



Pathfinder Energy Ltd.

Rocky 5 Bitcoin Mining Power Plant

January 25, 2023

Alberta Utilities Commission

Decision 27673-D01-2023

Pathfinder Energy Ltd.

Rocky 5 Bitcoin Mining Power Plant

Proceeding 27673

Application 27673-A001

January 25, 2023

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1 Decision summary

1. In this decision, the Alberta Utilities Commission approves Application 27673-A001 submitted by Pathfinder Energy Ltd. (Pathfinder) to construct and operate the Rocky 5 Bitcoin Mining Power Plant.

2 Application

2. Pathfinder Energy Ltd., previously named Nexus Energy Associates Ltd.,¹ filed Application 27673-A001 with the Commission on September 26, 2022, for approval to construct and operate a 60-megawatt (MW) natural gas-fired power plant, designated as the Rocky 5 Bitcoin Mining Power Plant.

3. The power plant would consist of forty 1.5-megawatt generators, forty 1.5-megavolt ampere transformers, and ten 6-megawatt cooling pods.

4. The project would be sited on approximately 10 acres of Crown land, approximately 30 kilometres northwest of the town of Rocky Mountain House. The project would be located in the northeast and southeast quarters of Section 28, Township 42, Range 8, west of the Fifth Meridian. A map of the project area has been included below for reference (Figure 1 and Figure 2).

¹ Exhibit 27673-X0003, Certificate of Amendment.

Figure 1. Rocky 5 Bitcoin Mining Power Plant site

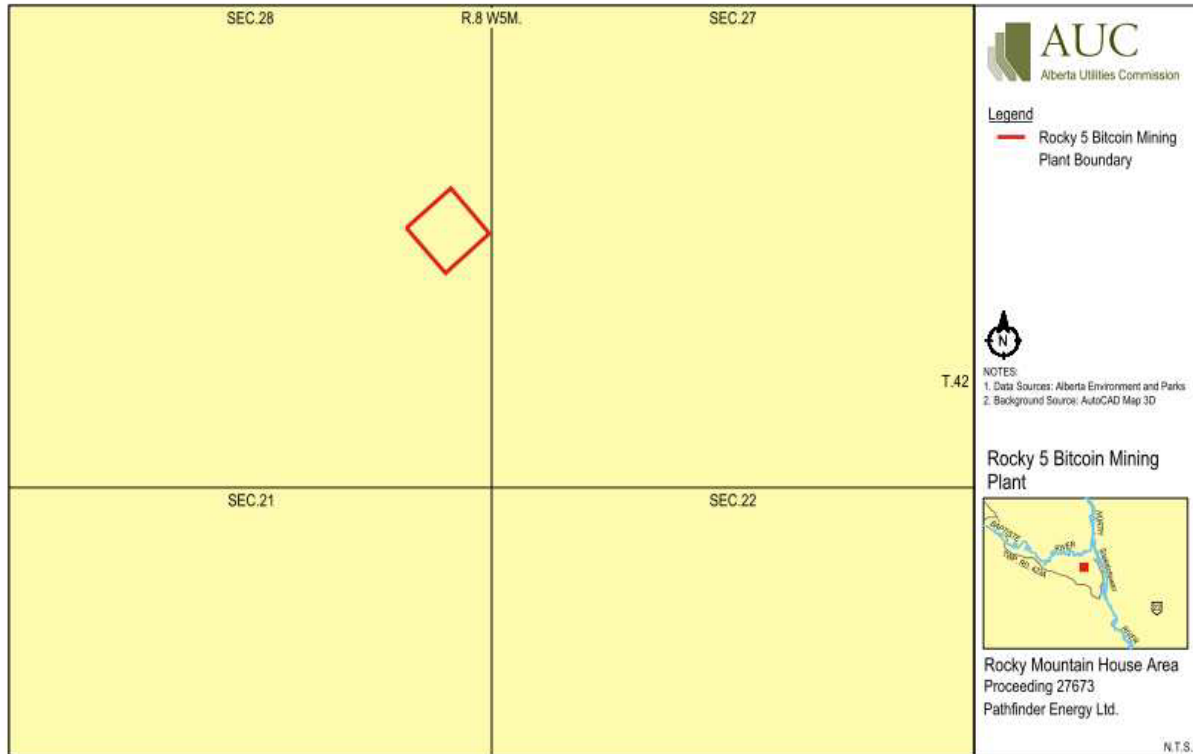


Figure 2. Rocky 5 Bitcoin Mining Power Plant site²



² Exhibit 27673-X0005, Rocky 5 Power Plant.

5. Pathfinder's application included:
- a) A participant involvement program, which detailed consultation with stakeholders within 800 metres of the project and notification to stakeholders within 2,000 metres of the project.
 - b) An Indigenous pre-consultation assessment³ and an Aboriginal Consultation Office (ACO) adequacy assessment decision.⁴
 - c) A noise impact assessment⁵ which concluded that the project would be in compliance with Rule 012: *Noise Control*.
 - d) An air quality assessment⁶ which concluded that the cumulative maximum concentration of carbon monoxide (CO), nitrogen dioxide (NO₂) and fine particulate matter (PM_{2.5}) resulting from the project would be less than the *Alberta Ambient Air Quality Objectives and Guidelines* limits.
 - e) An environmental evaluation⁷ and an environmental protection plan⁸ which concluded that any potential adverse effects of the project can be effectively mitigated.
 - f) A *Historical Resources Act* approval for the project⁹ dated April 5, 2022.
6. Pathfinder requested Commission approval of the project by December 2022, and advised that it expected the project in-service date to be June 2023; however, Pathfinder requested an October 31, 2023, construction completion date for the project approval, in case there were any unforeseen delays in permitting and procurement.
7. The project would be fully owned and operated by Pathfinder, with the resultant power generation entirely consumed by an on-site bitcoin mining operation also owned and operated by Pathfinder.

3 Interveners

8. On October 20, 2022, the Commission issued a notice of application that included notice to four Indigenous communities. During the four-week notice period, the Commission received one statement of intent to participate (SIP) from O'Chiese First Nation.¹⁰ The Commission denied the O'Chiese First Nation standing for the reasons set out in its January 18, 2023, ruling.¹¹

³ Exhibit 27673-X0028, Pre-consultation Assessment.

⁴ Exhibit 27673-X0029, Adequacy Assessment Decision.

⁵ Exhibit 27673-X0008, Attachment 7 - NIA Nexus Rocky#5.

⁶ Exhibit 27673-X0012, Attachment 11 – Air Quality Nexus Rocky#5.

⁷ Exhibit 27673-X0010, Attachment 9 - Rocky 5 Env Eval.

⁸ Exhibit 27673-X0013, Attachment 12 - Environmental Protection Plan.

⁹ Exhibit 27673-X0014, Attachment 13 - Signed HRA Response.

¹⁰ Exhibit 27673-X0033, OCFN Statement of Intent Pathfinder.

¹¹ Exhibit 27673-X0041, AUC letter - Ruling on standing.

4 Discussion and findings

9. The Commission considered the application pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*.

10. In accordance with Section 17 of the *Alberta Utilities Commission Act*, where the Commission conducts a hearing or other proceeding on an application to construct or operate a power plant under the *Hydro and Electric Energy 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 power plant is in the public interest, having regard to the social and economic effects of the power plant and the effects of the power plant on the environment.

11. The Commission has previously found that the public interest will be largely met if an application complies with existing regulatory standards, and the project's public benefits outweigh its negative impacts.¹² The Commission must take into account the purposes of the *Hydro and Electric Energy Act* and the *Electric Utilities Act*, and cannot consider the need for the project. The Commission must also determine whether an applicant has met the requirements of Rule 007: *Application for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* and Rule 012. An applicant must also obtain all approvals required by other applicable provincial or federal legislation.

12. Pathfinder advised that the project will not be connected to the Alberta Interconnected Electric System, and that it considered the requirements in Section 2(1) of the *Electric Utilities Act* are met.¹³ Section 2(1)(b) of the *Electric Utilities Act* provides that the act 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." Section 2(3) of the *Electric Utilities Act* specifies that "[t]he exemption under subsection (1)(b) applies whether or not the owner or tenant is the owner of the generating unit producing the electric energy." The Commission finds that Pathfinder qualifies for the exemption under Section 2(1) of the *Electric Utilities Act*.

13. The Commission has considered the application having regard to the applicable legislative and regulatory framework described above, and for the reasons that follow, finds that the project is in the public interest.

14. The Commission is satisfied that the information requirements specified in Rule 007 have been met for the natural gas-fired power plant.

15. The Commission finds that Pathfinder's participant involvement program satisfies the requirements of Rule 007. Details of the participant involvement program reflect that Pathfinder consulted with stakeholders as required. In the Commission's January 18, 2023, ruling, the Commission noted that the ACO deemed consultation to be adequate for the *Public Lands Act* application, and that the ACO's directions and decisions govern the discharge of the Crown's duty in relation to the public lands disposition for the project. In the same ruling, the

¹² Alberta Energy and Utilities Board Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation 490-MW Coal-Fired Power Plant, Application 2001173, December 21, 2001, page 4.

¹³ Exhibit 27673-X0040, Pathfinder-AUC-2022DEC20-001.

Commission found that the Crown's duty to consult in respect of Pathfinder's application before the AUC had been satisfied.

16. The Commission finds that the noise impact assessment submitted by Pathfinder meets the requirements of Rule 012. The Commission accepts the conclusion that noise from the project would comply with the permissible sound levels established by Rule 012.

17. The Commission notes that the air quality assessment submitted by Pathfinder concludes that the cumulative maximum CO, NO₂ and PM_{2.5} emissions from the project are expected to be below the Alberta Ambient Air Quality Objectives limits. The Commission is satisfied that the analysis, conducted by RWDI AIR Inc., demonstrates that the project will satisfy the *Alberta Ambient Air Quality Objectives and Guidelines*.

18. The environmental protection plan, originally prepared by Northern Resources Analysts Ltd. and updated by McCallum Environmental Ltd., concluded that residual environmental effects of the project due to pre-construction, construction, and post-construction activities will be limited if Pathfinder adheres to applicable guidelines and diligently implements the mitigation measures identified in the report. The Commission accepts Pathfinder's statement that it will implement all recommendations included in the environmental protection plan. Specifically, this includes Pathfinder's commitment to strip and store topsoil and subsoil, and to implement appropriate reclamation procedures for all surface disturbances (i.e., seeding, erosion blankets, slash rollback, straw crimping) to promote stability of the site, soil preservation, and plant re-establishment. Pathfinder has also committed to constructing the site during dry or frozen ground conditions to minimize terrain disturbance and soil structure damage. As such, the Commission is satisfied that the residual environmental effects of the project will not be significant.

19. 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

20. Pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 27673-A001, and grants Pathfinder Energy Ltd. the approval set out in Appendix 1 – Approval 27673-D02-2023 to construct and operate the Rocky 5 Bitcoin Mining Power Plant.

Dated on January 25, 2023.

Alberta Utilities Commission

(original signed by)

Carolyn Dahl Rees
Chair