



**BluEarth Renewables Inc.**

**Wheatcrest Solar Project**

**July 21, 2021**



**Alberta Utilities Commission**

Decision 26496-D01-2021

BluEarth Renewables Inc.

Wheatcrest Solar Project

Proceeding 26496

Application 26496-A001

July 21, 2021

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Eau Claire Tower

1400, 600 Third Avenue S.W.

Calgary, Alberta T2P 0G5

Telephone: 310-4AUC (310-4282 in Alberta)

1-833-511-4AUC (1-833-511-4282 outside Alberta)

Email: [info@auc.ab.ca](mailto:info@auc.ab.ca)

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

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## **1 Decision summary**

1. In this decision, the Alberta Utilities Commission approves an application from BluEarth Renewables Inc. to construct and operate a 60-megawatt solar power plant, designated as the Wheatcrest Solar Project.

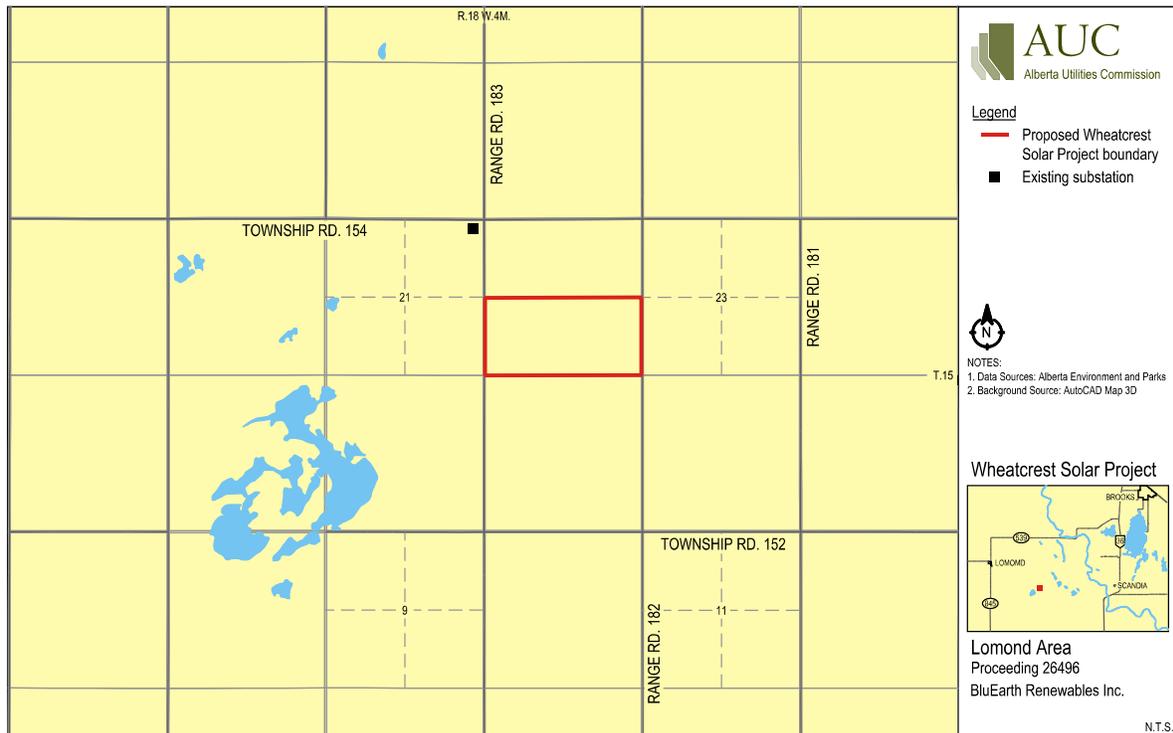
## **2 Application**

2. BluEarth Renewables Inc. filed an application with the Commission for approval to construct and operate a 60-megawatt solar power plant, designated as the Wheatcrest Solar Project, near the community of Enchant, within the Municipal District of Taber (the project).

3. The project would consist of an array of approximately 136,000 575-watt photovoltaic solar panels and associated racking systems, including 21 3,150-kilovolt-amp (kVA) electrical inverters and 21 3,150 kVA, 630-volt/34.5-kilovolt padmount transformers. The project would also include access roads, electrical collector systems, distribution interconnection equipment, communications and telecommunications equipment and other ancillary equipment.

4. The project would be located on privately owned land in the south half of Section 22, Township 15, Range 18, west of the Fourth Meridian, as shown on the map in Figure 1.

Figure 1. Proposed Wheatcrest Solar Project boundary



5. The project would be connected to the AltaLink Management Ltd. transmission system, near the Enchant 447S Substation, through a new transmission line and a new substation. BluEarth plans to submit future applications for the substation and interconnection.

6. BluEarth's application included:

- A participant involvement program that detailed consultation with stakeholders within 800 metres of the project and notification to stakeholders within 2,000 metres of the project. BluEarth confirmed that there are no outstanding concerns.
- A noise impact assessment summary form, completed by DNV Energy Systems Canada Inc. (DNV) that concluded that the project would be in compliance with Rule 012: *Noise Control*.
- A solar glare assessment, prepared by DNV that predicted no glare impact on any of the 14 analyzed receptors and concluded that no further studies or mitigative actions are required for the project.
- A renewable energy referral report issued by Alberta Environment and Parks Fish and Wildlife Stewardship (AEP) that concluded that the project would result in low risk to wildlife and wildlife habitat.
- An environmental evaluation report, prepared by DNV that concluded that any potential adverse effects of the project can be effectively mitigated.
- *Historical Resources Act* approval dated January 28, 2021.

7. In response to information requests from the Commission, BluEarth stated that:
  - In collaboration with local fire authorities and the Municipal District of Taber, BluEarth developed a site-specific emergency response plan for the construction and operation of the project.
  - It would engage an independent third-party assessment of decommissioning and reclamation costs specific to the project and would create a reserve fund to cover these costs at the end of the project's useful life of 35 years.
  - It did not consult with Indigenous groups because the project is proposed on previously disturbed private cultivated land, does not limit right-of-access for Indigenous Communities, and is greater than two km from the nearest reserve. BluEarth further stated that no Heritage Resource Impact Assessment was required by Alberta Culture, Multiculturalism, and Status of Women, and the current Rule 007 application requirements (version 2019) do not require specific consultation with Indigenous groups.
8. BluEarth stated that it expects construction to commence as early as May 2022, with an estimated in-service date of no later than March 31, 2023.
9. The Commission issued a notice of application. No submissions were received in response to the notice.

### **3 Discussion and findings**

10. The Commission is considering the application under Section 11 of the *Hydro and Electric Energy Act*. This section states that no person can construct or operate a power plant without the Commission's approval.
11. For the reasons outlined below, 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.
12. Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments* requires applicants to develop a participant involvement program that ensures all persons whose rights may be directly and adversely affected by a proposed development are informed of the application, have an opportunity to voice their concerns, and have an opportunity to be heard. Bulletin 2019-20: *Interim direction on Indigenous consultation* clarified that the participant involvement program must include Indigenous groups if there is a potential for the project to affect Aboriginal and treaty rights as set out in Section 35 of the *Constitution Act*, 1982. Section 35 rights may be practiced on unoccupied Crown land and other lands to which the members of an Indigenous group have a right of access for such purposes.
13. The Commission has reviewed the application and has determined that the information requirements specified in Rule 007 have been met. Additionally, the Commission finds that BluEarth's participant involvement program satisfied the requirements of Rule 007. Details of the participant involvement program reflect that BluEarth consulted with persons whose rights may be directly and adversely affected by the project as required. The Commission received no

response to its notice of application and BluEarth has confirmed that there are no outstanding concerns in relation to its application.

14. The Commission notes that BluEarth has not finalized the design or equipment for the project. Consequently, the Commission imposes the following as a condition of approval:
  - a) Once BluEarth Renewables Inc. has made its final selection of equipment for the project, it shall file a letter with the Commission that identifies the make, model, and quantity of the equipment and, if the equipment layout has changed, an updated site plan. This letter must also confirm that the finalized design of the project will not increase the land, noise and environmental impacts from what was approved for the base reference case by the Commission. This letter is to be filed no later than one month before construction is scheduled to begin.
15. The Commission finds that the noise impact assessment summary form submitted by BluEarth meets the requirements of Rule 012 and it accepts the conclusion of the summary form that noise from the project will comply with the permissible sound levels established by Rule 012.
16. BluEarth retained DNV to complete a solar glare assessment<sup>1</sup> for the project. The solar glare assessment identified two dwellings, five local roads and seven intersections as receptors.
17. The solar glare assessment indicated that the project's solar panels would utilize a single-axis tracking system with a maximum tracking angle of 60 degrees. The single-axis tracking system would include a backtracking function with a resting angle of 15 degrees. The solar glare assessment predicted that receptors would experience zero glare from the project solar panels based on this specific design. In addition, DNV investigated the impact of alternative backtracking resting angles on solar glare from the project and concluded that prediction results were very sensitive to the backtracking resting angles.
18. The Commission accepts DNV's prediction that the receptors would experience zero glare from the project based on its specific design. The Commission notes that prediction results for the project's solar glare were premised upon the use of an anti-reflective coating applied to the project's solar panels, and were sensitive to the backtracking resting angles of the project's solar panels. In view of the foregoing, the Commission imposes the following conditions:
  - b) BluEarth Renewables Inc. shall use anti-reflective coating on the project's solar panels.
  - c) BluEarth Renewables Inc. shall provide an update to the Commission specifying the final backtracking design of the project's solar panels and confirm that the final backtracking design is consistent with the design approved by the Commission and will not result in glare for any of the receptors considered in the solar glare assessment. The update is to be filed no later than one month before construction is scheduled to begin. This update may be part of the letter confirming the final project design.
19. There are currently no public safety standards or regulations associated with solar glare that apply to the project. Nonetheless, the Commission expects that any glare issues associated

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<sup>1</sup> Exhibit 26496-X0015 - Attachment 14 - Wheatcrest Glare Assessment FINAL 23 April 2021.

with the project will be addressed by BluEarth in a timely manner. Accordingly, the Commission imposes the following condition of approval:

- d) BluEarth Renewables Inc. 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 BluEarth's response to the complaints or concerns. In the event of complaints or concerns, BluEarth shall file this report no later than 13 months after the project becomes operational.

20. AEP's renewable energy referral report concluded that the project would have an overall low risk to wildlife and wildlife habitat. The environmental evaluation report likewise concluded that with diligent implementation of the mitigation measures identified by DNV, the residual environmental effects of the project would be limited. The Commission expects that BluEarth will adhere to and implement all of the foregoing. With the addition of the condition stipulated below, the Commission is satisfied that the residual environmental effects of the project are limited and can be reasonably mitigated.

21. Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants* requires approval holders to submit to Alberta Environment and Parks and the AUC annual post-construction monitoring survey reports. Consequently, the Commission imposes the following condition of approval:

- e) BluEarth Renewables Inc. shall submit a post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission 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*.

22. 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*.

#### 4 Decision

23. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves Application 26496-A001 and grants BluEarth Renewables Inc. the approval set out in Appendix 1 – Power Plant Approval 26496-D02-2021 – July 21, 2021, to construct and operate the Wheatcrest Solar Project (Appendix 1 will be distributed separately).

Dated on July 21, 2021.

#### Alberta Utilities Commission

*(original signed by)*

Kristi Sebalj  
Panel Chair

*(original signed by)*

Vera Slawinski  
Commission Member

## Appendix A – Summary of Commission conditions of approval in the decision

This section is intended to provide a summary of all conditions of approval specified in the decision for the convenience of readers. Conditions that require subsequent filings with the Commission will be tracked as directions in the AUC's eFiling System. In the event of any difference between the 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 26496-D01-2021 that require subsequent filings with the Commission and will be included as conditions of Power Plant Approval 26496-D02-2021:

- Once BluEarth Renewables Inc. has made its final selection of equipment for the project, it shall file a letter with the Commission that identifies the make, model, and quantity of the equipment and, if the equipment layout has changed, an updated site plan. This letter must also confirm that the finalized design of the project will not increase the land, noise and environmental impacts from what was approved for the base reference case by the Commission. This letter is to be filed no later than one month before construction is scheduled to begin.
- BluEarth Renewables Inc. shall provide an update to the Commission specifying the final backtracking design of the project solar panels, and confirm that the final backtracking design is consistent with the design approved by the Commission and will not result in glare for any of the receptors considered in the solar glare assessment. The update is to be filed no later than one month before construction is scheduled to begin. This update may be part of the letter confirming the final project design.
- BluEarth Renewables Inc. shall submit a post-construction monitoring survey report to Alberta Environment and Parks (AEP) and the Commission 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*.

The following is a condition of Decision 26496-D01-2021 that does not or may require a subsequent filing with the Commission:

- BluEarth shall use anti-reflective coating on the project solar panels.
- BluEarth Renewables Inc. 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 BluEarth's response to the complaints or concerns. In the event of complaints or concerns, BluEarth shall file this report no later than 13 months after the project becomes operational.