitive areas,[89] including the Wainwright Dunes Ecological Reserve, which is 1,257 metres from the project.[90] The Commission must consider if proximity to these environmental features constitutes an increased risk of adverse impacts to the environment.

82. The project avoids critical wildlife habitat, and the AEPA referral report does not identify any risks to mapped wildlife zones aside from wetlands (discussed above).[91] As a result, the Commission accepts that siting of the project infrastructure reflects an effort to avoid these critical habitats and to minimize the risk of adverse impacts to the environment. Dolcy committed to contributing $10,000 annually for the improvement and maintenance of the Wainwright Dunes Ecological Reserve. The Commission considers that this commitment is a meaningful mitigation to any potential impacts associated with this area.

4.2.6 What are the decommissioning and reclamation commitments?

83. DLCC's concerns about decommissioning and reclamation include whether the project lands would be recovered to the way they were, whether Dolcy has reclamation security available for the project, and whether Dolcy will comply with its commitments and the

88 Canadian Standards Association. 2021. Canadian Electrical Code, Part I. Safety Standard for Electrical Installations. 25th Edition.
89 Exhibit 28723-X0131, Appendix P. Expert Evidence of Cliff Wallis_8_May_2024, PDF page 25 to 30.
90 Exhibit 28723-X0014, Attachment 13 - Environmental Evaluation, PDF page 13.
91 Exhibit 28723-X0051, AEPA-FWS Amendment Letter.

Commission's conditions regarding reclamation.[92] In this section, the Commission concludes that the information provided regarding decommissioning and reclamation is reasonable, and no further conditions are necessary.

84. Dolcy developed an environmental protection plan, an initial conservation and reclamation plan, and an environmental evaluation to ensure that the land within the project footprint will be properly reclaimed. Dolcy stated that it will also implement interim monitoring site assessments in accordance with AEPA's *Conservation and Reclamation Directive for Renewable Energy Operations* to ensure reclamation targets are met, erosion is not occurring and revegetation is occurring.[93] Dolcy indicated that its contractual obligations with the hosting landowners requires Dolcy to restore land to equivalent land capability, within 12 months of termination of each lease.[94]

85. Dolcy is required to comply with legislative requirements pertaining to decommissioning and reclamation including the obligation to reclaim the land to a state equivalent to the pre-disturbance condition. Dolcy is required to comply with all requirements in the *Conservation and Reclamation Directive for Renewable Energy Operations*. Dolcy is also required to obtain a reclamation certificate after facility closure and has committed to do so following the Government of Alberta's *2010 Reclamation Criteria for Wellsites and Associated Facilities for Cultivated Lands* or relevant regulatory requirements in place at the time.[95]

86. With respect to reclamation security, Dolcy explained how the reclamation security will be calculated, reassessed and updated, and the form of the reclamation security. Specifically, the leases with host landowners require reclamation security based on an estimate of reclamation costs, offset by the estimated salvage value, with a reassessment performed every seven years. Dolcy committed to use an independent third party to estimate the reclamation cost and salvage value. Dolcy specified that it will use a form of reclamation security, such as a letter of credit or surety bond, that is expected to be protected from creditors in the event of insolvency. In addition, Dolcy indicated that the form of reclamation security must be agreed upon by each hosting landowner. Dolcy confirmed that the reclamation security will be in place within 90 days of the commercial operations date confirmed with the Alberta Electric System Operator, and the security may be drawn on by the landowner if the approval holder fails to comply with its reclamation obligations, 12 months after the obligations are triggered. Furthermore, Dolcy committed to maintain insurance coverage that is sufficient to protect against any reasonably foreseeable liabilities.[96]

87. The Commission notes that the February 28 letter discussed a new reclamation security regime applying to all approvals issued on or after March 1, 2024.[97] Dolcy may be responsible for posting security under that regime, but its specific parameters and scope are not yet known.

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92 Exhibit 28723-X0107, DLCC Group Submissions, PDF page 18. Exhibit 28723-X0108, Appendix A. Hilson & Linda Maull Direct Evidence, PDF page 5. Exhibit 28723-X0109, Appendix B. Direct Evidence of Robert (Dale) & Jane Scott, PDF page 4; Exhibit 28723-X0110, Appendix C. Robert (Bob) & Roxy McBride Direct Evidence. Exhibit 28723-X0111, Appendix D. Darren & Sue Kvigstad Direct Evidence, PDF page 3.

93 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 16. Exhibit 28723-X0013, Attachment 12 - Preliminary Conservation and Reclamation Plan, PDF page 23.

94 Transcript, Volume 1, page 33, lines 11-21.

95 Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3.

96 Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF pages 17 and 18. Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3.

97 Exhibit 28723-X0061, AUC letter - Policy guidance from the Government of Alberta, PDF page 5.

In the meantime, the Commission must assess whether the project is in the public interest, including whether Dolcy's security program indicates that sufficient funds will be available to reclaim the project at its end of life.

88. The Commission expects Dolcy to fully reclaim the project and bear the costs of doing so. The Commission expects Dolcy to uphold its commitment to use an independent third party to help estimate the reclamation security amount for the project, and to post security in the form of a letter of credit, surety bond or similar instrument. Overall, the Commission finds that Dolcy has satisfied the requirements of Rule 007, Section 4.4.2, SP18 and SP19 regarding end-of-life management and the interim requirements regarding reclamation security in Bulletin 2023-05.[98] Based on the information provided, the Commission accepts that Dolcy's approach to reclamation is sufficient for the purposes of satisfying the Commission that the approval of the project is in the public interest.

4.3 Fire risks from the energy storage facility

89. DLCC raised concerns about fire risks associated with the proposed energy storage facility (ESF). Several risk management strategies and mitigations were presented by Dolcy to prevent, monitor and mitigate fire risks. In this section, the Commission concludes that fire risks associated with the ESF are limited and will be mitigated by Dolcy's monitoring systems and emergency response plan (ERP) to an acceptable level, and the Commission requires Dolcy to finalize the site-specific ERP and develop a reliable communication plan. This section proceeds as follows:

- The Commission considers potential fire risks and related factors, including battery chemistry, equipment design and equipment siting.
- The Commission reviews the evidence about Dolcy's detection and monitoring systems.
- The Commission assesses mitigation measures and procedures in the ERP.

4.3.1 What are potential fire risks associated with the project energy storage facility?

90. In this proceeding, both Dolcy and DLCC provided an air dispersion modelling assessment of what could occur during a fire at the project ESF site, provided evidence related to real ESF fires that have occurred and provided commentary on the fire protection engineering analysis of the battery system.

91. Dolcy stated that lithium iron phosphate (LFP) chemistry, and specifically the Tesla Megapack 2XL, is the proposed ESF technology for the project.[99] Dolcy confidentially submitted a fire protection engineering analysis report for Tesla Megapack 2/2XL, which was prepared by Fisher Engineering Inc. for the battery manufacturer, Tesla Energy (Fisher Report).[100] The Commission granted confidential treatment to the information in this document, and related information.[101]

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98 Bulletin 2023-05: Interim Rule 007 information requirements, September 6, 2023.

99 Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF page 9. Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 4.

100 Exhibit 28723-X0140-C, Fisher Engineering Fire Protection Engineering Analysis, PDF pages 3 and 4.

101 Exhibit 28723-X0136, AUC letter - Ruling on Dolcy Solar Inc. motion for confidentiality.

92. Dolcy submitted that based on the Fisher Report, the Tesla Megapack 2XL has been certified or listed to all relevant product design standards; [redacted][102]

93. [redacted][103] Based on the testing results in the Fisher Report, Dolcy concluded that the Tesla battery units are resistant to fire propagation from one to another and the prescribed approach allows the affected unit to consume itself while applying water to adjacent exposures.[104]

94. Given that the project ESF batteries meet relevant product design standards and battery units are resistant to fire propagation from one to another, the Commission considers the use of LFP batteries mitigates some safety concerns related to other battery technologies. This finding is consistent with previous Commission findings on ESFs, in which the Commission found LFP battery chemistry to be more stable than other commercially available chemistries and less likely to experience a thermal runaway event leading to a fire.[105]

95. Dolcy retained Calvin Consulting Group Ltd. to conduct an air quality dispersion modelling assessment for the project ESF, which concluded that the maximum predicted air quality emissions at the closest residences to the ESF will comply with the Alberta Ambient Air Quality Objectives (AAAQO) and that the immediately dangerous to life or health (IDLH) values will not be exceeded at or beyond the ESF site fenceline for hydrogen fluoride, the principal air contaminant of concern.[106]

96. DLCC expressed concerns that the air quality dispersion modelling assessment did not address a worst-cast scenario. DLCC retained Marc Polivka and Jason Binding of Integrated Modelling Inc. to review Dolcy's dispersion modelling assessment, and prepare a dispersion modelling assessment report.[107]

97. Dolcy retained Dr. Stephen Ramsay of Calvin Consulting to reply to Integrated Modelling's evidence. Dr. Ramsay explained that the Fisher Report contained the most relevant data for Calvin Consulting's assessment, which is specifically for the LFP chemistry and the Tesla Megapack at a utility-scale. Dr. Ramsay noted that Calvin Consulting's assessment used conservative modelling parameters that reflected the plausible worst-case scenario.[108]

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[102] Exhibit 28723-X0140-C, Fisher Engineering Fire Protection Engineering Analysis, PDF pages 3 and 4.
[103] Exhibit 28723-X0140-C, Fisher Engineering Fire Protection Engineering Analysis, PDF pages 47 and 48.
[104] Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 14.
[105] Previous decisions include Decision 28845-D01-2024, PDF page 7, Decision 27971-D01-2023, PDF pages 11-12, and Decision 27109-D01-2022, PDF page 10.
[106] Exhibit 28723-X0043, IR Attachment 2 - Dolcy BESS Air Dispersion Modelling Report, PDF page 5.
[107] Exhibit 28723-X0107, DLCC Group Submissions, PDF page 9.
[108] Exhibit 28723-X0193, Attachment 3 - Calvin Consulting Group Reply Evidence, PDF page 7.

98. Dolcy submitted that Integrated Modelling's position as to a worst-case scenario is not credible based on the concurrent improbability of each of the respective modelling assumptions.[109] Dr. Ramsay explained that when the low probability of ESF battery failure is combined with low probability of a particular receptor being downwind throughout the event, the combined probability is very small or even negligible.[110] The Commission acknowledges that wind direction may be a relevant consideration in terms of assessing ESF failure risks, but does not accept Dolcy's contention that Integrated Modelling's worst-case scenario is not credible. Rather, both modelling scenarios provide value to the Commission's public safety analysis.

99. Further, Dolcy pointed out that the dispersion modelling report prepared by Integrated Modelling appears to rely on analysis of the Victoria battery incident and on a 2017 study by Larsson et al. in determining modelling input parameters. Dolcy noted these two sources have limited applicability to the LFP chemistry used in the current Tesla Megapack 2XL equipment selected for this project.[111]

100. The Commission agrees with DLCC's statement that the Calvin Consulting and Integrated Modelling reports are complimentary, and that they provide emission predictions of different scenarios.[112] The Commission finds that the Fisher Report is the most directly related evidence for the proposed ESF technology and more closely aligns with the modelling by Calvin Consulting. The Commission accepts that the Calvin Consulting's modelling used reasonable and conservative assumptions and provided a reasonable prediction of contaminant concentrations during a thermal runaway event for the proposed Tesla Megapack 2XL system. The Commission has also considered the "worst-case reasonable" results of Integrated Modelling to inform its assessment of potential risks and appropriate mitigations associated with ESFs. During the hearing, M. Polivka clarified that at the time when Integrated Modelling reviewed Dolcy's dispersion modelling assessment, it was not entirely certain whether fire would likely spread from one Megapack battery cell to another, however, later after reviewing the confidential Fisher Report, Integrated Modelling's concerns have been alleviated. In particular, M. Polivka generally agreed that mitigation measures in the Fisher Report will reduce fire risks significantly, and cascading fires from one battery cell to another is extremely unlikely.[113]

101. Furthermore, the Commission notes that according to the Fisher Report, the Tesla Megapack 2XL includes several engineered safety features intended to mitigate a thermal runaway event leading to a fire, which include [redacted][114] In the event of a thermal runaway, additional design features to limit the escalation of an ESF fire include [redacted]

[109] Exhibit 28723-X0193, Attachment 3 - Calvin Consulting Group Reply Evidence, PDF pages 5 and 6.
[110] Exhibit 28723-X0193, Calvin Consulting Group Ltd. Rebuttal Response, PDF pages 6 and 7.
[111] Confidential transcript, Volume 4, page 6, lines 8-23.
[112] Exhibit 28723-X0157-C, DLCC Response to Dolcy Solar Information Request No. 011 – CONFIDENTIAL, PDF page 6.
[113] Transcript, Volume 3, page 445, lines 3-15.
[114] Exhibit 28723-X0140-C, Fisher Engineering Fire Protection Engineering Analysis (CONFIDENTIAL), PDF page 54.

[redacted][115]

102. In response to a request related to fire statistics specifically for the Tesla Megapack 2 system, Dolcy stated that [redacted][116] The Commission does not view this as an extensive analysis of the probability of a fire occurring at the proposed 200-MWh ESF, but does acknowledge that fires for these systems are uncommon.

103. Finally, the Commission considers that ESF siting is an important preventative mitigation measure for safety and fire control. The Commission understands that the ESF will be sited at a location with gravel hardscaping and an absence of vegetative fuel near the ESF equipment. This design limits the risk of grass or wildfires from reaching the proposed ESF. The closest residence to the ESF, which was identified to be the only residence within 1.5 kilometres of the project boundary, is located approximately 2.2 kilometres away from the project ESF site.[117]

104. Dolcy's air quality dispersion modelling assessment predicts the maximum predicted air quality emissions at the closest residence to the ESF will comply with the AAAQO. Further, the predicted contaminant concentrations at the ESF fenceline were below IDLH.[118] The ESF fenceline is much closer to the emission source than the closest residence, and therefore, the contaminant concentrations at the closest residence would be below IDLH. The Commission considers that health and safety risks in the event of a fire can be further minimized through measures and procedures in Dolcy's emergency response plan (ERP), which is discussed in Section 4.3.3 of this decision.

105. The assessments and analysis conducted by Dolcy and DLCC, and the discussion between the parties regarding the fire risks for the ESF were premised upon the use of the proposed Tesla Megapack 2XL. Given that the project equipment has not yet been finalized, if the chemistry or vendor of the batteries for the ESF for the final project design are different than those described in the current applications (e.g., the final project design is a battery type other than Tesla Megapack 2XL), then such changes would require an amendment application in accordance with Rule 007.

4.3.2 How will fire risks from the energy storage facility be monitored?

106. Dolcy submitted that the project will have a comprehensive monitoring, management, and communication system at the cell, module, unit and site level which is engineered to prevent thermal runaway and communicate status, condition, notifications, warnings, and alarms to

[115] Exhibit 28723-X0140-C, Fisher Engineering Fire Protection Engineering Analysis (CONFIDENTIAL), PDF pages 13 and 36.
[116] Exhibit 28723-X0225-C, Letter to AUC re Undertaking Response and Clarification of Dr. Yazdanpanah, PDF page 2.
[117] Exhibit 28723-X0005, Attachment 4 - Project Maps, PDF page 5. Exhibit 28723-X0019, Attachment 18 - Noise Impact Assessment, PDF page 8.
[118] Exhibit 28723-X0043, IR Attachment 2 - Dolcy BESS Air Dispersion Modelling Report, PDF page 5.

monitoring personnel and agencies.[119] Specifically, the ESF will be monitored by dual monitoring:[120]

- The ESF will be monitored continuously by a supervisory control and data acquisition (SCADA) system, which can be programmed to automatically notify emergency response providers immediately upon activation.
- The ESF will be monitored by the ESF manufacturer, Tesla Energy, through its own monitoring system. Dolcy may access the data from Tesla if required.

107. Dolcy further committed that operators will receive training in the use of monitoring systems' "Human-Machine Interface" and SCADA function, reviewing and monitoring the reports, operational standards and protocols, and management of performance exceptions and incidents.[121]

108. The Commission finds that even though there will be a dual monitoring scheme for the ESF site, being commercial SCADA monitoring system and Tesla remote monitoring, Dolcy is ultimately responsible for the effectiveness of system monitoring regardless of any third-party participation, including any manufacturer monitoring of the system. Installation of a monitoring system for the ESF is essential for safety and fire risk control. The Commission imposes the following condition of approval for the ESF:

f. Dolcy Solar Inc. shall install a remote monitoring and detection system that can be programmed to automatically notify emergency response providers, including the local fire station, immediately upon activation. Excluding emergency situations, the energy storage facility will not be operated without the monitoring system in use.

109. The Commission considers fire detection and response planning as an integral part of mitigating fire risks associated with ESFs. In its reply evidence, Dolcy submitted a report by BBA Engineering Consulting and commissioned by Energy Storage Canada, titled *Battery Energy Storage: Thermal Runaway and Fire Risk*. The BBA report recommended a number of measures to mitigate safety risks associated with thermal runaway including the implementation of continuous thermal imaging at site to monitor battery units and to detect hot spots as early as possible.[122] Similarly, Tesla's *Megapack 2 Safety Overview* (submitted by Dolcy in its reply evidence) also recommended fire detection at the site level with the use of third-party thermal imaging cameras that can detect fires on site.[123] Therefore, the Commission imposes the following condition of approval for the ESF:

g. Dolcy Solar Inc. shall install a thermal imaging camera at the energy storage facility site for continuous monitoring, and where appropriate, shall integrate the camera into its system alarms, shutdowns, and emergency response planning.

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[119] Exhibit 28723-X0041, Round 1 Information Responses, PDF page 11.

[120] Exhibit 28723-X0092.02, Dolcy Response to DLCC IR No. 1, PDF page 55. Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 13. Transcript, Volume 2, page 220, lines 22-25, and page 221, lines 1-9. Transcript, Volume 4, page 481, lines 5-10.

[121] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 2.

[122] Exhibit 28723-X0180, Attachment 4 - Battery Energy Storage Report Thermal Runaway and Fire Risk, PDF page 14.

[123] Exhibit 28723-X0181, Attachment 5 - Tesla Report Megapack 2 Safety Overview, PDF page 3.

4.3.3 Is the emergency response plan sufficient to mitigate fire risks from the project?

110. Dolcy developed a site-specific emergency response plan (ERP) that describes practices and procedures to be used in the event of medical aid, serious injury, fire, explosion or other emergency situations.[124] The Commission finds Dolcy's ERP acceptable to mitigate fire risks from the project, with the imposition of additional conditions as described below.

111. DLCC expressed concerns about the adequacy of Dolcy's ERP for the project. In particular, DLCC sought clarity on whether there would be sufficient emergency-related resourcing on site. Specifically, DLCC questioned whether subject matter experts will be involved in an emergency response or available for contact in the event of a battery fire, how employees will be trained to deal with a battery fire, and whether local fire departments will be able to provide an appropriate response to a battery fire. Some DLCC members were also concerned about the response time from the nearest fire station at Edgerton. These DLCC members estimated the fire response time from Edgerton to the project site would be one hour.[125]

112. With respect to emergency-related resourcing and training, Dolcy confirmed that it will retain and train personnel to safely operate, maintain and respond to emergencies pertaining to the ESF. Dolcy specifically explained that contact information for the appropriate subject matter experts will be included within the ERP, and that the ERP will be updated by the engineering, procurement and construction contractor before construction begins.[126] Further, Dolcy committed to provide support to the Edgerton fire department and emergency services with equipment and training.[127]

113. Dolcy indicated that it has consulted with the Edgerton Fire Chief about the emergency response plan and consultation will continue as Dolcy advances the project to construction. Dolcy committed that specifics of local emergency response resourcing and training specifically related to the ESF will be developed in collaboration with the local fire department and municipal leadership. Dolcy committed to conduct at least one emergency response drill that engages the local emergency services within 90 days of the start of construction.[128] Dolcy explained that given the length of the construction time frame and that the solar panels and the ESF will be constructed at different times, Dolcy will have more emergency response drills during the construction.[129]

114. In response to DLCC's concern about response time/distance, Dolcy considered a response time of one hour sufficient to protect surrounding exposures such as surface vegetation and trees.[130] Dolcy based this time frame on its consideration of the continuous monitoring of the ESF components, the long development time for a fire event initiated by cell thermal runaway, the resistance of the Megapack 2XL units to fire propagation from one to another, the gravel hardscaping of the ESF site, and the prescribed approach of allowing the affected unit to consume itself with discretionary application of water to adjacent exposures.

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124 Exhibit 28723-X0017, Attachment 16 - Emergency Response Plan.
125 Exhibit 28723-X0107, DLCC Group Submissions, PDF pages 13 and 14.
126 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 14. Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 2.
127 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 25.
128 Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 2.
129 Transcript, Volume 2, page 229, lines 10-18.
130 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 14.

115. DLCC also expressed concerns with the reliability of cellphone service in the area, in the event residents need to be contacted as part of an emergency response.[131] Dolcy committed to establish reliable and appropriate telecommunications to the project for monitoring, and confirmed that the project will have a redundant telecommunications connection to overcome routine interruptions in connectivity. Dolcy committed to retaining operations and maintenance personnel to perform all necessary tasks, and additional on-call personnel to ensure appropriate response times.[132] Although not responsible for the quality of the local telecommunications network, the Commission considers Dolcy responsible for the effectiveness of its ERP, and that the ERP must be designed having consideration for known resource constraints.

116. The Commission finds that Dolcy will mitigate fire risks associated with the ESF and other emergency events to a satisfactory level through the following measures and procedures:

- continuous and redundant monitoring of the ESF,
- establishment and maintenance of appropriate emergency response plans and procedures,
- adequate training and qualifications of staff hired to operate the equipment and respond in an emergency,
- continued coordination with local emergency services,
- continued engagement with local residents and landowners of the project specific risks, and,
- continuous improvement of Dolcy's emergency response procedures.

117. However, given the concerns expressed by DLCC and that not all risks related to the project can be eliminated, the Commission imposes the following conditions of approval for the power plant, substation and ESF:

h. Dolcy Solar Inc. shall continually, during construction and operation, and at a minimum annually, review and update the site-specific emergency response plan, and incorporate any reasonable changes necessary to address concerns received from Edgerton emergency services, the Municipal District of Wainwright, and other interested stakeholders such as local landowners. The updated plans are to be provided to the Municipal District of Wainwright and local fire departments.

i. Dolcy Solar Inc. shall develop and implement a reliable communication plan based on input from local residents and landowners that adequately accounts for any limitations or deficiencies of the local telecommunications network.

j. Dolcy Solar Inc. shall provide on-site training specifically to the local first responders following commissioning of both the power generation portion of the project and additionally following the completion of the emergency response plan.

[131] Transcript Volume 2, page 304, lines 23-25.
[132] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3. Exhibit 28723-X0092.02, Dolcy Response to DLCC IR No. 1, PDF pages 55 and 56.

118. In addition, the Commission imposes the following conditions of approval specifically for the ESF:

k. Dolcy Solar Inc., and any subsequent operator, shall maintain insurance coverage that is sufficient to the protect energy storage facility against any reasonably foreseeable liabilities.

l. Dolcy Solar Inc., and any subsequent operator, shall implement ongoing upgrades to improve the safety of the project energy storage facility, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.

4.4 Consultation

119. In this section, the Commission considers whether the consultation and notification conducted by Dolcy complies with Rule 007 and also comments on Jasona Rondeau's submission related to Dolcy's consultation. The Commission concludes that Dolcy's consultation for the project has complied with Rule 007.

120. DLCC expressed concerns about the adequacy of Dolcy's consultation efforts. Some DLCC members indicated that they did not have face-to-face consultation; while others indicated they received conflicting or inadequate responses from Dolcy representatives. Other DLCC members indicated they were not consulted by any method. In particular, William (Bill) Creech, on behalf of two corporations, submitted that the corporations and their principals had not been consulted about the applications.[133]

121. To prepare the applications, Dolcy conducted a participant involvement program (PIP) for the project.[134] Dolcy stated that during the PIP, it sought to address all stakeholder questions, concerns, and requests for mitigation to the extent possible. Dolcy mailed a project-specific information package and project update newsletters, hosted two open houses, and conducted consultation with stakeholders, including occupants, residents, landowners, industrial stakeholders, local government, and Indigenous groups. Dolcy completed its municipal development permit application and received development permits from the MD of Wainwright on July 10, 2023.

122. With respect to consultation issues related to the corporations and B. Creech, Dolcy explained that the ownership of the relevant lands changed during the PIP. Dolcy provided a consultation history that showed title to these lands had been checked on November 27, 2022. Dolcy attempted to consult with the registered owner identified on title over the next year, until it checked title to the lands again on November 7, 2023, when Dolcy identified the corporations as the new registered owners of the relevant lands. Following that, Dolcy sent consultation materials to the address listed for those corporations on the title documents.[135]

[133] Exhibit 28723-X0107, DLCC Group Submissions, PDF pages 23 and 24. Exhibit 28723-X0158, DLCC Motion re new interveners.
[134] Exhibit 28723-X0007, Attachment 6 - PIP Report December 2023 Final.
[135] Exhibit 28723-X0204, Letter to AUC re Consultation Information, PDF pages 2 and 3.

123. B. Creech stated that the corporations purchased the lands in November of 2022, and title to the lands indicates a transfer of ownership occurred on November 28, 2022,[136] one day after Dolcy performed its initial title search. The Commission considers that inadequate consultation concerns raised by B. Creech are largely attributable to unfortunate timing related to land title transfers and searches, rather than inadequate effort on the part of Dolcy. Further, Dolcy explained that once it was notified that B. Creech had concerns about consultation through B. Creech's counsel, Dolcy contacted B. Creech's counsel and offered to meet with B. Creech.[137] Dolcy confirmed that it remains committed to maintaining open communication with all stakeholders, including B. Creech and the corporations, during the development, construction and operation phases of the project.[138]

124. The Commission finds that Dolcy made reasonable efforts to consult and notify the corporations during the PIP, and expects Dolcy will continue communicating with these corporations and will promptly respond to any questions or concerns about the project.

125. With respect to Dolcy's stakeholder identification methods generally, the Commission notes that Dolcy generated consultation and notification lists, including landowners, occupants, residents, government agencies and industrial interest holders, using various sources of information including land titles searches, Crown land searches and discussion with project area landowners. In particular, Dolcy indicated that land titles were checked throughout the PIP to determine if new stakeholders purchased land within 800 metres of the project boundary.[139] The Commission considers the methods used by Dolcy's to identify stakeholders for consultation and notification to be reasonable.

126. With respect to some DLCC members' concern that they received conflicting or inadequate responses from Dolcy representatives, Dolcy explained that consultations were conducted by Dolcy team members who were intimately familiar with the project and associated documentation.[140] The Commission acknowledges that some stakeholders may prefer face-to-face discussions, but the Commission finds sufficient evidence to demonstrate that Dolcy conducted effective consultation by providing information to, and answering questions from, stakeholders via phone, text communication and open houses.

127. Dolcy received development permits from the MD of Wainwright for the project on July 10, 2023. However, the Commission notes that the development permits were for a 200-MW preliminary project layout, which is different than the 300-MW applied-for layout.[141] Dolcy explained that the project footprint did not increase beyond what was originally proposed for the municipal development permits. Dolcy confirmed that it has updated the MD of Wainwright with the latest project layout, and that updated municipal development permits will require renewal prior to construction.[142] Dolcy committed to ongoing consultation with the MD's development and planning, public works, and emergency services teams as the project progresses towards construction to ensure compliance with the conditions of the development permits.[143]

136 Exhibit 28723-X0161, Appendix C 2024-05-27 Land Title Search (NE 24-41-5W4).
137 Exhibit 28723-X0204, Letter to AUC re Consultation Information, PDF page 3.
138 Exhibit 28723-X0204, Letter to AUC re Consultation Information, PDF page 4.
139 Exhibit 28723-X0007, Attachment 6 - PIP Report December 2023 Final, PDF page 7.
140 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 24.
141 Exhibit 28723-X0063, IR2 Attachment 1 - Municipal Development Permits.
142 Transcript, Volume 2, page 245, lines 16-24, and page 246, lines 2-7.
143 Exhibit 28723-X0001, Dolcy Solar Project AUC Application December 2023 Final (signed), PDF page 24.

The Commission expects Dolcy will continue its consultation with the MD to ensure compliance with municipal requirements and conditions.

128. The Commission notes Dolcy's commitments to ongoing communication with all stakeholders throughout the project development, construction and operation to address any concerns as they arise.[144] In addition, Dolcy submitted that should the project be approved, it will provide stakeholders with an update including a more precise construction and project execution schedule.[145] Therefore, the Commission imposes the following condition of approval for the power plant, substation and ESF:

m. Dolcy Solar Inc. shall notify impacted stakeholders about the Commission approvals and permit and licence. Stakeholders to be notified shall include occupants, residents, landowners, Indigenous groups, industrial stakeholders within the notification radius as required in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*, local authorities, and other relevant agencies. Dolcy shall inform these stakeholders of the construction completion date specified in the approvals and permit and licence and the most up-to-date construction schedule for the project.

129. While Dolcy was unable to resolve all outstanding concerns raised by stakeholders, the Commission is satisfied, based on its review of the consultation records and the evidence in this proceeding, that Dolcy's PIP generally achieved the objectives of consultation and notification set out in Rule 007.

130. In addition to the concerns raised by members of DLCC, DLCC filed a submission related to the adequacy of Dolcy's consultation prepared by J. Rondeau.[146] In this report, J. Rondeau conducted analysis and provided opinions regarding appropriate proponent-stakeholder communication standards, the readability of the Commission's public engagement resources, the readability of Dolcy's online engagement material, and other matters. The report also relied on answers to questions that J. Rondeau had asked ChatGPT 3.5, an artificial intelligence program, on topics related to stakeholder communication.

131. In response to a Commission information request, DLCC stated that J. Rondeau was not being presented as an independent witness, that J. Rondeau was participating in this proceeding as a representative of DLCC, and that J. Rondeau's report was written in an objective manner.[147]

132. Earlier in this proceeding, Dolcy had objected to the participation of J. Rondeau. In its reply evidence, Dolcy stated that J. Rondeau had held two open houses with local landowners, and engaged in a social media campaign to solicit opposition to the project, and maintained that these activities "served only to engender misinformation, divide the community and raise doubts amongst stakeholders regarding the Project", and "further frustrated Dolcy's attempts to conduct meaningful consultations with stakeholders in addressing the misinformation raised by

[144] Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF pages 25 and 26.
[145] Exhibit 28723-X0041, Round 1 Information Responses, PDF page 36.
[146] Exhibit 28723-X0121, Appendix N. Jasona Rondeau Report re DSI Participant Involvement Program.
[147] Exhibit 28723-X0149, DLCC Responses to AUC Information Requests DLCC-AUC-2024MAY13-001 to 003, PDF page 1.

Ms. Rondeau."[148] As the Commission and Dolcy did not have questions on the report, J. Rondeau did not appear at the hearing.

133. The Commission is not bound by the rules of evidence in its proceedings,[149] but it often has regard to the principles that underlie the rules of evidence when considering expert evidence.[150] When weighing opinion evidence on technical matters, courts have recognized that relevant considerations include the independence and impartiality of the expert witness,[151] and the degree of their expertise in the technical subject matter.[152] The Commission also considers these matters, and it is for this reason that it has created rules that apply to independent witnesses in Rule 001: *Rules of Practice*, such as the requirement for an independent witness to provide a curriculum vitae, and to provide a statement that acknowledges the independent witness's duty to provide evidence that is fair, objective and non-partisan.[153]

134. The Commission considers that the majority of the submissions presented in J. Rondeau's report constitutes opinion evidence relying on specialized training. The Commission considers that it is inappropriate for this type of information to be introduced by a representative acting on behalf of landowners, rather than by an independent witness with the accompanying information required by Rule 001. Further, the substance of this information was not helpful to the Commission. Other information in the J. Rondeau report consisted of summaries of evidence that was already on the record through Dolcy's PIP information and the evidence of various members of DLCC. The Commission considers that the report prepared by J. Rondeau was improper given her role as a representative, not helpful in assessing the adequacy of consultation, and has therefore assigned it no weight.

4.5 Visual impacts including glare

135. DLCC expressed concerns about glare impacting road users, and requested the Commission require Dolcy to monitor and address complaints or concerns regarding glare, and to conduct a post-construction glare assessment on nearby roads. Robert (Dale) Scott raised concerns about the project's visual impacts to his work area in the northeast quarter of Section 30, Township 41, Range 4, west of the Fourth Meridian and indicated that Dolcy should plant trees to provide visual screening for his work area.[154] In this section, the Commission concludes that the visual impacts including glare will be reasonable, subject to the commitments and conditions below.

136. In response to D. Scott's concerns about visual impacts to his work area that is adjacent to the project, Dolcy committed to work with D. Scott to implement reasonable screening for his work area and also committed to submit a visual screening plan detailing discussions with D. Scott and final details of the visual impact mitigation. Specifically, Dolcy stated it would pay for the purchase and installation of vegetation to screen D. Scott's work area, and make

148 Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 24.
149 *Alberta Utilities Commission Act*, Section 20.
150 See Decision 27561-D05-2023, paragraphs 30-37.
151 *White Burgess Langille Inman v Abbott and Haliburton Co*, 2015 SCC 23, paragraph 40.
152 *R v Marquard*, [1993] 4 SCR 223 at 243.
153 Rule 001*: Rules of Practice*, Section 21.
154 Exhibit 28723-X0107, DLCC Group Submissions, PDF pages 18 and 23.

reasonable efforts to support the establishment of the selected vegetation.[155] Consequently, the Commission imposes the following condition of approval for the power plant:

n. Dolcy Solar Inc. shall file a visual screening plan with the Commission, detailing discussions with Robert (Dale) Scott and the final details of the visual impact mitigation. Unless D. Scott and Dolcy agree otherwise, Dolcy shall pay for the purchase and installation of any vegetation required as part of the visual screening plan, and will make reasonable efforts to support the establishment of the selected vegetation. The visual screening plan must be filed at least 90 days prior to the start of construction.

137. Dolcy retained Green Cat Renewables Canada Corporation (GCR) to complete a solar glare assessment for the project. The solar glare assessment identified one residence and five roads within 800 metres of the project boundary as receptors. The assessment predicted that Township Road 414 will receive up to 12,568 minutes of yellow glare per year, Township Road 415 will receive up to 11,503 minutes of yellow glare per year, the residence will receive up to 935 minutes of yellow glare per year, and the other receptors (i.e., three roads) will receive zero glare from the project.[156]

138. GCR explained that the prediction results are conservative because: (i) the glare analysis does not account for clouds, weather patterns or visual obstructions; (ii) a portion of the predicted glare is expected to originate from the same general direction as the sun for periods close to sunrise/sunset, thus reducing potential glare impacts from the project during these times through sun-masking; (iii) prediction results indicate the total glare that a road would receive from the project, but vehicle operators will be travelling past the affected areas, not standing still; and (iv) roads near the project are expected to experience minimal traffic.

139. The Commission notes that the project will mount project solar panels on a fixed-tilt racking system. Dolcy explained that compared to fixed-tilt projects, solar panels on a tracking system (i.e., rotating panels) may result in less glare for ground-based receptors. In response to a Commission information request about whether Dolcy is willing to use a tracking system as a mitigation measure to reduce glare, Dolcy explained that after assessing the suitability of a tracking system, it opted to use a fixed-tilt system for the project solar panels, because fixed-tilt systems are more accommodating of variabilities in terrain, require less maintenance, and generate greater overall energy production on constrained land.[157]

140. Dolcy identified blocking the path of glare between the project and receptors (e.g., by using vegetative screening, berms, walls/fencing) as a potential mitigation measure to reduce glare impacts on local roads. However, Dolcy did not model the potential mitigation measures to verify their feasibility or effectiveness. Dolcy requested that it not be required to provide detailed specifications for glare mitigation measures at the current time, because: (i) the project design has not yet been finalized; (ii) the glare model is based on conservative assumptions and the actual glare observations are likely to be less impactful, less frequent, and for shorter durations than modeled; and (iii) given limited traffic volumes on the local roads, predicted glare from the

[155] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 6.

[156] The 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.

[157] Exhibit 28723-X0041, Round 1 Information Responses, PDF page 26.

project is not expected to create a hazardous situation. Dolcy submitted it is better to design mitigation to address specific cases where someone is affected by glare from the constructed project.[158]

141. Dolcy committed to submit an updated glare assessment as part of its final project update and to specify mitigation measures that achieve no predicted glare from the project on local roads. If it receives concerns or complaints about project glare following construction, Dolcy committed to investigate the concerns or complaints and apply mitigation as necessary.[159]

142. Given Dolcy's commitments regarding glare impacts and mitigation, the Commission requires Dolcy to evaluate potential glare mitigation measures in the final project update and requires Dolcy to implement these mitigation measures in the event of glare concerns or complaints as necessary once the project commences operations. Consequently, the Commission imposes the following conditions of approval for the power plant:

o. As part of the final project update, Dolcy Solar Inc. must submit an updated solar glare assessment to the Commission that details specifications for mitigation measures sufficient to achieve no predicted glare from the project on local roads. In the updated solar glare assessment, Dolcy shall also verify the feasibility and effectiveness of the mitigation measures via glare modelling.

p. Dolcy Solar Inc. shall promptly address any complaints or concerns regarding solar glare from the project. In the event of complaints or concerns, Dolcy shall file an annual report with the Commission detailing any complaints or concerns it receives regarding solar glare from the project during the first three years of operation, with the first report due to the Commission no later than 13 months after the project becomes operational. The report shall also detail Dolcy's response to the complaints or concerns, and describe the mitigation measures that Dolcy has implemented.

143. The Commission notes that predictions in the solar glare assessment were premised upon the use of solar panels with anti-reflective coating. As such, the Commission imposes the following condition of approval for the power plant:

q. Dolcy Solar Inc. shall use solar panels with anti-reflective coating for the project.

144. The fact that the two roads predicted to receive glare from the project are lightly used and that the visual screening Dolcy will implement near the one residence may reduce the glare received, weighed heavily in the Commission's determination on glare impacts. In addition, the Commission acknowledges that the prediction results were based on conservative assumptions and accepts GCR's conclusion that glare impacts are expected to be reduced by sun-masking as glare is predicted to occur from the same direction of the sun. Subject to the above conditions, the Commission accepts that the project is not likely to create hazardous glare conditions for drivers on nearby transportation routes or have unacceptable glare effects on the residential receptor.

[158] Exhibit 28723-X0081, Information Responses AUC Round Three_2024MAR28 002, PDF pages 3 and 4.
[159] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3.

4.6 Noise impacts

145. DLCC questioned whether noise impacts have been appropriately or adequately addressed or considered by Dolcy in its applications for the project. In particular, some DLCC members were concerned about noise during construction, such as the pounding of piles and vehicles with back-up beepers. In particular, these DLCC members were concerned that noise from project construction may have negative effects on animals, including livestock and wildlife.[160] In this section, the Commission concludes that the project is expected to comply with Rule 012, and that the noise impacts from construction will be reasonable, subject to Dolcy's commitments and the conditions imposed.

4.6.1 Will noise impacts from the project operation be compliant with Rule 012?

146. Dolcy retained GCR to complete a noise impact assessment (NIA) for the project in accordance with Rule 012.[161] The NIA identified one residence within 1.5 kilometres of the project boundary as a noise receptor (R1) and predicted that noise from the project operation will be compliant with applicable permissible sound levels at this receptor. Dolcy described two potential noise mitigation measures that could be implemented in the event of non-compliance with Rule 012: building an enclosure or noise attenuation walls around the ESF and/or selecting inverters that come equipped with noise attenuation walls.[162]

147. The Commission finds the NIA conducted by GCR for the project meets the requirements in Rule 012 and accepts the conclusion of the NIA that the project is expected to comply with permissible sound levels set out in Rule 012.

148. The Commission notes that the predicted nighttime cumulative sound level at Receptor R1 is 39.9 dBA, which is only 0.1 dBA less than the 40 dBA nighttime permissible sound level. Dolcy committed, if necessary, to conduct post-construction sound monitoring to determine actual noise levels from the project.[163] As such, the Commission imposes the following condition of approval for the power plant, substation and ESF.

r. Dolcy Solar Inc. shall conduct a post-construction comprehensive sound level (CSL) survey, including an evaluation of low frequency noise, at Receptor R1. The post-construction CSL survey must be conducted under representative conditions and in accordance with Rule 012: *Noise Control*. Within one year after the project commences operations, Dolcy shall file a report with the Commission presenting measurements and summarizing the results of the post-construction CSL survey.

4.6.2 How will noise impacts from the project construction activities be managed?

149. With respect to construction noise, Dolcy committed to implement the construction noise mitigation measures recommended in Rule 012. In particular, Dolcy confirmed that it will conduct construction activity between the hours of 7 a.m. and 10 p.m. and will promptly respond to noise complaints associated with project construction. In addition, Dolcy confirmed that all

[160] Exhibit 28723-X0107, DLCC Group Submissions, PDF page 16.
[161] Exhibit 28723-X0019, Attachment 18 - Noise Impact Assessment.
[162] Exhibit 28723-X0041, Round 1 Information Responses, PDF page 32.
[163] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3.

construction vehicles will be kept in good working order, and vehicles will not be kept running unless necessary for construction.[164]

150. Regarding the project's pile design, Dolcy explained that the project construction will most likely use screw piles, which are less noisy to install than driven piles. However, if driven piles are ultimately selected for the project, Dolcy confirmed that it will work with landowners to mitigate noise impacts from the piling activity, and in particular, Dolcy will work with nearby residents to schedule the piling activity so as to reduce noise impacts.[165]

151. The Commission expects Dolcy will finalize the pile design (i.e., screw piles or driven piles) based on the final project design. Therefore, the Commission imposes the following conditions of approval for the power plant:

s. In the final project update, Dolcy Solar Inc. shall describe whether Dolcy has selected screw piles or driven piles and explain the reasoning for the selection. If different pile technologies will be used for different parts of the project, this information must be included in the final project update.

t. If the pile design is altered after the final project update, Dolcy Solar Inc. shall provide the Commission with a summary of those changes and explain what necessitated the changes. This summary shall be filed with the Commission no later than the start of construction.

152. The Commission expects Dolcy will uphold its commitments to implement mitigation measures from Rule 012 to manage the noise impacts from construction, promptly respond to concerns or complaints from residents, and mitigate construction noise wherever feasible.

4.7 Property value impacts

153. DLCC had concerns that the project will interfere with the rural character and beautiful views of the area and impact the value of their properties. In this section, the Commission considers these concerns and concludes the project may have a negative impact on property values in the zero to five per cent range, and that these impacts must be balanced against the project's benefits in the final analysis.

154. DLCC retained Brian Gettel of Gettel Appraisals Ltd. to conduct a real estate impact assessment of the project. B. Gettel's assessment focused on Garth Arneson's farmland and D. Scott's farmland and work area with a woodshop as discussed above. B. Gettel concluded that a potential loss of zero per cent to five per cent could arise for vacant farmland located close to solar farms, and a potential loss of five per cent to 10 per cent could arise for residential properties located close to solar farms. Because this project includes an ESF, B. Gettel considered a loss towards the upper end of the range or 10 per cent to be probable, with a potential loss in value up to 15 per cent.[166]

[164] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 8.
[165] Exhibit 28723-X0226, Letter to AUC re Dolcy's List of Commitments, PDF page 3; Transcript, Volume 2, page 205, lines 17-24.
[166] Exhibit 28723-X0107, DLCC Group Submissions, PDF page 16, PDF page 20.

155. Dolcy retained Glen Doll of Serecon Inc. to reply to the Gettel report. G. Doll submitted that the Gettel report "contains considerable information with a tenuous connection to the current proceeding."[167] In particular, G. Doll pointed out that most studies cited by B. Gettel focus on residential properties in urban areas and they are not applicable to rural agricultural properties, and that no evidence in the Gettel report supports the hypothesis that combination of the solar farm and the battery could elevate the loss impact to property value. G. Doll concluded that there would be no property value impacts to surrounding farmland due to the project, and in particular, any property value impact to the woodshop on D. Scott's work area would be limited and minor.

156. Assessing property valuations is a complex process and technical matter that is influenced by a wide variety of contextual and circumstantial factors. The Commission requires project-specific evidence to make findings; however, project-specific evidence may not always be readily available due to an absence of local sales data.

157. While it is difficult to quantify property value impacts given the lack of objective and local market data, the Commission recognizes that the project may have a potential negative impact on property values, in the nature of the zero to five per cent range. The Commission does not find sufficient evidence demonstrating that the presence of the ESF would increase this negative impact to 10 to 15 per cent. The Commission also notes that it has imposed a visual screening condition in relation to D. Scott's property that should mitigate potential property value impacts in respect of that property caused by visual impacts. These impacts are a consequence of the project that needs to be balanced against the project's public benefits.

4.8 Residential and social impacts

158. DLCC was concerned about the project impacting the rural character of the area. In particular, some DLCC members expressed concerns about the potential risk of an increase in criminal activity in the area due to individuals being attracted to valuable equipment and materials located on the site.[168]

159. Dolcy responded that protecting the local community and the project site from theft, vandalism, and unauthorized access is important. Dolcy explained that it will install 1.8-metre fences topped with barbed wire around the project, and it is willing to consider the implementation of closed-circuit television monitoring and surveillance both as a deterrent to dissuade intruders and to assist law enforcement in the event of a security breach. Further, Dolcy explained there will be an on-site operator present at the site during working hours and someone contracted locally to respond in case of an emergency during off hours.[169]

160. The Commission acknowledges DLCC's concerns regarding potential residential and social impacts from the project but accepts that Dolcy's proposed mitigation measures are reasonable.

4.9 Project benefits

161. Dolcy submitted benefits from the project include the avoidance of approximately 430,000 metric tons of carbon dioxide a year, the provision of reliable, cost-effective, and clean energy to Albertans, and the generation of over $50 million in property tax revenue for the

[167] Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 22.
[168] Exhibit 28723-X0107, DLCC Group Submissions, PDF pages 14 and 15.
[169] Exhibit 28723-X0176, Dolcy Written Reply Evidence, PDF page 21.

MD of Wainwright. Dolcy stated that the project is also anticipated to create both direct and indirect employment opportunities (e.g., approximately 1,100 jobs will be created during construction) and to support supply chain industries.

5 Conclusion

162. In accordance with Section 17 of the *Alberta Utilities Commission Act*, and in addition to any other matters that the Commission may or must consider, the Commission must consider whether approval of the project is in the public interest having regard to the social and economic effects and the effects on the environment. The Commission considers an application to be in the public interest if it complies with existing regulatory standards, and the public benefits of the project outweigh its negative impacts.[170]

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, to generate municipal tax revenue and to create employment opportunities.

164. Overall, the Commission finds the project complies with existing regulatory standards, and that the negative impacts associated with the project are outweighed by the benefits of the project. The Commission finds that the applications are in the public interest having regard to the purposes of the *Electric Utilities Act*, the *Hydro and Electric Energy Act*, and all other relevant considerations.

6 Decision

165. For reasons outlined in the decision, and subject to the conditions in this decision, the Commission finds that, in accordance with Section 17 of the *Alberta Utilities Commission Act*, approval of Dolcy Solar Inc.'s applications are in the public interest having regard to the social, economic, and other effects of the project, including the effects on the environment.

166. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 28723-A001 and grants Dolcy Solar Inc. the approval set out in Appendix 1 – Power Plant Approval 28723-D02-2024, to construct and operate the Dolcy Solar + Energy Storage Project Power Plant.

167. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 28723-A002 and grants Dolcy Solar Inc. the permit and licence set out in Appendix 2 – Substation Permit and Licence 28723-D03-2024, to construct and operate the Dolcy 1148S Substation.

[170] Decision 27842-D01-2024: Aira Wind Power Inc. – Aira Solar Project and Moose Trail 1049S Substation, Proceeding 27842, Applications 27842-A001 and 27842-A002, March 21, 2024, paragraph 27; Decision 27486-D01-2023: Foothills Solar GP Inc. - Foothills Solar Project, Proceeding 27486, Applications 27486-A001 and 27486-A002, April 20, 2023, paragraph 22; Alberta Energy and Utilities Board Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation - 490-MW Coal-Fired Power Plant, Application 2001173, December 21, 2001, paragraph 22.

168. Pursuant to sections 13.01(1) and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 28723-A003 and grants Dolcy Solar Inc. the approval set out in Appendix 3 – Energy Storage Facility Approval 28723-D04-2024, to construct and operate an energy storage facility for the Dolcy Solar + Energy Storage Project.

169. The appendixes will be distributed separately.

Dated on September 12, 2024.

Alberta Utilities Commission

(original signed by)

Renée Marx
Panel Chair

(original signed by)

Michael Arthur
Commission Member

Appendix A – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
Bennett Jones LLP Jessica Kennedy Erin Anderson Lisa Rodriguez **Dolcy Solar Inc.** Margaret McKenna Jennifer Traichel
Ackroyd LLP Richard Secord **David Lake Concerned Citizens Group (DLCC)** Garth Arneson Bob and Roxy McBride Archie Clark Morley Muldoon Joy and Dean Kemper Hailey Kemper Blake Kemper Robert (Dale) Scott Darren and Susan Kvigstad Hilson and Linda Maull Levi and Taylor Maull Walker Maull William (Bill) Creech Sherry Creech Connor Creech Ted Creech 2294481 Alberta Ltd. 2294467 Alberta Ltd.
Alberta Utilities Commission **Commission panel** Renée Marx. Panel Chair Michael Arthur, Commission Member **Commission staff** Patrick Schembri (Commission counsel) Jaimie Graham (Commission counsel) Joan Yu Chad Bergeron Derek Rennie

Appendix B – Oral hearing – registered appearances

Name of organization (abbreviation) Name of counsel or representative	Witnesses
Dolcy Solar Inc. Jessica Kennedy, Bennett Jones LLP, counsel Erin Anderson, Bennett Jones LLP, counsel Lisa Rodriguez, Bennett Jones LLP, counsel	Margaret McKenna Jennifer Traichel Dr. Steven Tannas Michael Sveen Janet Bauman Dr. Stephen Ramsay Dr. Hesam Yazdanpanahi Glen Doll
David Lake Concerned Citizens Group (DLCC) R. Secord, Ackroyd LLP, counsel	Robert (Dale) Scott Bill Creech Darren and Sue Kvigstad Bob and Roxy McBride Hilson and Linda Maull Cliff Wallis Brian Gettel Marc Polivka Jason Binding Brandon Green Thomas Jensen Sheilah Nolan

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 directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

All conditions of Decision 28723-D01-2024, except conditions f, g, k and l will be included as conditions of Power Plant Approval 28723-D02-2024. Conditions h to j, m and r will be included as conditions of Substation Permit and Licence 28723-D03-2024. Conditions a, f to m and r will be included as conditions of Energy Storage Facility Approval 28723-D04-2024.

The following are conditions of Decision 28723-D01-2024 that require subsequent filings with the Commission:

a. Once Dolcy Solar Inc. has finalized its equipment selection for the project, it must file a final project update to the Commission to confirm that the project has stayed within the final project update allowances for solar power plants and energy storage facilities specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines*. The final project update must be filed at least 90 days prior to the start of construction.

b. As part of the final project update, Dolcy Solar Inc. must file an updated agrivoltaics plan that reflects the final project layout, and incorporates the best available knowledge and best practices for initiating the agrivoltaics program.

c. Dolcy Solar Inc. must file an annual agricultural report that documents the production realized from the agrivoltaics program. This report must be filed with the AUC no later than January 31 for the first three years of the agrivoltaics program.

d. Dolcy Solar Inc. shall submit an annual post-construction monitoring survey report to Alberta Environment and Protected Areas beginning no later than January 31 of the year following the mortality monitoring period and submit the annual post-construction monitoring survey report and the Alberta Environment and Protected Areas' post-construction monitoring response letter to the Commission within one month of its issuance to Dolcy Solar Inc. These reports and response letters shall be subsequently filed with the same time constraints every subsequent year for which Alberta Environment and Protected Areas requires surveys pursuant to subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

n. Dolcy Solar Inc. shall file a visual screening plan with the Commission, detailing discussions with Robert (Dale) Scott and the final details of the visual impact mitigation. Unless D. Scott and Dolcy agree otherwise, Dolcy shall pay for the purchase and installation of any vegetation required as part of the visual screening plan, and will make reasonable efforts to support the establishment of the selected vegetation. The visual screening plan must be filed at least 90 days prior to the start of construction.

o. As part of the final project update, Dolcy Solar Inc. must submit an updated solar glare assessment to the Commission that details specifications for mitigation measures sufficient to achieve no predicted glare from the project on local roads. In the updated solar glare assessment, Dolcy shall also verify the feasibility and effectiveness of the mitigation measures via glare modelling.

r. Dolcy Solar Inc. shall conduct a post-construction comprehensive sound level (CSL) survey, including an evaluation of low frequency noise, at Receptor R1. The post-construction CSL survey must be conducted under representative conditions and in accordance with Rule 012: *Noise Control*. Within one year after the project commences operations, Dolcy shall file a report with the Commission presenting measurements and summarizing the results of the post-construction CSL survey.

s. In the final project update, Dolcy Solar Inc. shall describe whether Dolcy has selected screw piles or driven piles and explain the reasoning for the selection. If different pile technologies will be used for different parts of the project, this information must be included in the final project update.

The following are conditions Decision 28723-D01-2024 that do not or may require subsequent filings with the Commission:

e. Dolcy Solar Inc. shall install bird strike diverters on the project fencing and any additional mitigation measures recommended by Alberta Environment and Protected Areas near David Lake within the southwest quarter of Section 36 of the project lands to prevent collisions of birds with the fencing.

f. Dolcy Solar Inc. shall install a remote monitoring and detection system that can be programmed to automatically notify emergency response providers, including the local fire station, immediately upon activation. Excluding emergency situations, the energy storage facility will not be operated without the monitoring system in use.

g. Dolcy Solar Inc. shall install a thermal imaging camera at the energy storage facility site for continuous monitoring, and where appropriate, shall integrate the camera into its system alarms, shutdowns, and emergency response planning.

h. Dolcy Solar Inc. shall continually, during construction and operation, and at a minimum annually, review and update the site-specific emergency response plan, and incorporate any reasonable changes necessary to address concerns received from Edgerton emergency services, the Municipal District of Wainwright, and other interested stakeholders such as local landowners. The updated plans are to be provided to the Municipal District of Wainwright and local fire departments.

i. Dolcy Solar Inc. shall develop and implement a reliable communication plan based on input from local residents and landowners that adequately accounts for any limitations or deficiencies of the local telecommunications network.

j. Dolcy Solar Inc. shall provide on-site training specifically to the local first responders following commissioning of both the power generation portion of the project and additionally following the completion of the emergency response plan.

k. Dolcy Solar Inc., and any subsequent operator, shall maintain insurance coverage that is sufficient to the protect energy storage facility against any reasonably foreseeable liabilities.

l. Dolcy Solar Inc., and any subsequent operator, shall implement ongoing upgrades to improve the safety of the project energy storage facility, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.

m. Dolcy Solar Inc. shall notify impacted stakeholders about the Commission approvals and permit and licence. Stakeholders to be notified shall include occupants, residents, landowners, Indigenous groups, industrial stakeholders within the notification radius as required in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines,* local authorities, and other relevant agencies. Dolcy shall inform these stakeholders of the construction completion date specified in the approvals and permit and licence and the most up-to-date construction schedule for the project.

p. Dolcy Solar Inc. shall promptly address any complaints or concerns regarding solar glare from the project. In the event of complaints or concerns, Dolcy shall file an annual report with the Commission detailing any complaints or concerns it receives regarding solar glare from the project during the first three years of operation, with the first report due to the Commission no later than 13 months after the project becomes operational. The report shall also detail Dolcy's response to the complaints or concerns, and describe the mitigation measures that Dolcy has implemented.

q. Dolcy Solar Inc. shall use solar panels with anti-reflective coating for the project.

t. If the pile design is altered after the final project update, Dolcy Solar Inc. shall provide the Commission with a summary of those changes and explain what necessitated the changes. This summary shall be filed with the Commission no later than the start of construction.