



C&B Alberta Solar Development ULC

Vauxhall Solar Power Plant

July 4, 2017

Alberta Utilities Commission

Decision 22447-D01-2017

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Proceeding 22447

Application 22447-A001

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1 Decision summary

1. In this decision, the Alberta Utilities Commission must decide whether to approve an application from C&B Alberta Solar Development ULC to construct and operate a power plant designated as Vauxhall Solar. 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. C&B Alberta Solar Development ULC (CBA) filed an application with the AUC for approval to construct and operate a 17.6-megawatt (MW) solar photovoltaic facility designated as Vauxhall Solar within the Municipal District of Taber, approximately five kilometres north-northeast of the town of Vauxhall. The application, filed pursuant to Section 11 of the *Hydro and Electric Energy Act*, was registered on February 28, 2017, as Application 22447-A001. CBA is not applying for a connection order at this time, and stated that it will apply for a connection order after the distribution facility owner, FortisAlberta Inc., confirms the facilities that will be required to connect the solar project.

3. The Commission issued information requests to CBA on March 28, 2017, and CBA responded on March 29, 2017. On March 10, 2017 the Commission issued a notice of application for the proceeding directly to potentially affected stakeholders within 2,000 metres of the project. The notice was also published in the Vauxhall Advance and Taber Times newspapers, and on the AUC website. Notification was automatically emailed to eFiling System users who had chosen to be notified of notices of application issued by the Commission. The Commission received concerns from the Municipal District of Taber and an objection from Jaarno van der Wielen in response to the notice. The Commission issued a notice of hearing for the project on April 26, 2017 and a notice of hearing cancellation on May 4, 2017 after Mr. van der Wielen indicated that he supports the project and would not attend the hearing. On May 5, 2017, the Commission received an additional submission from Kerby Redekop in response to the notice of hearing, which stated that he would not participate in a hearing if one were held.

3 Discussion

4. The proposed Vauxhall Solar project includes approximately 78,000 solar panels, each with a rating of 315 watts, distributed across a 60.7-hectare fenced area. The photovoltaic panels would be connected to eight inverter and transformer stations that would convert the electricity from direct current to alternating current and step-up the voltage. The photovoltaic panels would

be installed on fixed-axis, continuous rows, with a separation spacing of 12 metres, facing southwards at a 35 degree angle. CBA does not anticipate any issues with glare or reflection off the solar panels, noting that solar facilities have been installed at several international airports and glare has not been an issue for aircraft. The racking would be approximately 50 centimetres above the soil and the top edge of the panels would be approximately 2.8 metres above grade and would be piled approximately three to 3.5 metres below the surface. An underground electrical collector system would also be installed.

5. The Vauxhall Solar project would be located over the four quarter sections in Section 26, Township 13, Range 16, west of the Fourth Meridian. CBA stated that the existing land use is agricultural for row crops. The project would be located within the Dry Mixedgrass Natural Subregion of the Grassland Natural Region of Alberta.

6. The project area falls within the boundaries of the South Saskatchewan Regional Plan (2014-2024). CBA stated it complies with the regional plan, specifically Strategy 1.9 which encourages investments in renewable energy such as solar.

7. CBA retained Stantec Consulting Ltd. to conduct a preliminary constraints analysis, field survey and desktop assessment. The field survey included upland and wetland mapping and classification, and vegetation classification. CBA submitted that no rare plants or rare plant communities were identified during the field survey. The survey identified two species listed by the Alberta *Weed Control Act*, which would be controlled and not allowed to be spread to adjacent properties. The project would affect three waterbodies within the project area. The three waterbodies consist of two seasonal marsh (Class III) wetlands and an ephemeral waterbody (Class I).¹ CBA stated that an approval under the Alberta *Water Act* will be obtained for the wetlands and the ephemeral waterbody prior to construction. CBA also stated it would require setback relaxation from Alberta Environment and Parks for a Class IV wetland south of the site. It stated it would submit an application under the *Water Act* to address the waterbodies.

8. CBA stated that the wildlife assessment, amphibian mitigations, and post-construction monitoring plans were reviewed by Alberta Environment and Parks, which provided a Wildlife Renewable Energy Referral Report on February 6, 2017. Alberta Environment and Parks concluded the project posed a low risk to wildlife and wildlife habitat, and found that the proposed mitigation measures were acceptable.

9. CBA has committed to conducting post-construction monitoring for up to two years and will work with Alberta Environment and Parks to develop and implement mitigation measures if a high level of wildlife mortality is observed in the first year. CBA initially proposed a post-construction monitoring program over two years, consisting of bi-weekly wildlife carcass counts from April 1 to October 15. This differed from the Alberta Environment and Parks recommendation of weekly carcass counts from April 1 to November 15. CBA stated it would revise the post-construction monitoring program during the final design of the project to align with the recommendation from Alberta Environment and Parks.

10. Golder Associates, retained by CBA to conduct a preliminary geotechnical assessment, found no slope stability or surface erosion issues. CBA also retained Dillion Consulting Limited

¹ The wetland classification system ranges from Class I (ephemeral wetland) to Class VII (fen pond). Higher classifications typically support a higher abundance and diversity of wildlife and vegetation.

to prepare a stormwater management and grading plan. It stated that based on a 100-year, 24-hour storm event, the quality and quantity of stormwater leaving the project area could be managed to not exceed the existing flow conditions.

11. A noise impact assessment conducted by Stantec Consulting Ltd. indicated 11 noise sensitive receptors located within 1.5 kilometres of the project footprint. The noise impact assessment found that the most impacted dwelling was approximately 330 metres to the south of the project. It concluded that the project complied with Rule 012: *Noise Control* as the predicted daytime and nighttime cumulative sound levels at that dwelling are 45.2 decibels A-weighted (dBA) and 36.6 dBA respectively. The daytime and nighttime permissible sound levels are 50 dBA and 40 dBA. Low frequency noise effects were not expected at any receptor.

12. CBA retained Scott Land & Lease Ltd. to develop and conduct a participant involvement program. The program included notification to stakeholders within two kilometres, personal consultation with stakeholders within 800 metres of the project, an open house, and meetings with municipal and provincial agencies. A dedicated project website, an email address and a phone line were also established to provide information about the project.

13. CBA consulted with the Municipal District of Taber on May 17, 2016. The Municipal District of Taber indicated that a development permit is required and provided a letter approving the project location and stated that it had no further questions or comments on the project. CBA submitted the development permit application with the Municipal District of Taber on December 29, 2016 and received a development permit with conditions on February 21, 2017.

14. CBA distributed project information packages to stakeholders in July of 2016. It advertised an open house in the Vauxhall Advance on July 21, 2016 and the Taber Times on July 20, 2016. The open house was held at the Vauxhall Community Hall on August 9, 2016. CBA indicated there were 14 attendees at the open house.

15. Concerns from pipeline owners about alternative current mitigation and interference with communications equipment were communicated to CBA. CBA stated that all well site and pipeline setbacks will be respected, and that it is also proposing to relocate an industry access road and will coordinate the relocation with affected companies prior to the relocation to ensure adequate access for all parties.

16. The Municipal District of Taber filed a submission with the Commission on March 30, 2017 in which it stated that it did not oppose renewable energy products, but had concerns with crop land being taken out of production. It submitted that CBA did a good job siting the project because it was minimizing impacts to crop lands and adjacent landowners. The Municipal District of Taber added that in the event of an on-site fire, it would monitor the perimeter to prevent the fire from spreading, but would not enter the site. Lastly, it requested that the Commission consider requiring a security bond for reclamation to ensure proper reclamation will be undertaken should the site be decommissioned. The Municipal District of Taber submitted that a development permit for CBA's project has been conditionally approved.

17. CBA stated that pursuant to its lease agreement with the landowner, it is contractually obligated to fully reclaim the project lands once the project is no longer operational. Reclamation would consist of removing and recycling the solar modules and racking system, excavating and removing access road materials and foundations, and tilling the land to reduce soil compaction.

CBA stated that it would submit a site-specific reclamation plan to the Municipal District of Taber prior to construction, in accordance with the development permit issued by the municipality.

18. To address concerns of bankruptcy or insolvency, CBA stated that while it is a new Alberta company, it is a wholly-owned subsidiary of Canadian Solar Solutions Inc. and that Canadian Solar Solutions Inc. and BowMont Capital and Advisory Ltd. will jointly develop the portfolio of Alberta solar projects.

19. CBA submitted that Canadian Solar Solutions Inc. was founded in Ontario in 2001 and employs over 8,000 employees with offices in 18 countries. The company has shipped over 17 gigawatts of modules, successfully developed over 1.4 gigawatts of solar projects, and currently manages over 10 gigawatts of solar projects worldwide. CBA explained that BowMont Capital and Advisory Ltd. has advised clients on more than \$900 million of acquisition and divestiture transactions, raised over \$500 million in debt financing for renewable energy projects, and has developed projects or provided advisory services to some of Alberta's largest power industry participants.

20. CBA asserted that Canadian Solar Solutions Inc., as the ultimate project owner, is a large, reputable publically-traded company with a market capitalization of \$1.1 billion. CBA stated the salvage value of the solar modules and racking system are expected to outweigh the cost of dismantling the project.

21. Mr. van der Wielen submitted a statement of intent to participate to the Commission on March 31, 2017, in which he outlined his concerns with the proposed site and the negative impact the power plant would have on the value of his property. Mr. van der Wielen's property is located in the northwest quarter of Section 24, Township 13, Range 16, west of the Fourth Meridian, within 800 metres of the project. On May 2, 2017, Mr. van der Wielen informed the Commission that he would not be participating in the hearing and that he supported the project. He stated that he still had concerns with the effects of this project on property value and any future projects in close proximity. He requested that his concerns be taken into consideration when considering any solar power plant in close proximity to residences.

22. On May 5, 2017 the Commission received a submission from Mr. Redekop, in which he stated his concerns with the potential for abandoned facilities and requested information on the provisions and regulations in place to ensure the site is cleaned up and rehabilitated at its end of life. Mr. Redekop also noted his general concerns with the lessee's potential insolvency for such projects. Mr. Redekop indicated he would not participate in a hearing. CBA stated that while it did not consult with Mr. Redekop, he appeared to be associated with Benbro Farms Ltd., and it had consulted with the directors and shareholders of Benbro Farms Ltd., who were not opposed to the project. On May 17, 2017, CBA provided a description of its follow-up correspondence with Mr. Redekop and attached its written responses to his concerns. CBA also confirmed that Mr. Redekop found the responses to be adequate and that his concerns with this project had been resolved.

23. CBA submitted a Statement of Justification to Alberta Culture and Tourism seeking *Historical Resources Act* clearance on December 2, 2016, and received clearance on

December 14, 2016.² A predetermination request was sent to Alberta Transportation on September 9, 2016 with respect to the proposed setback from and access to provincial highways. Alberta Transportation provided its response on October 18, 2016, which indicated a setback of 25 metres from the highway property line is required. CBA stated its final detailed design will reflect the feedback received from Alberta Transportation, and a roadside development permit application will be completed closer to the start of construction.

24. CBA stated that subject to the outcome of Alberta's initiative to procure solar power for half of its government operations, the construction completion date of the proposed project could be as early as the first quarter of 2018. CBA added that in the event that CBA is a participant in Alberta's Renewable Electricity Program with respect to this project, an in-service date of the first quarter of 2019 or later is anticipated.

4 Findings

25. The Commission is satisfied that the technical, siting, emissions, environmental and noise information provided by CBA regarding the power plant comply with its requirements as set out in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*.

26. The Commission is satisfied that the participant involvement program undertaken by CBA was adequate. Although Mr. Redekop was missed during the initial rounds of consultation because he was not identified on the land title, he was ultimately contacted and his concerns were addressed.

27. The Commission was not presented with evidence in this proceeding to suggest that the project will result in an adverse impact on the property value of parcels adjacent to the project. However, the Commission finds that in general, property value impacts are expected to diminish with distance from the project.

28. The Commission reiterates its views stated in Decision 22296-D01-2017³ with respect to the reclamation concerns raised by the Municipal District of Taber and Mr. Redekop:

27. ... the Commission observes that the reclamation obligations for certain power generation facilities in Alberta, including solar power generating facilities, are set out in the *Environmental Protection and Enhancement Act*, which is administered and enforced by Alberta Environment and Parks.

28. Under the *Environmental Protection and Enhancement Act*, an operator carrying out an "activity" (as defined in the act and/or its regulations) has a duty to reclaim specified land and obtain a reclamation certificate from Alberta Environment and Parks. To obtain a reclamation certificate an operator must reclaim the land in accordance with the standards set out in the *Environmental Protection and Enhancement Act* or as otherwise directed by Alberta Environment and Parks.

² Exhibit 22447-X0012 - Attach 11 HRA Clearance.

³ Decision 22296-D01-2017: C&B Alberta Solar Development ULC– Hays Solar Power Plant, Proceeding 22296, Application 22296-A001, June 7, 2017.

29. Until recently, the definition of “activity” under the *Environmental Protection and Enhancement Act* did not include solar power generation projects and, therefore, the duty to reclaim did not apply to the operators of such projects. However, on March 31, 2017, the *Renewable Electricity Act* came into force and amended the *Environmental Protection and Enhancement Act* by adding “the generating of solar electric power” to its Schedule of Activities.

30. As a result of this amendment, it is the Commission’s view that solar power generation projects now fall within the definition of an “activity” in the *Environmental Protection and Enhancement Act* and that the operators of such projects located on specified land are now required to obtain reclamation certificates from Alberta Environment and Parks.

...

32. 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.

29. Accordingly, the Commission finds that should it approve this project, it 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.

30. CBA has committed to conducting post-construction wildlife mortality monitoring for two years and will work with Alberta Environment and Parks to develop and implement mitigation measures if a high level of wildlife mortality is observed. In addition, CBA stated it would revise the post-construction monitoring program during the final design of the project to align with the recommendation from Alberta Environment and Parks. The Commission directs CBA to follow the direction of Alberta Environment and Parks and conduct weekly carcass surveys in all areas selected for monitoring between April 1 and November 15. Should adjustments to the monitoring program’s duration and frequency be made by Alberta Environment and Parks, the Commission will accordingly allow CBA to change the frequency and duration of its post-construction monitoring program as directed by Alberta Environment and Parks once CBA has advised the Commission of such a change in writing.

31. Alberta Environment and Parks has issued a Wildlife Renewable Energy Referral Report indicating that it is satisfied with the environmental approach for the solar project. In this regard, the Commission finds the environmental impacts of the project to be minimal as the project is located on agricultural lands.

32. The Commission accepts CBA’s assessment that the noise from the solar project will comply with the Rule 012 permissible sound levels.

33. Furthermore, CBA has confirmed that it will apply for a connection order prior to connecting the Vauxhall Solar Power Plant to the FortisAlberta Inc. distribution system.

34. 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

35. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants CBA the approval set out in Appendix 1 – Power Plant Approval 22447–D02-2017, July 4, 2017 (Appendix 1 will be distributed separately).

Dated on July 4, 2017.

Alberta Utilities Commission

(original signed by)

Anne Michaud
Panel Chair

(original signed by)

Carolyn Hutniak
Commission Member