



**Sunset Solar Inc.**

**Sunset Solar Project**

**June 27, 2019**



**Alberta Utilities Commission**

Decision 23612-D01-2019

Sunset Solar Inc.

Sunset Solar Project

Proceeding 23612

Application 23612-A001 and 23612-A002

June 27, 2019

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## **1 Decision summary**

1. In this decision, the Alberta Utilities Commission considers whether to approve an application from Sunset Solar Inc. to construct and operate a 60-megawatt solar power plant designated as the Sunset Solar Project, to construct and operate a collector substation designated as Grassy Lake 446S Substation and an application to connect the substation to the Alberta Interconnected Electric System (AIES).

2. After consideration of the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the Sunset Solar Project and the Grassy Lake 446S Substation is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment. The Commission defers its decision on the connection of the Grassy Lake 446S Substation to AltaLink Management Ltd.'s Transmission Line 612L.

## **2 Introduction**

3. Sunset Solar Inc. filed applications with the AUC to construct and operate a 60-megawatt (MW) alternating-current solar photovoltaic power plant, to construct and operate the Grassy Lake 446S Substation and to connect the substation to the AIES via AltaLink Management Ltd.'s Transmission Line 612L. The applications, filed pursuant to sections 11, 14, 15 and 18 of the *Hydro and Electric Energy Act*, were registered on June 4, 2018, as applications 23612-A001 and 23612-A002.

4. On January 15, 2019, the Commission issued a notice of applications in accordance with Section 7 of Rule 001: *Rules of Practice*. In response to the notice, the Commission received a statement of intent to participate from St. Mary River Irrigation District (SMRID). On March 7, 2019, the Commission received correspondence from SMRID indicating that its concerns had been adequately addressed.<sup>1</sup>

## **3 Applications**

5. Sunset Solar submitted that the project would consist of 216,756 fixed-mount photovoltaic solar panels,<sup>2</sup> an underground network of electrical collector lines, a collector substation designated as Grassy Lake 446S Substation, and the project would be surrounded by an eight foot high chain link fence.

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<sup>1</sup> Exhibit 23612-X0048, Trevor Helwig email-06Mar2019.

<sup>2</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 12.

6. The Sunset Solar Project would be sited on approximately 257 hectares of primarily cultivated land on sections 8, 9, 17 and 18 of Township 10, Range 13, west of the Fourth Meridian, approximately one kilometre southwest of the hamlet of Grassy Lake.
7. Sunset Solar stated that Grassy Lake 446S Substation would be located on the northwest quarter of Section 8, Township 10, Range 13, west of the Fourth Meridian and would contain the following major equipment:
  - one 138/34.5-kilovolt (kV), 45/60/75 – megavolt-ampere transformer
  - one 138-kV circuit breaker
  - one 34.5-kV switchgear building with four 34.5-kV circuit breakers
  - an enclosure surrounded by a chain-link fence
8. Sunset Solar stated that the project would connect to AltaLink's existing Transmission Line 612L via a T-tap configuration. Sunset Solar stated that the changes to existing facilities to accommodate the interconnection would be the responsibility of AltaLink and that those changes would be described in AltaLink's facility application to the Commission.<sup>3</sup>
9. Sunset Solar received a development permit for the project from the Municipal District of Taber on October 17, 2018.
10. The project was granted *Historical Resources Act* approval on September 6, 2017 and June 5, 2018.
11. A noise impact assessment summary form and additional noise related information responses for the project were submitted. These documents stated that the dwelling that would be the most impacted would be located 30 metres from the project. The nighttime permissible sound level was determined to be 40 dBA  $L_{eq}$  and the daytime permissible sound level was determined to be 50 dBA  $L_{eq}$ . The cumulative sound level at the dwelling located 30 metres from the project was predicted to be 36.2 dBA  $L_{eq}$  nighttime and 45.1 dBA  $L_{eq}$  daytime. The noise impact assessment summary form and additional noise related information responses indicated that the predicted cumulative sound levels would meet the permissible level during daytime and nighttime hours.
12. Sunset Solar provided an environmental assessment for the proposed project. The assessment indicated that the project lands encompass approximately 259 hectares of agricultural land. The project location was chosen based on the lower agricultural value relative to the general land quality in the Municipal District of Taber and its proximity to the adjacent transmission line.<sup>4</sup>
13. Sunset Solar received a renewable energy referral report from Alberta Environment and Parks Wildlife Management (AEP WM). AEP WM indicated that the project had been sited to avoid all wildlife features except a Swainson's hawk nest and cliff swallow colony for which alternative mitigations that meet the AEP policy had been identified. AEP WM assessed the

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<sup>3</sup> Exhibit 23612-X0022, Substation application document, PDF page 15.

<sup>4</sup> Exhibit 23612-X0010, Environmental Assessment, PDF page 10.

proposed project to be a low risk based on the project siting, and commitments by Sunset Solar to mitigate and monitor wildlife impacts.<sup>5</sup>

14. In response to an information request, Sunset Solar provided an updated environmental protection plan incorporating feedback it had received from AEP WM. Included in the updates were mitigation methods to reduce wildlife impacts such as trenching and/or excavating on the same day so open excavations would be limited and wildlife entrapment would be unlikely to occur. Sunset Solar would also conduct migratory nest sweeps during weed control and vegetation management activities during the breeding bird period.

15. Sunset Solar stated that it would comply with the *Wildlife Act*, *Weed Control Act*, *Environmental Protection and Enhancement Act*, the *Water Act*, the *Public Lands Act* and all the associated regulations.<sup>6</sup>

16. There is one intermittent watercourse present within the project boundary. No infrastructure would be located within 45 metres of the watercourse. Sunset Solar confirmed that all wetland and watercourse setbacks would be maintained during operations and required wetland crossings with underground collector lines would be completed outside of the April 15 to July 15 restricted activity period.<sup>7</sup>

17. An irrigation canal was identified to be adjacent to the project boundary. The habitat within the irrigation canal was assessed by AEP to be low value for wildlife and therefore a 45 metres setback would not need to be adhered to. AEP WM indicated that the setback infringement is of lower risk and meets the intent of the AEP WM policy.<sup>8</sup>

18. Sunset Solar confirmed that it would complete a pre-disturbance site assessment on the project footprint consistent with the requirements and guidelines contained in the *Conservation and Reclamation Directive for Renewable Energy Operations*.

19. Sunset Solar confirmed that it would conduct weed monitoring during operational activities, in addition to annual weed monitoring and vegetation health assessments, until such time that weed eradication and control is successful. Sunset Solar stated that it would consult with the Municipal District of Taber regarding weed control.<sup>9</sup>

20. In response to an information request, Sunset Solar conducted a solar glare report. The report predicted that there was no potential for hazardous glare to occur. There was limited solar glare predicted to occur at three residents near the project. The solar glare intensity was predicted to primarily be of the type that has potential to cause a temporary after-image if viewed directly (yellow grade solar glare). The duration of the glare was expected to be of short duration. Solar glare was not expected to occur on Highway 2, Highway 3 or a nearby railroad. There was some yellow-grade solar glare expected at the intersection of Township Road 10-2 and Range Road 13-4, and Township Road 10-2 and Range Road 13-3. The solar glare at the intersections would be expected to be seasonal and limited to the period between March and

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<sup>5</sup> Exhibit 23612-X0034, AEP Wildlife Referral Report, PDF page 3.

<sup>6</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 81.

<sup>7</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 81.

<sup>8</sup> Exhibit 23612-X0034, AEP Wildlife Referral Report, PDF page 9.

<sup>9</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 21.

October.<sup>10</sup> Sunset Solar stated that it would monitor and attempt to resolve any complaints related to solar glare.<sup>11</sup>

21. SMRID submitted a statement of intent to participate as the owner and operator of a pipeline in the project area. Sunset Solar indicated that it would not place panels over any easement, right-of-way or leased area. As a result, SMRID indicated that its concerns had been adequately addressed, however it noted a turnaround area that would require a crossing agreement subject to SMRID's review.<sup>12</sup> Sunset Solar confirmed that it would apply for a crossing agreement subject to SMRID's requirements.<sup>13</sup>

#### 4 Findings

22. The Commission has reviewed the applications and determined that its requirements with respect to the technical, siting, emissions, environmental and noise aspects of the power plant and substation applications have been met. The Commission has determined that the power plant and substation applications meet the information requirements stipulated in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*.

23. The Commission finds that Sunset Solar's participant involvement program for the project meets the requirements of Rule 007. SMRID's concerns were adequately addressed and no other public or industry objections or concerns were raised.

24. The Commission finds that the noise impact assessment summary form and additional noise related information request responses demonstrate that cumulative sound levels for the project are predicted to be below the daytime and nighttime permissible sound levels set out in Rule 012: *Noise Control*.

25. The Commission has considered the environmental effects of the project and has found that due to the project's siting on previously disturbed lands, and Sunset Solar's commitment to implementing the mitigation measures set out in the project-specific renewable energy referral report issued by AEP WM, the potential environmental impacts of the project can be adequately mitigated.

26. Specifically, the Commission notes that the project will adhere to the 45 metres setback for the intermittent watercourse but will not adhere to the 45 metres setback from the irrigation canal. The Commission accepts AEP's assertion that the nearby irrigation canal is of low value for wildlife and that the project meets the intent of AEP WM policy.

27. The reclamation process that would apply to the project is administered by AEP pursuant to the *Conservation and Reclamation Directive for Renewable Energy Operations*, which provides more detailed information on conservation and reclamation planning and reclamation certificate requirements for renewable energy operators in Alberta. Sunset Solar acknowledged its statutory obligations under the *Environmental Protection and Enhancement Act*. Under the

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<sup>10</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF pages 33-48.

<sup>11</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 33.

<sup>12</sup> Exhibit 23612-X0048, Trevor Helwig email-06Mar2019.

<sup>13</sup> Exhibit 23612-X0058, Sunset IR1 Response\_Final-31May2019, PDF page 15.

*Conservation and Reclamation Regulation* Sunset Solar must reclaim the project and obtain a reclamation certificate at the project's end of life.

28. The Commission finds that the solar glare report was reasonable and is satisfied that no hazardous solar glare is expected to occur. The Commission acknowledges there are currently no standards or regulations in place related to public safety associated with solar glare.

29. No affected stakeholders submitted concerns to the Commission regarding solar glare and no affected party given a copy of the glare report contacted Sunset Solar. Notwithstanding the absence of stated concerns, the Commission wishes to ensure that any glare associated with the project is addressed by Sunset Solar in a timely manner. Accordingly, if the Commission approves the application, its approval will be conditional on Sunset Solar filing 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 Sunset Solar's response. Sunset Solar shall file this report no later than 13 months after the project becomes operational.

30. Having regard for the foregoing, the Commission approves the applications to construct and operate the Sunset Solar Project subject to the following conditions:

- a. Sunset Solar shall abide by all of AEP's project-specific recommendations pertaining to post-construction mitigation and monitoring, as outlined in AEP's project-specific renewable energy referral report.
- b. Sunset Solar shall abide by all of the requirements and commitments outlined in the project-specific renewable energy referral report, as well as the final version of its post-construction wildlife monitoring and mitigation plan and environmental protection plan as accepted and reviewed by AEP.
- c. After the project is operational, Sunset Solar shall carry out site-specific post-construction monitoring surveys in the manner and for the period recommended by AEP in a project-specific renewable energy referral report or as required by the *Wildlife Directive for Alberta Solar Energy Projects*. A report summarizing the results of these surveys is to be submitted annually to AEP and the Commission, along with any correspondence from AEP providing its views on the report.
- d. All post-construction monitoring must be conducted under the direction of an experienced wildlife biologist, as defined in the *Wildlife Directive for Alberta Solar Energy Projects*.
- e. As part of its post-construction wildlife monitoring program, Sunset Solar shall communicate to AEP the corrected mortality rates for birds and bats (using an AEP approved "fatality estimator") and upon the discovery of any carcasses of species-at-risk, must report the discovery to AEP. Sunset Solar must abide by any AEP requirements to implement new mitigation measures to prevent or reduce further mortalities.
- f. Sunset Solar shall file a report with the Commission detailing any complaints or concerns about solar glare that are brought to its attention during its first year of operation, as well as Sunset Solar's response. Sunset Solar shall file this report no later than 13 months after the project becomes operational.

31. Based on the foregoing and subject to the above-noted conditions, the Commission considers the applications to construct and operate the Sunset Solar Project and the Grassy Lake 446S Substation to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

32. The Commission recognizes that Sunset Solar has applied for the connection of the Grassy Lake 446S Substation to AltaLink's Transmission Line 612L using a T-tap configuration. Sunset Solar stated that AltaLink is expected to submit a facility application to the Commission to alter Transmission Line 612L. A separate proceeding would be required for the connection application, and as such, the Commission defers its decision on the connection of the Grassy Lake 446S Substation to AltaLink's Transmission Line 612L to a future proceeding, when an application is filed with the AUC.

## **5 Decision**

33. Pursuant to Section 11 the *Hydro and Electric Energy Act*, the Commission approves Application 23612-A001 and grants Sunset Solar the approval set out in Appendix 1 – Power Plant Approval 23612-D02-2019 – June 27, 2019.

34. Pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*, the Commission approves Application 23612-A002 and grants Sunset Solar the approval set out in Appendix 2 – Substation Permit and Licence 23612-D03-2019 – June 27, 2019.

Dated on June 27, 2019.

### **Alberta Utilities Commission**

*(original signed by)*

Neil Jamieson  
Commission Member

## Appendix A – Summary of Commission directions and conditions requiring further submissions

This section is intended to provide a summary of those directions and conditions that require follow-up with the Commission, for the convenience of readers. It is not intended to summarize all of the conditions imposed on the applicant. 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. These directions and conditions will be tracked as conditions of Power Plant Approval 23612-D02-2019 using the AUC's eFiling System.

- After the project is operational, Sunset Solar shall carry out site-specific post-construction monitoring surveys in the manner and for the period recommended by AEP in a project-specific renewable energy referral report or as required by the *Wildlife Directive for Alberta Solar Energy Projects*. A report summarizing the results of these surveys is to be submitted annually to AEP and the Commission, along with any correspondence from AEP providing its views on the report.
- Sunset Solar shall file a report with the Commission detailing any complaints or concerns about solar glare that are brought to its attention during its first year of operation, as well as Sunset Solar's response. Sunset Solar shall file this report no later than 13 months after the project becomes operational.