



IPC Canada Ltd.

Blackrod Cogeneration Power Plant

September 8, 2023

Alberta Utilities Commission

Decision 28187-D01-2023

IPC Canada Ltd.

Blackrod Cogeneration Power Plant

Proceeding 28187

Application 28187-A001

September 8, 2023

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The Commission may, no later than 60 days from 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.

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from IPC Canada Ltd. (IPC) to construct and operate the Blackrod Cogeneration Power Plant, consisting of a cogeneration power plant and an emergency backup power plant, located within the Blackrod Commercial steam-assisted gravity drainage (SAGD) facility in the Lac La Biche County area.

2 Introduction and background

2. In 2016, IPC received approval from the Alberta Energy Regulator (AER) for its Blackrod Commercial SAGD facility; however, for the past 10 years, IPC has only been operating the Blackrod Pilot SAGD facility to validate its commercial bitumen production rates. IPC has recently revised the Blackrod Commercial SAGD facility design and applied for *Environmental Protection and Enhancement Act* amendments with the AER. The amended Blackrod Commercial SAGD facility would be developed in three phases, commencing with construction of the Phase 1 central processing facility, which includes the need for the addition of a cogeneration power plant and an emergency backup power plant.

3. On May 4, 2023, IPC filed Application 28187-A001 with the Commission for approval to construct and operate a 33.06-megawatt (MW) natural gas-fired cogeneration power plant and a 2.5-MW dual fuel diesel/natural gas-fired emergency backup power plant (collectively, the project).

4. The Commission issued a notice of application and no submissions were received in response to the notice.

3 Is approval of the power plant in the public interest?

5. 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 power plants, including its effect on the environment.

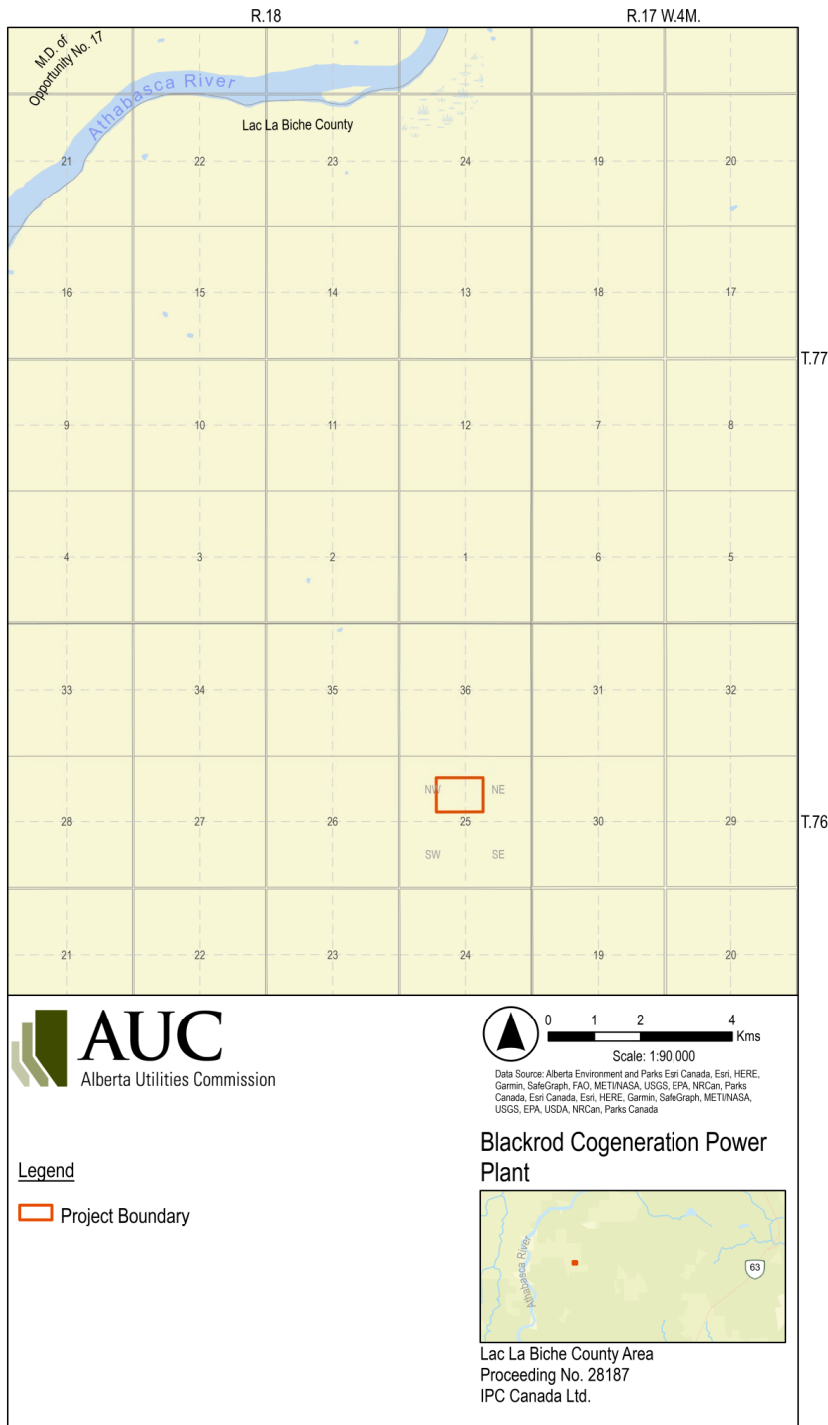
6. The project is located on Crown land approximately 50 kilometres northwest of Wandering River, Alberta, in Lac La Biche County, in the northeast quarter of Section 25, Township 76, Range 18, west of the Fourth Meridian, as shown on the map in Figure 1.

7. The cogeneration power plant would consist of two 16.53-MW natural gas-fired turbine generators and two heat recovery steam generators, with a total capability of 33.06 MW. IPC stated that the cogeneration power plant will connect to the internal electrical distribution system

within the Blackrod Commercial SAGD facility and no power would be exported to the Alberta Interconnected Electric System.

8. The emergency backup power plant would include one 2.5-MW dual fuel diesel/natural gas-fired generator that would only be operated in the event of a power outage at the Blackrod Commercial SAGD facility.

Figure 1. Project location



9. IPC's application and supplemental information included:
- Details of its participant involvement program.¹
 - A noise impact assessment, completed by Acoustical Consultants Inc., which predicted that the project would comply with Rule 012: *Noise Control*.
 - An air quality assessment report, completed by Horizon Compliance Group Inc., which concluded that potential changes to air quality from the project are expected to be minimal on a local and regional scale, and that the maximum predicted ground-level nitrogen dioxide (NO₂) and sulphur dioxide (SO₂) concentrations from all three phases of the Blackrod Commercial SAGD facility, including the cogeneration power plant, and other industrial emission sources in the area are predicted to be less than their respective limits in the *Alberta Ambient Air Quality Objectives*.
 - A review of the current environmental setting in the area to assess the potential environmental effects of the proposed project. The assessment, completed by Integrated Sustainability, in combination with the findings in the original provincial environmental impact assessment² for the Blackrod Commercial SAGD facility, determined that the potential adverse effects associated with the project can be mitigated and that residual adverse effects are predicted to not be significant.³
 - Confirmation that IPC would continue engaging with the Aboriginal Consultation Office as part of its *Environmental Protection and Enhancement Act* amendment process.
10. IPC expects the project to be in-service by the third quarter of 2025, with construction starting in January 2024.
11. IPC submitted that the SAGD Phase 1 project's load is nearing the capacity of the initially planned two turbine generators and that a third turbine generator may be added in the future; however, IPC stated that it will request Commission approval to amend the power plant to address this change, if required.⁴ IPC advised it expects to build additional infrastructure and submit additional applications to the AUC for its future Phase 2 and Phase 3 power generation requirements.⁵
12. IPC stated that the project will continue to operate until the decommissioning of the Phase 1 central processing facility, which is expected to start in 2046. At end of life, IPC stated

¹ Exhibit 28187-X0001, Blackrod_Rule007-Power-Generation-Application, PDF pages 26-29; Exhibit 28187-X0009, Participant Involvement Package, PDF pages 1-2, 9 and 18-66; Exhibit 28187-X0022, Responses to AUC Information request, IPC-AUC-2023JUN06-004 and IPC-AUC-2023JUN06-005; Exhibit 28187-X0040, Responses to AUC Information request, IPC-AUC-2023JUL17-002.

² Alberta Government, Environmental Assessment – BlackPearl Resources Inc. Blackrod Commercial SAGD Project – EIA Report and application for approval, May 1, 2012.

³ Exhibit 28187-X0001, Blackrod_Rule007-Power-Generation-Application, PDF pages 16-23; Exhibit 28187-X0022, Responses to AUC Information request, IPC-AUC-2023JUN06-007; Exhibit 28187-X0040, Responses to AUC Information request, IPC-AUC-2023JUL17-003; Exhibit 28187-X0046, Unsupported Document (original EIA).

⁴ Exhibit 28187-X0001, Blackrod_Rule007-Power-Generation-Application, PDF pages 4 and 6.

⁵ Exhibit 28187-X0022, Responses to AUC Information request, IPC-AUC-2023JUN06-003(b).

that it is responsible for the decommissioning of all its equipment.⁶ IPC submitted that the Blackrod Commercial SAGD facility decommissioning and reclamation costs are included within the AER's deemed liability and will be kept up to date throughout the life of the Blackrod Commercial SAGD facility. IPC committed to investing in asset reclamation activities to further reduce IPC's corporate environmental liability. The Commission is satisfied that the reclamation costs for the proposed project are included in the costs of reclaiming the overall SAGD site.

13. The Commission has reviewed the application and has determined that the information requirements specified in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* have been met.

14. The Aboriginal Consultation Office required IPC to engage and consult with seven Indigenous groups regarding its *Environmental Protection and Enhancement Act* amendment application. In response to a Commission information request, IPC clarified that the project information packages it sent to Indigenous groups did not include a specific description of the proposed project, but explained that the project was included as part of the Phase 1 central processing facility.⁷

15. IPC subsequently confirmed in an information response⁸ that it provided separate notification information packages specific to the project to the Indigenous groups, as directed by the Commission. IPC confirmed that there were no objections from the Indigenous groups or adjacent landowners or stakeholders to the proposed project.

16. The Commission finds that the participant involvement program complies with the requirements of Rule 007.

17. With respect to noise impacts, the noise impact assessment indicated that the existing Blackrod Pilot SAGD facility is the most dominant sound source in the area and that there are no residential receptors within 1,500 metres of the power plant project boundary. Further, compared to noise contribution from the three phases of the Blackrod Commercial SAGD facility, the noise contribution from the proposed cogeneration power plant would be negligible. The Commission accepts the conclusion that the project's predicted cumulative sound levels will comply with the daytime and nighttime permissible sound levels and finds that the noise impact assessment meets the requirements of Rule 012.

18. In regard to environmental impacts, the Commission accepts the air quality assessment report conclusions that air emissions will comply with *Alberta Ambient Air Quality Objectives*. The Commission also accepts IPC's submission that the potential environmental effects associated with the project can be mitigated, as detailed in the environmental review and in the original provincial environmental impact assessment for the Blackrod Commercial SAGD facility, as such, the residual adverse effects of the project are not predicted to be significant. The Commission is satisfied that because the project will be located within the footprint of the Blackrod Commercial SAGD Phase 1 central processing facility, a large industrial site, the project will not result in any significant incremental adverse effects to the environment.

⁶ Exhibit 28187-X0001, Blackrod_Rule007-Power-Generation-Application, PDF page 24.

⁷ Exhibit 28187-X0022, Responses to AUC Information request, IPC-AUC-2023JUN06-004.

⁸ Exhibit 28187-X0040, Responses to AUC Information request, IPC-AUC-2023JUL17-002.

19. In response to an information request, IPC confirmed that an environmental protection plan (EPP) is being prepared that will incorporate site-specific mitigations per its *Environmental Protection and Enhancement Act* amendment approvals, and will submit the EPP to the Commission prior to the construction and operation of the project.⁹

20. A project-specific environmental protection plan was not submitted with the application. Accordingly, the Commission imposes the following condition of approval:

- a. IPC Canada Ltd. must file a stand-alone, project-specific environmental protection plan no later than two months after the *Environmental Protection and Enhancement Act* amendment approvals are received and no later than one month before construction is scheduled to begin.

21. 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

22. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants IPC Canada Ltd. the approvals set out in Appendix 1 – Power Plant Approval 28187-D02-2023 to construct and operate the 33.06-megawatt Blackrod Cogeneration Power Plant and Appendix 2 – Power Plant Approval 28187-D03-2023 to construct and operate the 2.5-megawatt Blackrod Emergency Backup Power Plant.

23. The appendices will be distributed separately.

Dated on September 8, 2023.

Alberta Utilities Commission

(original signed by)

Michael Arthur
Commission Member

⁹ Exhibit 28187-X0040, Responses to AUC Information request, IPC-AUC-2023JUL17-003.