



**SunEEarth Alberta Solar Development Inc.**

**Yellow Lake Solar Project**

**September 26, 2017**

**Alberta Utilities Commission**

Decision 22422-D01-2017

SunEEarth Alberta Solar Development Inc.

Yellow Lake Solar Project

Proceeding 22422

Application 22422-A001

September 26, 2017

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Fifth Avenue Place, Fourth Floor, 425 First Street S.W.

Calgary, Alberta

T2P 3L8

Telephone: 403-592-8845

Fax: 403-592-4406

Website: [www.auc.ab.ca](http://www.auc.ab.ca)

## **1 Decision summary**

1. In this decision, the Alberta Utilities Commission must decide whether to approve an application from SunEEarth Alberta Solar Development Inc. to construct and operate a 19-megawatt solar power plant designated as the Yellow Lake Solar Project. After consideration of the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the Yellow Lake Solar 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**

2. SunEEarth Alberta Solar Development Inc. (SunEEarth) filed an application with the Commission for approval to construct and operate a 19-megawatt (MW) solar power plant, designated as the Yellow Lake Solar Project (project), pursuant to Section 11 of the *Hydro and Electric Energy Act*. The application was registered on February 16, 2017, as Application 22422-A001. The Yellow Lake Solar Project would be located approximately 19 kilometres south of the village of Burdett, Alberta.

3. The Commission issued information requests to SunEEarth on March 24, 2017 and April 12, 2017. SunEEarth submitted responses to the information requests on April 7, 2017, April 21, 2017 and May 23, 2017.

4. On March 22, 2017, the Commission issued a notice of application for Proceeding 22422. Submissions to the Commission in response to the notice were to be made by April 12, 2017. The notice was sent directly to potentially impacted stakeholders within 2,000 metres of the project. The notice was also published in the Bow Island Commentator on March 28, 2017, posted on the Commission's website and notification was automatically emailed to eFiling System users who had chosen to be notified of notices of application issued by the Commission.

5. On April 12, 2017, the Commission received statements of intent to participate from 1482420 Alberta Ltd. and 1494227 Alberta Ltd. The Commission granted standing to 1482420 Alberta Ltd. and 1494227 Alberta Ltd. on May 15, 2017. On June 20, 2017, the Commission issued a notice of hearing with the hearing to commence on September 6, 2017 in Medicine Hat. On July 31, 2017, the companies withdrew their objections to the project and the Commission issued a notice of hearing cancellation on August 2, 2017.

### 3 Discussion

6. The project includes approximately 83,125 solar photovoltaic panels each with a rating of 320 watts. The photovoltaic panels would be connected to 10 inverter/transformer pairs on a fixed racking system. An underground collector system would also be installed.

7. The project would connect to the FortisAlberta Inc. distribution system at the Westfield 107S Substation by a feeder line that is approximately 800 metres long. FortisAlberta Inc. indicated in a letter<sup>1</sup> that it was prepared to allow the interconnection of the project to its 25-kilovolt distribution system.

8. The project is to be wholly located within a single quarter section of land, in the northwest quarter of Section 13, Township 8, Range 12, west of the Fourth Meridian. The project quarter section and surrounding area is currently cultivated land. The site would be surrounded by chain-link fencing and gravel roads would be located throughout the site to allow access to the project's generating equipment for maintenance.

9. The Yellow Lake Solar Project is to be located within the area covered by the South Saskatchewan Regional Plan and within the Dry Mixed grass Natural Subregion of Alberta. SunEEarth stated that the project is being developed in accordance with the South Saskatchewan Regional Plan which endorses the responsible development of renewable energy, seeks to maintain terrestrial and aquatic biodiversity and maintain an intact native grassland and habitat. SunEEarth stated that the project is a clean source of energy and would not produce any air pollutants.

10. SunEEarth retained Stantec Consulting Ltd. to conduct an environmental evaluation for the project and filed an environmental evaluation report on the record of the proceeding detailing its results. The environmental evaluation report summarized studies of breeding birds, burrowing owls, amphibians, raptor nests, wetland and rare plant surveys. In its report, Stantec Consulting Ltd. found that no native prairie is located within the project area; however, native prairie is located adjacent to the project area in the northeast quarter of Section 13, Township 8, Range 12, west of the Fourth Meridian. No rare plant or rare ecological community occurrences were documented within 1.6 kilometres of the project area. Stantec Consulting Ltd. found no amphibian breeding ponds or burrowing owl nests within 500 metres of the project, and no raptor nests within 1,000 metres of the project.

11. SunEEarth stated that two wetlands are proposed to be removed and two additional wetlands would be partially affected by the project. The environmental evaluation report stated that the wetlands in the project area are heavily disturbed because they are located on cultivated land and were not suitable to support water birds due to the lack of surface water. The environmental evaluation report therefore concluded that the project's potential effects can be mitigated with the implementation of standard environmental protection measures and compensation for wetland loss. The potential for wildlife mortality would be greatly reduced with the implementation of appropriate setback distances and timing restrictions for construction.

12. Alberta Environment and Parks reviewed the environmental evaluation report and provided SunEEarth with a Wildlife Renewable Energy Referral Report on October 26, 2016.

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<sup>1</sup> Exhibit 22422-X0020, A19-FortisAlberta Letter.

The Wildlife Renewable Energy Referral Report stated that the project is consistent with Alberta Environment and Parks' recommendations that the project be sited on cultivated lands and that construction occur outside of the bird breeding season. However, the Wildlife Renewable Energy Referral Report also noted that a 100-metre setback from Class III wetlands in sensitive amphibian habitat was not observed. Accordingly, Alberta Environment and Parks stated that the removal of the wetlands was not consistent with its recommendations.

13. SunEEarth revised its project layout following consultation with Alberta Environment and Parks and committed to adhering to a 15-metre setback from Class I and Class II wetlands and a 30-metre setback from all wetlands classified as Class III or greater. SunEEarth also relocated roads so that they were at least 100 metres from wetlands and implemented a speed limit for vehicles within the project area to minimize amphibian mortality. SunEEarth stated that the 100-metre setback only applies to Class III wetlands on native prairie and for northern leopard frog breeding ponds, which are not applicable to the project. SunEEarth also stated that wildlife monitors would be used should amphibians be detected. SunEEarth added that Alberta Environment and Parks confirmed that the modifications and mitigation measures proposed addressed its outstanding concerns and that the revised project is acceptable from its perspective.<sup>2</sup>

14. SunEEarth also proposed additional mitigation measures such as the development of a spill prevention and emergency response plan and a stormwater management plan. A post-construction monitoring program was developed based on discussions with Alberta Environment and Parks. Alberta Environment and Parks stated that a revised wildlife renewable referral report could not be produced in time for SunEEarth's application to the Commission but agreed that the original Wildlife Renewable Energy Referral Report could be submitted with the revised mitigation measures.

15. SunEEarth conducted a participant involvement program that included notifying all participants within a 2,000-metre radius of the project, and conducted personal consultations with those located within 800 metres from the edge of the project's boundary. SunEEarth also held a public meeting in Burdett on November 24, 2015. Throughout the consultation process, SunEEarth heard from individuals who expressed concerns with weed control, visual impact, water flow management, land use, construction impacts, compensation, and expansion.

16. Statements of intent to participate were received from 1482420 Alberta Ltd. and 1494227 Alberta Ltd. in response to the Commission's notice of application. These companies own land adjacent to the project and they objected to the project's approval because they had concerns regarding drainage, noise, vegetation control, traffic, ambient glare, environmental impacts, remediation, future expansion and property values. SunEEarth submitted it was able to address the concerns of the companies, and the companies withdrew their objections to the project on July 31, 2017.

17. SunEEarth stated that the County of Forty Mile is aware and supportive of the project, and is in the process of obtaining development permits. SunEEarth stated that it received a *Historical Resources Act* approval from Alberta Culture and Tourism on October 19, 2016.

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<sup>2</sup> Exhibit 22422-X0029, YLPV – Information Request Rnd 1 responses, SunEEarth-AUC-2017MAR24-009(a), April 7, 2017.

18. SunEEarth submitted a noise impact assessment (NIA) for the project that stated that the 10 inverters constituted the project's main noise source. An inverter is an electronic device that changes direct current to alternating current.

19. The NIA considered third-party noise sources in the area and identified four dwellings with the closest receptors located approximately 600 metres southwest and 850 metres north of the project respectively. The permissible sound levels for the dwellings are 50 dBA daytime and 40 dBA nighttime. The NIA concluded that the predicted comprehensive noise levels from the project, including all other third-party energy-related facilities in the area, are in compliance with Rule 012: *Noise Control* and that low frequency noise concerns are unlikely to occur. The NIA recommended construction activity be limited between 7 a.m. and 10 p.m. to reduce the impact of construction noise.

20. SunEEarth submitted that an in-service date of January 31, 2018 was expected if construction commenced in June 2017.

#### 4 Findings

21. The Commission is satisfied that the technical, siting, emissions, environmental and noise information provided by SunEEarth for the project comply with the requirements set out in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*.

22. Based on the evidence filed by SunEEarth, the Commission accepts that following SunEEarth's participant involvement program, there are no outstanding public or industry objections or concerns. The Commission finds that the participant involvement program undertaken by SunEEarth is satisfactory and meets the requirements of Rule 007.

23. As indicated in Alberta Environment and Parks' Wildlife Renewable Energy Referral Report, SunEEarth has committed to conducting post-construction wildlife mortality monitoring for two years and working with Alberta Environment and Parks to develop and implement mitigation measures if a high level of wildlife mortality is observed. The Commission is satisfied with the post-construction monitoring plan developed with Alberta Environment and Parks, and with the proposed mitigation.<sup>3</sup>

24. In the Wildlife Renewable Energy Referral Report, Alberta Environment and Parks identified its outstanding concerns relating to wetlands. Based on this feedback, SunEEarth modified the project and proposed additional mitigation measures. Alberta Environment and Parks has subsequently confirmed that the modifications and mitigation measures proposed addressed its outstanding concerns and that the revised project is acceptable from its perspective.<sup>4</sup> The Commission considers that sign-off from Alberta Environment and Parks is strong evidence that the project's environmental effects can be mitigated to an acceptable degree.

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<sup>3</sup> Exhibit 22422-X0004, A2 – Referral Report, PDF 8, Post-Construction Monitoring and Mitigation, February 16, 2017.

<sup>4</sup> Exhibit 22422-X0029, YLPV – Information Request Rnd 1 responses, SunEEarth-AUC-2017MAR24-009(a), April 7, 2017.

25. Because the project is sited on cultivated land and does not impact native prairie, the Commission considers that its potential environmental impacts are limited.
26. The Commission concludes that with the diligent application of the proposed mitigation strategies, the environmental effects from construction and operation of the project can be adequately mitigated.
27. The Commission expects that the applicant will comply with all applicable requirements for conservation and reclamation of the project site under the *Environmental Protection and Enhancement Act* at the end of the project's life, including the requirement to obtain a reclamation certificate. However, if for any reason, at the time of decommissioning, there are no statutory reclamation requirements in place for solar electric power generating facilities, the applicant will be required to submit a reclamation plan to the Commission for its review and approval.
28. Accordingly, the Commission finds that approval of this project would be subject to the following condition: The applicant shall comply with current applicable reclamation standards at the time of decommissioning. If no legislative requirements pertaining to reclamation are in place at the time of decommissioning, the applicant will submit a reclamation plan to the Commission for approval.
29. The Commission finds that the NIA demonstrates that the project is in compliance with the permissible sound levels outlined in Rule 012.
30. The Commission notes that SunEEarth has not applied for a connection order to interconnect the project to the Alberta Interconnected Electric System, and reminds SunEEarth that it must obtain a connection order from the Commission prior to connecting the project to FortisAlberta Inc.'s distribution system.
31. Because approval of the project was delayed by a potential oral hearing the Commission finds that an amended in-service date of July 31, 2018, is reasonable.
32. Based on the foregoing, the Commission considers the project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

## 5 Decision

33. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants SunEEarth the approval set out in Appendix 1 – Power Plant Approval 22422-D02-2017 – September 26, 2017, to construct and operate the Yellow Lake Solar Project (Appendix 1 will be distributed separately).

Dated on September 26, 2017.

### **Alberta Utilities Commission**

*(original signed by)*

Anne Michaud  
Commission Member