



2113260 Alberta Ltd.

Oyen Community Solar Power Plant

February 18, 2020

Alberta Utilities Commission

Decision 24845-D01-2020

2113260 Alberta Ltd.

Oyen Community Solar Power Plant

Proceeding 24845

Application 24845-A001

February 18, 2020

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The Commission may, within 30 days of the date of this decision and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected decision on its website.

1 Decision summary

1. In this decision, the Alberta Utilities Commission considers whether to approve an application from 2113260 Alberta Ltd., operating as Oyen Solar Partners, to construct and operate a power plant designated as the Oyen Community Solar Project, to qualify the power plant as a community generating unit, and to connect the power plant to the ATCO Electric Ltd. distribution system. During the proceeding, Oyen Solar Partners requested that the Commission defer its consideration of the community generation aspect of the application to give the applicant more time to file additional information. Accordingly, this decision does not address the application to designate the power plant as a community generating unit.

2. After considering the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the project is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

2 Introduction

3. Oyen Solar Partners (OSP) filed an application with the AUC seeking approval to construct and operate a 15-megawatt (MW) solar power plant, and to connect the power plant to the Alberta Interconnected Electric System, near the town of Oyen (collectively, the project), pursuant to sections 11 and 18 of the *Hydro and Electric Energy Act*. OSP also applied for the power plant to be designated as a community generating unit as defined in Section 3 of the *Small Scale Generation Regulation*.

4. The Commission issued a notice of application in accordance with Section 7 of Rule 001: *Rules of Practice*. The Commission received one submission in response to the notice of application from Kelly Marshall. The Commission granted standing to Mr. Marshall based on his concerns and proximity to the proposed project.

5. During the course of the proceeding, OSP stated that it could not address all of the Commission's information requests regarding the community generation aspect of the application within the set schedule. OSP therefore requested that the Commission defer the decision on the community generation aspect, but continue processing the power plant application. OSP confirmed that it would submit the requested information at a later date.¹

6. The Commission issued a letter stating it would continue to process the power plant aspect of the application, and would determine the completeness of the community generation

¹ Exhibit 24845-X0027, Information Response - Round 2, PDF page 2.

designation component of the application once OSP files its responses to the Commission's information requests.²

3 Discussion

7. The Commission is considering the power plant component of the application under sections 11 and 18 of the *Hydro and Electric Energy Act*. In accordance with Section 17 of the *Alberta Utilities Commission Act*, the Commission must assess whether the project is in the public interest, having regard to its social, economic and environmental effects.

8. The Commission considers that the public interest will be largely met if an application complies with existing regulatory standards, and the project's public benefits outweigh its negative impacts.³ The Commission must take into account the purposes of the *Hydro and Electric Energy Act* and the *Electric Utilities Act*,⁴ and cannot consider the need for the project. The Commission must also determine whether an applicant has met the requirements of Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments* and Rule 012: *Noise Control*. An applicant must obtain all approvals required by other applicable provincial or federal legislation.

3.1 Application details

9. The project would be located approximately three kilometres east of the town of Oyen, within the southeast quarter of Section 36, Township 27, Range 4, west of the Fourth Meridian on previously disturbed land within the boundaries of the Special Area No. 3, owned by the Crown by right of the Special Areas Board. The proposed power plant would consist of 54,000 solar panels mounted on fixed tilted racks and six inverter transformer units, as described in the application. The power plant would have a gross generation capability of 15 MW.

10. The project would be interconnected to ATCO Electric Ltd.'s 25-kilovolt electric distribution system at a point in the southeast quarter of Section 36, Township 27, Range 4, west of the Fourth Meridian. ATCO Electric Ltd. indicated that it has no concerns with the interconnection of the power plant.⁵

11. OSP submitted a solar glare analysis report for the project prepared by Proventus Consulting. Proventus predicted the intensity and amount of glare from the proposed solar panels with anti-reflective coating and indicated that yellow-grade glare, which has the potential to cause temporary after-images, would be produced by the project along Highway 41 for up to 70 minutes per year, and at adjacent residences for up to 684 minutes per year. Proventus confirmed there would be no red-grade glare produced by the project, which would have the potential to cause permanent after-image burns to an individual.

² Exhibit 24845-X0041, AUC application complete letter.

³ EUB Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation 490-MW Coal-Fired Power Plant, Application 2001173, December 21, 2001, page 4.

⁴ *Hydro and Electric Energy Act*, RSA 2000 Ch. H-16, sections 2 and 3; *Electric Utilities Act*, RSA 2003 Ch. E-5.1, Section 5.

⁵ Exhibit 24845-X0013, Attachment 11 DFO Letter.

12. OSP stated that the project would be sited on previously-disturbed lands. OSP retained Hemmera Envirochem Inc. to conduct an environmental assessment for the project, in which it concluded that there would be no significant impacts on the environment.

13. OSP submitted a renewable energy referral report from Alberta Environment and Parks (AEP) Wildlife Management. In its report, AEP concluded that the project would pose a low risk to wildlife and wildlife habitat, based on project siting and on commitments made by OSP to mitigate and monitor wildlife impacts. OSP acknowledged its statutory obligations under the *Environmental Protection and Enhancement Act* and the *Conservation and Reclamation Regulation*, to properly reclaim the project and obtain a reclamation certificate at the project's end of life.

14. OSP conducted a participant involvement program pursuant to Rule 007. That program included consultation with stakeholders within 800 metres of the project and notification of stakeholders within 2,000 metres of the project. OSP stated that it was aware of outstanding stakeholder concerns raised by Mr. Marshall.

15. OSP filed a noise impact assessment for the project to address the requirements of Rule 012. The noise impact assessment indicated that the predicted cumulative sound levels for the most affected receptor would have an overnight cumulative sound level of 35.3 decibels and that the project would meet the Rule 012 permissible sound levels.⁶

16. OSP indicated that although it had not designed a site-specific fire or emergency response plan, it would finalize an emergency response plan before construction of the project is completed.⁷

17. OSP stated that the project would be constructed in two phases. The first phase would be completed by June 2020, and the second phase would be completed by June 2021.⁸

3.2 Views of the intervener

18. Mr. Marshall stated that he has a grazing lease on the land directly south of the project, in the northeast quarter of Section 25, Township 27, Range 4, west of the Fourth Meridian. He submitted that this land can be converted to deeded land through an application process with the Special Areas Board and that he has considered building a residence on the land but that, to date, he has not pursued an application with the Special Areas Board.⁹ Mr. Marshall expressed concerns about the project's visual and land-use impacts.

19. Mr. Marshall commented on the negative visual impacts on his property from multiple directions, as his leased land would border the project on two sides for up to one mile. He also submitted that because his lands are at a higher elevation, the visual impact would be amplified. Mr. Marshall stated that during consultation, OSP discussed the prospect of planting trees around the site to reduce the visual and noise impacts. Mr. Marshall stated that a tree screen around the project site, and not on his leased land, could reduce the visual and noise impacts and contribute to the environment and wildlife habitat in the area. Although Mr. Marshall acknowledged OSP's statement that a tree screen could reduce the solar generation, he suggested that the angle of the

⁶ Exhibit 24845-X0010, Attachment 8 Noise Impact Assessment, PDF page 15.

⁷ Exhibit 24845-X0021, Proceeding 24845 Information Response 1, PDF pages 3-4.

⁸ Exhibit 24845-X0021, Proceeding 24845 Information Response 1, PDF page 2.

⁹ Exhibit 24845-X0039, 24845 Kelly Marshall Email, PDF pages 1-2.

sun during the summer would limit the reductions in generation caused by the tree shadows, and would be minimal in comparison to that caused by snow buildup on the panels or by overcast days.¹⁰

20. Mr. Marshall noted that the project could increase water runoff by reducing the amount of land available for water absorption, which could result in erosion of the land adjacent to the project. Mr. Marshall is also concerned with the potential increase in weeds spreading throughout the project site and to adjacent lands. Further, Mr. Marshall is concerned that if chemical weed control measures were used, the chemicals could spread to adjacent lands.¹¹

21. Mr. Marshall argued that the project should be relocated, and if it cannot, that it be set back further from his leased land. Mr. Marshall also requested that a tree screen be planted along the two project boundaries that border his lands, and that it be maintained by the applicant to reduce the effects of the project.

3.3 Views of the applicant

22. OSP indicated that it considered the existing land use, location of residences, proximity to existing electrical interconnection, site access and environmental studies when it selected the proposed project site.

23. OSP acknowledged that the land directly south of the project is currently leased to Mr. Marshall through the Special Areas Board, and does not dispute Mr. Marshall's evidence that he could apply to have the land converted to deeded land through an application with the Special Areas Board. OSP stated that the project would not affect Mr. Marshall's right to continue to use his leased lands in accordance with the current restrictions on the land use and the existing agricultural land use designation.¹²

24. OSP designed the project with an 18-metre setback from the property line for the lands directly south of the project. OSP noted that the current land use bylaw requires a minimum 7.5-metre setback from the property line.¹³ OSP suggested that it would be amenable to plant a vegetation screen around a future home development, should such a plan be approved by the Special Areas Board, but that a tree screen around the project perimeter would affect the solar generation.

25. OSP confirmed that a detailed stormwater management plan would be completed in conjunction with municipal development permit applications and in accordance with the *Stormwater Management Guidelines for the Province of Alberta*. Additionally, OSP stated that it would incorporate specific measures to limit the spread of weeds, including reclaiming temporary workspaces, ensuring that vehicles entering the site have been cleaned and implementing weed control measures during operation. OSP noted that the control measures would be developed in consultation with landowners.¹⁴

¹⁰ Exhibit 24845-X0039, 24845 Kelly Marshall Email, PDF page 4.

¹¹ Exhibit 24845-X0039, 24845 Kelly Marshall Email, PDF pages 2-3.

¹² Exhibit 24845-X0040, Applicant's Reply Submission, PDF page 1.

¹³ Exhibit 24845-X0040, Applicant's Reply Submission, PDF page 2.

¹⁴ Exhibit 24845-X0009, Attachment 7 Environmental Evaluation, PDF page 21.

4 Findings

26. For the following reasons, the Commission finds that the approval of the project is in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

27. The Commission has reviewed the application and has determined that the technical, siting, and noise aspects of the power plant application have been met. The Commission is satisfied that OSP conducted its participant involvement program in accordance with Rule 007.

28. The Commission accepts OSP's evidence that it selected the project site to limit the environmental impacts of the project, and to limit the amount of new infrastructure required to connect the project to the Alberta Interconnected Electric System by locating the project close to existing electric distribution lines and a substation with existing capacity. Further, the Commission recognizes that OSP exceeded the minimum setback requirements between the project infrastructure and the property line of the lands directly south of the project.

29. While the project could result in visual impacts on the lands leased by Mr. Marshall directly south of the project, the Commission notes that Mr. Marshall has not proposed any development for that land, nor has he filed an application with the Special Areas Board to have such development permitted. The Commission therefore finds that the mitigation of visual impacts proposed by Mr. Marshall is premature. While OSP asserted that a tree screen would have a negative impact on the total generation of the project, this assertion was not supported by any evidence and was therefore not persuasive. OSP stated that it would be amenable to offer Mr. Marshall tree screening options around any development on the lands directly south of the project, should such a development be approved in the future.

30. Although the Commission acknowledges Mr. Marshall's concerns about erosion from water runoff and the spread of weeds, it is satisfied that OSP's commitments to develop a stormwater management plan and implement weed control measures address these concerns.

31. The Commission finds that the project complies with the permissible sound levels established in Rule 012. Although no receptors were modelled on Mr. Marshall's leased land, the noise impact assessment results for the most affected receptor were within Rule 012 permissible sound levels.

32. The Commission has considered the environmental effects of the project and finds that due to OSP's siting of the project on previously disturbed lands and its commitment to implementing the mitigation measures set out in the project-specific renewable energy referral report issued by AEP, the potential environmental effects of the project, designated by AEP as low risk, can be adequately mitigated.

33. Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* came into force on July 1, 2019, and applies to all solar projects approved after September 1, 2019. Accordingly, OSP must comply with the requirements of Rule 033. Subsection 3(3) of Rule 033 requires approval holders to submit to AEP and the AUC annual post-construction monitoring survey reports. Consequently, the Commission imposes the following as a condition of approval:

- a. OSP shall submit an annual post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the AUC within 13 months of the project

becoming operational, and on or before the same date every subsequent year for which AEP requires surveys pursuant to Subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

34. There are currently no public safety standards or regulations in place associated with solar glare. The Commission accepts the conclusion by Proventus in its glare analysis report, that solar glare from the panels will not result in lasting health impacts on individuals, but that an observer's vision could be temporarily affected by an after-image from solar glare. The Commission observes that Proventus' conclusion was premised upon the use of an anti-reflective coating applied to the solar panels that would limit solar glare. Accordingly, the approval of this project is conditional upon the use of an anti-reflective coating.

35. The Commission acknowledges that the glare analysis report indicated that incidents of yellow-grade glare on roads located adjacent to the project area and at residences adjacent to the project. However, there are no outstanding stakeholder concerns relating to solar glare from the project. Notwithstanding the absence of stated concerns, the Commission wishes to ensure that any glare associated with the project is addressed by OSP in a timely manner. Consequently, the Commission imposes the following as conditions of approval:

- b. OSP shall use a standard anti-reflective coating for the project's solar panels.
- c. OSP shall file a report detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as OSP's response to the complaint. OSP shall file this report no later than 13 months after the project becomes operational.

36. The Commission acknowledges the property valuation concerns raised by Mr. Marshall, the leaseholder of the land. However, the Commission was not presented with any evidence of a direct or measurable impact by the project to land and property values. Moreover, the Special Areas Board, the owner of the land in question, has not expressed any concerns about the impacts to the value of its property.

5 Decision

37. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants 2113260 Alberta Ltd. the approval set out in Appendix 1 – Power Plant Approval 24845-D02-2020 – February 18, 2020.

38. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves the interconnection and grants 2113260 Alberta Ltd. the connection order set out in Appendix 2 – Connection Order 24845-D03-2020 – February 18, 2020.

39. The appendices will be distributed separately.

Dated on February 18, 2020.

Alberta Utilities Commission

(original signed by)

Anne Michaud
Vice-Chair

(original signed by)

Kristi Sebalj
Commission Member

(original signed by)

Tracee Collins
Commission Member

Appendix A – Summary of Commission conditions of approval

This section is intended to provide a summary of all conditions of approval for the convenience of readers. In the event of any difference between the directions and conditions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

The following are conditions of Decision 24845-D01-2020 that require follow-up with the Commission, and will be tracked as conditions of Power Plant Approval 24845-D02-2020 using the AUC's eFiling System:

- OSP shall submit an annual post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the AUC within 13 months of the project becoming operational, and on or before the same date every subsequent year for which AEP requires surveys pursuant to Subsection 3(3) of Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.
- OSP shall file a report detailing any complaints or concerns it receives or is made aware of regarding solar glare from the project during its first year of operation, as well as OSP's response to the complaint. OSP shall file this report no later than 13 months after the project becomes operational.

The following is a condition of Decision 24845-D01-2020 that does not require follow-up with the Commission:

- OSP shall use a standard anti-reflective coating for the project's solar panels.