AUC
Alberta Utilities Commission

BitDeer Energy Inc.

Opal Power Plant Amendments

September 28, 2026

Alberta Utilities Commission
Decision 30907-D01-2026
BitDeer Energy Inc.
Opal Power Plant Amendments
Proceeding 30907
Application 30907-A001

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1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from BitDeer Energy Inc. to make amendments to the Opal Power Plant.

2 Application

2. BitDeer, under Approval 29843-D02-2025[1] and Permit and Licence 29843-D03-2025,[2] has approval to construct and operate a 101.133-megawatt (MW) flexible natural gas-fired power plant and the Gemini 1008S Substation, in the Fox Creek area, within the Municipal District of Greenview No. 16 (MD of Greenview).

3. BitDeer filed an application with the Commission for approval to reposition the power generation equipment on site. BitDeer stated that it is proposing to incorporate a bitcoin mining data centre into the site layout which requires a site design change to the power generation equipment. BitDeer indicated that construction was expected to occur from April 2026 to July 2027. Construction has not yet commenced. There are no changes proposed to the substation.

4. BitDeer indicated that the project will continue to operate as a peaker plant with the ability to export to the Alberta Interconnected Electric System and when the project is not operating as a peaker plant, the power generated will be used to power the data centre. BitDeer added that no concerns have been raised by the Alberta Electric System Operator.

5. BitDeer stated that all of the changes are within the existing Crown surface lease and no additional lands are required to accommodate these changes. BitDeer added that the Public Lands Branch of the Government of Alberta confirmed that there are no concerns with the changes.

6. BitDeer submitted an updated air quality assessment which concluded that the project will comply with the *Alberta Ambient Air Quality Objectives*.

7. Acoustical Consultants Inc. was retained to conduct an updated noise impact assessment (NIA) in accordance with Rule 012: *Noise Control* following layout changes to the project equipment. The NIA identified three receptors within 1.5 kilometres of the project boundary which were assessed for cumulative noise impacts from the Opal Power Plant and other nearby energy-related facilities and noise-emitting sources. The NIA concluded that the project would comply with Rule 012. The most affected receptor, R1, located approximately 1.1 kilometres

[1] Power Plant Approval 29843-D02-2025, Proceeding 29843, Application 29843-A001, March 12, 2025.
[2] Substation Permit and Licence 29843-D03-2025, Proceeding 29843, Application 29843-A002, March 12, 2025.

from the project boundary had a predicted cumulative nighttime sound level of 46.1 A-weighted decibels (dBA).

8. BitDeer stated that it completed an updated participant involvement program which included pulling new title searches, mailing out update letters, two open houses, a presentation to the MD of Greenview with a project update, and notifying Indigenous groups in the area regarding the project. BitDeer indicated that there are no outstanding concerns.

9. BitDeer submitted that Alberta Environment and Protected Areas (AEPA) was consulted regarding the layout change in the power plant and the addition of the data centre and had no objections.

10. In the initial approved layout, the power plant was located adjacent to the road. However, in the new proposed layout, the power plant would be relocated to the most northeast boundary of the lease. Due to this proposed change, the Commission had increased concern for environmental impacts to lands adjacent to the project. In response to information requests on this topic, BitDeer indicated that surveys of the lands adjacent to the Opal Power Plant identified two wetlands within 100 metres of the Opal Power Plant, the closest of which is approximately 18.5 metres from the closest infrastructure. Primary wetland risks include wetland contamination from sediment or contaminants from the project to the wetlands. BitDeer proposed mitigation of these risks through site drainage, erosion/sediment control, and spill prevention and response measures.[3]

11. BitDeer provided an emergency response plan and stated that an updated emergency response plan will be provided to the Commission by the end of September 2026.

3 Findings

12. BitDeer has provided information respecting the need, nature, extent, land affected, land ownership and the timing of the work. BitDeer has stated that no adverse environmental impact will be caused by the proposed work.

13. The Commission finds that the power plant's environmental risk has increased due to the re-siting of the power plant away from the road and closer to off-project wetlands. However, given BitDeer's communication with AEPA and the mitigation commitments made, the project amendments are reasonable and unlikely to have significant adverse effects on the environment.

14. The Commission finds that the updated NIA meets the requirements of Rule 012 and accepts the conclusion that the amended project will comply with Rule 012. The Commission notes that the conclusion was made based on the predicted nighttime cumulative sound level at the most impacted receptor, R1, which has a nighttime permissible sound level of 48 dBA resulting in a 2-dBA margin of compliance.

[3] Exhibit 30907-X0033, 2026-09-04 Bideer - IR#3_FINAL, PDF page 2.

15. In response to an information request, BitDeer stated that the project equipment design is ongoing and given that mitigation was incorporated in the modelling of the predicted project sound levels, the Commission imposes the following condition of approval:

- Once BitDeer Energy Inc. has finalized its equipment selection for the power plant, it must file a final project update with the Commission which includes an updated noise impact assessment based on the final project design. The updated noise impact assessment shall identify the major project sound sources and mitigation measures it has implemented, or alternative measures that provide equal or greater acoustic performance and demonstrate through modelling, the feasibility and effectiveness of those measures to ensure the power plant complies with Rule 012: *Noise Control*. The final project update must be filed at least 90 days prior to the start of construction.

16. Section 5.1 of Rule 007: *Facility Applications* states that applicants will have up to seven years to finish construction of a power plant, absent unusual or extraordinary circumstances. The approved completion date of September 30, 2027, is within seven years from the initial approval date of August 3, 2022.[4]

17. The Commission's approval of the application is solely for the electrical components that comprise the power plant equipment. The Commission has no approval authority over the cryptocurrency mining and data centre operations.

18. Based upon the information provided, the Commission is satisfied that the proposal is of a minor nature, no person is directly and adversely affected by the proposal, and no significant adverse environmental impact will be caused by the proposed alterations.

4 Decision

19. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 30907-A001 and grants BitDeer Energy Inc. the approval set out in Appendix 1 – Approval 30907-D02-2026 for the Opal Power Plant.

20. The appendix will be distributed separately.

Dated on September 28, 2026.

Alberta Utilities Commission

Maureen Higgins
Acting Commission Member

[4] Decision 27293-D01-2022: Kiwetinohk Energy Corp. – Opal Power Plant Project, Proceeding 27293, Applications 27293-A001 and 27293-A002, August 3, 2022.