Advantage Oil and Gas Ltd.

Glacier Power Plant Alteration

April 26, 2019
Alberta Utilities Commission
Decision 23756-D01-2019
Advantage Oil and Gas Ltd.
Glacier Power Plant Alteration Proceeding 23756
Application 23756-A001

April 26, 2019

Published by the:
Alberta Utilities Commission
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
Website: www.auc.ab.ca

The Commission may, within 30 days of the date of this decision and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected decision on its website.
Alberta Utilities Commission  
Calgary, Alberta

Decision 23756-D01-2019  
Proceeding 23756  
Application 23756-A001

1 Decision summary

1. In this decision, the Alberta Utilities Commission considers whether to approve an application from Advantage Oil and Gas Ltd. for the alteration of a power plant designated as the Glacier Power Plant, and to connect the power plant to the Alberta Interconnected Electric System through ATCO Electric Ltd.’s 25-kilovolt distribution system.

2. After considering the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the alterations to the Glacier Power Plant is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

3. However, the Commission denies Advantage’s application to connect the Glacier Power Plant to the Alberta Interconnected Electric System and to export some of the electric energy from the power plant to the system because it is not permitted by the statutory scheme.

2 Application and background

4. Pursuant to Approval 22571-D02-2017, Advantage is the owner of a power plant designated as the Glacier Power Plant and located in the Hythe, Alberta, area. Approval 22571-D02-2017 stipulates that the power plant shall consist of two 1,451-kilowatt (kW) generating units, four 2,200-kW generating units, two 375-kW generating units and one 400-kW generating unit, for a total generating capability of 12.85 megawatts (MW). The power plant is not currently connected to the Alberta Interconnected Electric System (AIES); it only provides power to the adjacent Glacier Sour Gas Processing Plant.

5. Advantage filed a letter of enquiry with the AUC for approval to alter the power plant and connect the power plant to the AIES through ATCO Electric’s distribution system. The letter of enquiry was registered on July 30, 2018, as Application 23756-A001.

6. Having regard for the minor nature of the proposed alterations, including the fact that the nearest residence is approximately 6.5 kilometres away from the project, it did not appear to the Commission that its decision on the application would directly and adversely affect the rights of

---

2 Hydro and Electric Energy Regulation, Section 11, provides that a person proposing to make minor alterations to a power plant may apply for an amendment to an approval by submitting a letter of enquiry to the Commission in accordance with Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, and Hydro Developments.
any person. Accordingly, the Commission did not issue a notice of application and did not hold a hearing to consider the application.

3 Legislative scheme

7. The Commission regulates the construction and operation of power plants in Alberta. Section 11 of the *Hydro and Electric Energy Act* states that no person may construct or operate a power plant without prior approval from the Commission. Section 18 of the *Hydro and Electric Energy Act* prohibits an owner or operator of a power plant from connecting the power plant to an electric distribution system without an order from the Commission.

8. When considering an application for a power plant and associated infrastructure, Section 17 of the *Alberta Utilities Commission Act* requires the Commission to consider the public interest:

**Public interest**

17(1) Where the Commission conducts a hearing or other proceeding on an application to construct or operate a hydro development, power plant or transmission line under the *Hydro and Electric Energy Act* or a gas utility pipeline under the *Gas Utilities Act*, it shall, in addition to any other matters it may or must consider in conducting the hearing or other proceeding, give consideration to whether construction or operation of the proposed hydro development, power plant, transmission line or gas utility pipeline is in the public interest, having regard to the social and economic effects of the development, plant, line or pipeline and the effects of the development, plant, line or pipeline on the environment.

9. Section 3 of the *Hydro and Electric Energy Act* requires the Commission to have regard for the purposes of the *Electric Utilities Act* when assessing whether an application to construct or operate a generating unit, or to connect a generating unit to an electric distribution system, is in the public interest under Section 17 of the *Alberta Utilities Commission Act*. The purposes of the *Electric Utilities Act* include the development of an efficient electric industry structure and the development of an electric generation sector guided by competitive market forces.³

10. Section 11 of the *Hydro and Electric Energy Regulation* states that unless the Commission directs otherwise, if a person proposes to make minor alterations to a power plant (other than minor alterations that are excluded from the application of Section 11 of the act) the person may apply for an approval by submitting a letter of enquiry to the Commission in accordance with Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*. Section 12 of the *Hydro and Electric Energy Regulation* lists the information that must be included in a letter of enquiry.

---

³ *Electric Utilities Act*, SA 2003, c E-5.1, Section 5.
11. Section 1.4.2 of Rule 007 provides guidance to applicants proposing to make minor alterations to a power plant:

**1.4.2 Minor alterations**

If an applicant is proposing alterations to existing electric facilities and considers the alterations to be minor, the applicant must comply with sections 11, 12 and 18.2 of the *Hydro and Electric Energy Regulation*. The Commission’s guidance is provided in the Electric Power Plant Facilities Process Guidelines, as amended, and in the Electric Transmission Facilities Process Guidelines (revised February 1, 2016), as amended.

The guidelines provide direction whether:

(a) The approval holder may proceed with the alterations without an application.

(b) The approval holder must file an enquiry proposal application in which case the proposal would proceed by letter of enquiry.

(c) The approval holder must file an application for a new approval, permit or licence to carry out the proposed alterations.

12. Section 10 of Rule 007 allows an applicant applying for a minor alteration under the letter of enquiry process to meet the Commission’s informational and other requirements by submitting a completed checklist in accordance with the Commission’s *Electric Power Plant Facilities Process Guidelines*. The application must also meet the requirements set out in Rule 012: *Noise Control*, and the applicant must obtain all approvals under other applicable provincial or federal legislation.

4 **Power plant alterations application**

13. Advantage stated that as part of its proposed alterations to the power plant, it would remove two 375-kW generating units, and that one 1,451-kW generating unit previously on standby would begin operating full time. Upon completion of the alterations, the power plant would consist of two 1,451-kW generating units, four 2,200-kW generating units and one 400-kW generating unit. Advantage explained that the two 1,451-kW generating units are currently used as standby/start up power for the four 2,200-kW generating units that power the Glacier Sour Gas Processing Plant. The power plant’s total generating capability after completion of the proposed alterations would be 12.102 MW.

14. Advantage stated that the power plant is located on an existing sour gas processing plant site, there would be no new vegetation clearing or additional footprint required for the alterations, and that Alberta Environment and Parks has no wildlife concerns related to the alterations. Advantage stated that the air emissions associated with the project would comply with all *Alberta Ambient Air Quality Objectives* and that an *Environmental Protection and Enhancement Act* industrial approval amendment issued by the Alberta Energy Regulator considered the proposed alterations. Advantage confirmed that it would comply with all conditions of the approvals associated with the power plant.

---

4 Exhibit 23756-X0013, ERCS – AUC-SIR #1 Audit Response, page 3.
15. In Proceeding 22571, which concerned prior amendments to the power plant, Advantage committed to implementing noise control measures to ensure that the power plant complied with the nighttime permissible sound level of 40 dBA, as specified in Rule 012. In response to information requests in this proceeding, Advantage stated that it had not yet implemented those measures because the noise impact assessment that it filed in this proceeding recommended different mitigation measures. Advantage explained that it ultimately decided to proceed with the original noise control measures that it committed to implement in Proceeding 22571, and that it would implement those measures by April 2019, following which the power plant would comply with the nighttime maximum permissible sound level of 40 dBA. Advantage also indicated that the nearest residence was approximately 6.5 kilometres away.

4.1 Power plant findings

16. The Commission is satisfied that the application to make minor alterations to the power plant, supplemented by Advantage’s responses to information requests, meets the information requirements for a letter of enquiry stipulated in Section 12 of the Hydro and Electric Energy Regulation, and sections 1.4.2 and 10 of Rule 007.

17. The Commission finds that the noise impact assessment submitted by Advantage fulfills the requirements of Rule 012 and the power plant is not expected to exceed the permissible sound levels after Advantage implements the noise control measures identified in Proceeding 22571. In this regard, Advantage confirmed in this proceeding, its commitment made in Proceeding 22571 to implement those noise control measures and indicated that it expected to do so by April 2019. The Commission expects Advantage to address its commitment as soon as practicable.

18. The Commission is satisfied that minimal environmental impacts are expected from the proposed alterations to the power plant. It also accepts that no additional footprint or vegetation clearing is required for the alterations and that air emissions from the power plant are expected to remain compliant with the Alberta Ambient Air Quality Objectives.

19. The Commission has determined that the technical, siting, emissions, environmental and noise aspects of the power plant alterations meet the Commission’s requirements.

20. Based on the foregoing, the Commission considers the alterations to the power plant to be in the public interest in accordance with Section 17 of the Alberta Utilities Commission Act.

5 Interconnection application

21. Advantage requested approval to connect the power plant to the AIES using ATCO Electric’s 25-kilovolt distribution system. It submitted that the power plant would continue to supply power to the Glacier Sour Gas Processing Plant but would also export excess electricity to the AIES. More precisely, the four 2,200-kW generating units would be used to provide power to the processing plant while the two 1,451-kW generating units would export

---

6 Exhibit 23756-X0013, ERCS – AUC-SIR #1 Audit Response - with appendices, page 5.
7 Exhibit 23756-X0013, ERCS - AUC-SIR #1 Audit Response - with appendices, page 5.
8 Exhibit 23756-X0013, ERCS – AUC-SIR #1 Audit Response, PDF page 6.
excess electricity. Advantage indicated that the two 1,451-kW generators currently used for standby/start up produce excess energy as the load requirement varies, and that the generators operate best at a load greater than 70 per cent. On this basis, Advantage considered two options: either tying the load differential into a load bank which would waste the energy, or connecting the power plant to the grid and exporting the excess energy. Advantage is of the view that connecting the two 1,451-kW generators to the grid is the best alternative.

22. Advantage stated that ATCO Electric agreed to connect the power plant to its distribution system and filed a copy of the cost proposal, accepted by ATCO Electric, for a Distributed Generation Connection to export the electricity produced by the two 1,451-kW synchronous generators.\(^9\)

23. Advantage submitted that its proposal to consume a portion of the electric energy produced by the power plant and export the remaining energy to the AIES complies with the legislative scheme under the *Electric Utilities Act* and the *Hydro and Electric Energy Act*. It added that the electric energy produced by the two 1,451-kW generators and consumed by the Glacier Sour Gas Processing Plant is exempt from the provisions of the *Electric Utilities Act* pursuant to Subsection 2(1)(b) of that act, which provides that the statute “does not apply to ‘electric energy produced on property of which a person is the owner or a tenant, and consumed solely by that person and solely on that property.’”\(^10\) According to Advantage, this means that the energy produced and consumed on site is not required to be exchanged through the wholesale market and would require no distribution service from ATCO Electric, and that distribution service would only be required for the portion of energy produced on site that is exported by way of ATCO Electric’s distribution system. Advantage explained that although it would install bi-directional meters at the site, it would only supply electric energy to the grid and would not buy any electric energy from the grid. It also submitted that all applicable requirements of the *Electric Utilities Act* would apply to the electric energy that it would export to the grid.

5.1 Interconnection findings

24. In Decision 23418-D01-2019,\(^11\) the Commission addressed the issue of whether the statutory scheme allows a market participant to generate electricity for the purposes of self-supply and export to the AIES. In that proceeding, a market participant proposed to construct a 12-MW solar plant and to consume approximately 70 per cent of the electricity it produced on site while exporting the remainder to the AIES. The Commission found, for the reasons set out in paragraphs 75 to 102 of that decision, that the statutory scheme did not permit such conduct.

25. The Commission finds that Advantage’s proposal to use generating units located on a site that it owns for both self-supply and export is prohibited by the statutory scheme for the reasons provided in Decision 23418-D01-2019. As set out in that decision, the Commission’s conclusion on this issue arises from its interpretation of sections 101, 18 and 2 of the *Electric Utilities Act* and Section 2(f) of the *Fair, Efficient and Open Competition Regulation*.

---

\(^9\) Exhibit 23756-X0013, ERCS – AUC-SIR #1 Audit Response, PDF page 16.

\(^10\) Exhibit 23756-X0023, ERCS – AUC-SIR #3 Audit Response, PDF page 2.

26. Section 101(1) of the *Electric Utilities Act* provides direction to persons on how they must obtain electricity in Alberta. It states that a person wishing to obtain electricity for use on a property must make arrangements for the purchase of electric distribution service from the owner of the electric distribution system in whose service area the property is located. In the case of Advantage, Section 101(1) would require it to make arrangements with ATCO Electric (the owner of the electric distribution system in whose service area Advantage’s property is located) to obtain the electricity it uses, unless it can demonstrate that it is exempt from the operation of Section 101.

27. Section 18(2) of the *Electric Utilities Act* and Subsection 2(f)(i) of the *Fair, Efficient and Open Competition Regulation* provide direction on how electricity generated in Alberta can be transacted (exported) through the AIES and the Power Pool. Section 18(2) states that all electric energy entering or leaving the AIES must be exchanged through the Power Pool of Alberta unless regulations made under sections 41, 99 or 142 provide otherwise.

28. Section 2(f) of the *Fair, Efficient and Open Competition Regulation* complements and supports Section 18(2). It provides that, subject to certain exceptions, not offering to the power pool all electric energy from a generating unit that is capable of operating is conduct that does not support the fair, efficient and openly competitive operation of the electricity market. One of the exceptions to Section 2(f) is electric energy used on property for the market participant’s own use.

29. Advantage is proposing to use generating units located on a site that it owns to both obtain electricity for its own use (self-supply) and export electricity to the AIES. To do this, it must demonstrate that it is exempt from the requirements set out in sections 101 and 18(2) of the *Electric Utilities Act* and 2(f)(i) of the *Fair, Efficient and Open Competition Regulation*.

30. Section 2(1) of the *Electric Utilities Act* sets out the forms or types of electric energy that are exempt from the operation of the act, including sections 18 and 101. Section 2(1)(b), which sets out the “self-supply exemption,” states:

   2(1) This Act does not apply to

   (b) electric energy produced on property of which a person is the owner or a tenant, and consumed solely by that person and solely on that property;

31. In Decision 23418-D01-2019 the Commission found that based on its plain and ordinary meaning, Subsection 2(1)(b) establishes three pre-conditions for the self-supply exemption. In the current application, Advantage would have to satisfy all three pre-conditions to qualify for the self-supply exemption, as follows:

   • The electric energy must be produced on Advantage’s property;

   • The electric energy must be consumed solely by Advantage; and

   • The electric energy must be consumed solely on Advantage’s property.
32. In Decision 23418-D01-2019, the Commission also found support for this interpretation in a number of other provisions in the statutory scheme. In particular, it examined Section 13 of the Hydro and Electric Energy Act, Section 6 of the Isolated Generating Units and Customer Choice Regulation, and Subsection 2(f)(i) of the Fair, Efficient and Open Competition Regulation, and concluded as follows:

The Commission considers it reasonable to conclude that these provisions all share the same target: on-site generation developed for the express purpose of self-supply. When read together, these provisions reflect the legislature’s intention to allow a person to build and operate a generating unit on land a person owns or leases, and to exempt the generating unit and the electric energy produced by it from the statutory scheme if the electric energy is intended only for the person’s own use, consumed solely by the person, and solely on the person’s property. The Commission finds that these exemptions reflect the “closed loop” nature of a self-supply arrangement; because the person is not using market infrastructure and is not transacting in the market, neither the person, the unit, nor the output is bound by the market’s rules.\(^\text{12}\)

33. The Commission also noted in that decision that there are provisions in the statutory scheme that expressly allow micro-generation units and generating units that are part of an industrial system designation to both self-supply and export. It stated:

…the Commission is satisfied that the statutory scheme expressly authorizes the owners of industrial systems and micro-generators to self-supply and transact any electric energy that is in excess of their own use through the interconnected electric system. Absent from the statutory scheme, however, is any express authorization for a party that relies upon the exemption in subsection 2(1)(b) to export electric energy that is in excess of the person’s own use on the property. Given that such express authorization exists for the other two self-supply mechanisms, the Commission considers its omission for subsection 2(1)(b) operations to be intentional and reflective of the drafter’s intent to require that all the electricity produced on site be consumed on site.\(^\text{13}\)

34. In an information request, the Commission asked Advantage to identify the factors that differentiate its proposed Glacier Power Plant export position from that of EPCOR Water Services Inc.’s proposed E.L. Smith Power Plant in Proceeding 23418, such that Advantage could demonstrate compliance with the statutory scheme. Advantage responded that its application was similar to the application in Proceeding 23418 in that both power plants have excess power that the owners want to supply to the grid. The Commission agrees with that assessment and finds that, similar to the proposal made in Proceeding 23418, Advantage’s proposal to supply excess power to the AIES does not comply with the statutory scheme. The electric energy produced on Advantage’s property will not be consumed solely by Advantage, and will not be consumed solely on Advantage’s property. Consequently, two of the three pre-conditions required for the exemption in Subsection 2(1)(b) to apply are not met.

35. Advantage seeks a connection order pursuant to Section 18 of the Hydro and Electric Energy Act to enable it to exchange electric energy produced by the power plant with the interconnected electric system. Advantage requested approval to interconnect only two of its power plant’s seven generating units to the interconnected electric system, however, these two units are only part of the entire power plant for which the interconnection order is sought. As

\(^{12}\) Ibid, paragraph 92.
\(^{13}\) Ibid, paragraph 101.
a result, the Commission finds that Advantage’s application is to connect not only the two 1,451-kW generating units that are the subject of its agreement with ATCO Electric, but also the four 2,200-kW generating units that serve the sour gas processing plant. From a technical perspective, the Commission is satisfied that the proposed connection would function as planned and would facilitate the efficient exchange of electric energy produced by the power plant with the interconnected electric system. However, in the issuance of a connection order, it is implicit that market participants must exchange electric energy on the interconnected electric system in accordance with the duties and obligations set forth in the Electric Utilities Act and in other related statutory instruments.

36. Having regard to the foregoing, the Commission finds that the exemption in Subsection 2(1)(b) of the Electric Utilities Act does not apply to the excess electric energy Advantage proposes to export to the AIES because this electric energy will not be consumed solely by Advantage and solely on Advantage’s property. Accordingly, sections 18 and 101 of the Electric Utilities Act and Subsection 2(f)(i) of the Fair, Efficient and Open Competition Regulation apply to the electric energy produced by the power plant. The Commission is not satisfied that, as proposed, the configuration of the connection and power plant would be able to operate in accordance with the duties and obligations set forth in the Electric Utilities Act. Accordingly, the Commission denies Advantage’s interconnection application. The power plant, including the alterations approved in this decision, may continue to operate and provide electric energy to the Glacier Sour Gas Processing Plant. However, Advantage cannot connect and export electric energy to the interconnected electric system in the manner proposed.

37. In making this finding, the Commission acknowledges that Advantage’s proposal is based on its interpretation and understanding of the statutory scheme, and is not suggesting that Advantage is intentionally seeking to engage in conduct that is inconsistent with the statutory scheme.

38. The Commission’s denial of the interconnection application is without prejudice to any future application in which Advantage proposes to interconnect the power plant in a manner consistent with the statutory scheme.
6 Decision

39. Pursuant to Section 11 of the Hydro and Electric Energy Act, the Commission approves the alteration to the Glacier Power Plant and grants Advantage Oil and Gas Ltd. the approval set out in Appendix 1 – Power Plant Approval 23756-D02-2019 – April 26, 2019, to alter and operate the power plant (Appendix 1 will be distributed separately).

Dated on April 26, 2019.

Alberta Utilities Commission

(original signed by)

Anne Michaud
Vice-Chair

(original signed by)

Joanne Phillips
Commission Member

(original signed by)

Kristi Sebalj
Commission Member