



KS Canada 1 Ltd.

Oyen Solar Park

January 6, 2017

Alberta Utilities Commission

Decision 21886-D01-2017

KS Canada 1 Ltd.

Oyen Solar Park

Proceeding 21886

Application 21886-A001

January 6, 2017

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1 Decision summary

1. In this decision, the Alberta Utilities Commission must decide whether to approve an application from KS Canada 1 Ltd. (KSC1) to construct and operate a power plant designated as the Oyen Solar Park. After consideration of 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

2. KSC1 filed an application with the AUC on August 5, 2016 for approval to construct and operate a 9.9-megawatt solar photovoltaic facility designated as the Oyen Solar Park pursuant to Section 11 of the *Hydro and Electric Energy Act*. KSC1 also applied for a connection order to connect the solar park to ATCO Electric Ltd.'s distribution system, pursuant to Section 18 of the *Hydro and Electric Energy Act*. The Oyen Solar Park would be located approximately one kilometre northeast of the town of Oyen, in the southwest quarter of Section 2, Township 28, Range 4, west of the Fourth Meridian. This application was registered on August 5, 2016, as Application 21886-A001.

3. The Commission issued information requests to KSC1 on August 23, 2016. KSC1 responded to the information requests on September 13, 2016; however, a number of environmental information responses could not be provided until after it conducted a fall survey. KSC1 requested an extension to November 17, 2016, to provide the remaining responses. The Commission issued a second round of information requests on September 21, 2016, requesting clarification on the responses that KSC1 had provided. KSC1 provided its responses to the second round of information requests on October 25, 2016 and also provided its remaining responses to the first round of information requests on November 11, 2016. The Commission issued a third round of information requests to KSC1 on November 17, 2016. KSC1 provided its responses on December 15 and 21, 2016.

4. On August 23, 2016, a notice of application was issued for Proceeding 21886. The notice was published in the Oyen Echo, posted on the AUC website and notification was automatically emailed to eFiling System users who had chosen to be notified of notices of applications issued by the Commission. KSC1 confirmed to the Commission that it delivered the notice to stakeholders within the 1,500-metre notification area and to the entire town of Oyen postal code.

It also confirmed that the notice was hand-delivered to the landowners outside of the town of Oyen.¹ No submissions were received by the Commission in response to the notice.

3 Discussion

5. The proposed Oyen Solar Park would consist of approximately 41,360 photovoltaic solar panels each with a rating of 270 watts. The photovoltaic panels are connected to inverters to convert the electricity from direct current to alternating current and then to transformers to step-up the voltage. The photovoltaic panels would be installed on fixed-axis, continuous rows, between 10 to 50 metres in length, facing southwards at an angle between 20 to 30 degrees. The racking would be approximately 80 centimetres above the soil and the top edge of the panels would have a maximum height of three metres above grade.

6. The Oyen Solar Park would be situated entirely on the southwest quarter of Section 2, Township 28, Range 4, west of the Fourth Meridian across 21 hectares of land. KSC1 stated the project site consists of lower grade farmland and the surrounding area has been historically used for agricultural purposes. KSC1 also stated the property is relatively flat, contains no wetlands and would not require the removal of buildings or structures. KSC1 submitted the effect of the proposed solar farm on the physical environment was considered to be negligible or insignificant for all environmental components, including traffic, noise, light, air quality, and surface and groundwater quality.

7. The project site is located within Special Area 3 of the Special Areas Municipality, which is a rural municipality in Southeastern Alberta. KSC1 contacted the Special Municipalities Board which has no specific concerns with the project.

8. KSC1 stated there would be little environmental impact during construction and almost no impact during the operation of the solar park. KSC1 also stated that the project is a clean source of energy and would have no air emissions. KSC1 submitted that an *Environmental Protection and Enhancement Act* approval was not required for this project because it is not a thermal power plant or a steam-producing plant. KSC1 also submitted that there is no special regional land use plan for the project area.

9. KSC1 prepared migratory bird surveys and a Phase 1 Environmental Site Assessment, which were submitted to Alberta Environment and Parks (AEP). The spring passage migration survey for birds was carried out and a search of a government database was conducted to determine whether any species of special management concern could potentially occur in the area of the project site. A search of the provincial Fisheries & Wildlife Management Information System identified three wildlife species within two kilometres of the project footprint. AEP was satisfied with the environmental reports and suggested an additional fall survey. AEP also requested a post-construction mortality survey plan.

10. KSC1 submitted a report following the fall migration survey. The report proposed a number of mitigation measures including construction activities outside of sensitive migration periods and pre-disturbance investigations to identify critical habitat and nests. The report also recommended investigation of non-polarizing technologies to help birds differentiate the solar

¹ Exhibit 21886-X0039 - Responses to first round of questions from AUC, PDF pages 6 to 7.

panels from bodies of water. KSC1 also stated it was prepared to erect nest boxes and nesting pads to enhance the population of some birds.

11. KSC1 also submitted a post-construction bird monitoring program, which recommended mitigations should the program identify significant bird mortality events. Significant mortality events were defined as cases where annual mortality associated with the project is significantly higher than background mortality rates, as determined by AEP personnel, where mortality of unexpected species are detected, and where mass mortality events are detected for a specific species, guild or of avifauna at large. KSC1 committed to working with AEP should these events arise.

12. KSC1 consulted with an AEP wildlife biologist and AEP issued a Wildlife Renewable Energy Referral Report indicating on December 20, 2016, that it was satisfied with the environmental approach for the solar project and the post-construction monitoring program. AEP recommended two years of post-construction monitoring be completed, which KSC1 has agreed to.

13. KSC1 submitted a noise impact assessment with the Commission as part of the application. The noise impact assessment indicated that the closest resident is 415 metres from the nearest noise source, an inverter. The noise impact assessment stated that the inverters switch to a standby mode and the cooling system is switched off, resulting in a lower sound pressure level during the night. The noise impact assessment concluded that the project would be compliant with Rule 012: *Noise Control*.

14. KSC1 prepared and distributed a project information package, containing contact information, project details, maps, schedule information and the Commission's public information document. KSC1 also held a public consultation meeting on July 25, 2016. The meeting was advertised around the town of Oyen and was mailed out to residents, occupants, and landowners within 1,500 metres of the site one month before the meeting. KSC1 also utilized telephone conversations, radio ads and the Oyen Echo newspaper to inform the public about the project. KSC1 stated that all questions were addressed and that no issues or concerns were communicated.

15. KSC1 conducted a study to assess the potential glare from the solar park on the nearby residents, the roads and the town of Oyen. The report identified a number of points along the roads and in buildings where the solar plant would not be blocked and could be seen. The report indicated that while driving on the roads, glare might be present in the peripheral but would not have a substantial adverse effect on driving activities. Along Township Road 280, the report stated that due to the distance of more than 850 metres, the relatively short-term occurrence of these reflections and the temporary appearance in the early morning hours, a possible disturbance effect would be regarded as low. The report also stated that the solar park could not be seen from housing complexes and other residential buildings due to the distance from the solar park, the vegetation in the area and the relative elevations.

16. KSC1 submitted an application to NAV Canada for clearance as the Oyen Solar Park is within three kilometres of the Oyen Municipal Airport. KSC1 received approval on August 17, 2016.

17. KSC1 submitted an application for *Historical Resources Act* clearance on June 29, 2016, and received approval on August 2, 2016.²
18. KSC1 proposed an in-service date of the first quarter of 2019.

4 Findings

19. The Commission has reviewed the application and has determined that the technical, siting, emissions, environmental and noise aspects of the power plant comply with the requirements prescribed in Rule 007. KSC1's participant involvement program has been conducted and there are no outstanding public or industry objections or concerns. The Commission notes that no parties objected to the application and no responses were received in response to the notice of application. The Commission finds that the participant involvement program undertaken by KSC1 meets the requirements of Rule 007.
20. The Commission accepts that the environmental impacts of the project are expected to be minimal, and observes that all development occurs on private agricultural land and there are no wetlands or sensitive environmental areas within the project area. The Commission notes that AEP has issued a Wildlife Renewable Energy Referral Report indicating that it was satisfied with the environmental approach for the solar project. The Commission also notes that the pre-disturbance wildlife surveys described in the Wildlife Renewable Energy Referral Report have yet to be completed but are required to be completed prior to construction.
21. The Commission accepts KSC1's assessment that the noise from the solar project will comply with the Rule 012 permitted sound levels.
22. With respect to the connection of the solar park to ATCO Electric Ltd.'s distribution system, ATCO Electric Ltd. has submitted a letter stating it is in discussions to connect the solar park to its 25-kilovolt distribution system pending acceptance of the stage one proposal.³
23. 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*.

² Exhibit 21886-X0010 - HRA Approval.

³ Exhibit 21886-X0029 - Grid Connection.

5 Decision

24. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants KSC1 the approval set out in Appendix 1 – Power Plant Approval 21886-D02-2017 – January 6, 2017, to construct and operate the 9.9-megawatt Oyen Solar Park (Appendix 1 will be distributed separately).

25. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants KSC1 the approval set out in Appendix 2 – Connection Order 21886-D03-2017 – January 6, 2017, to connect the Oyen Solar Park to ATCO Electric Ltd.’s distribution system (Appendix 2 will be distributed separately).

Dated on January 6, 2017.

Alberta Utilities Commission

(original signed by)

Henry van Egteren
Commission Member