



Signalta Resources Limited

High River Peaking Power Plant

April 29, 2021

Alberta Utilities Commission
Decision 26127-D01-2021
Signalta Resources Limited
High River Peaking Power Plant
Proceeding 26127
Application 26127-A001

April 29, 2021

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1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from Signalta Resources Limited to construct and operate a power plant, designated as the High River Peaking Power Plant, and connect the power plant to the Alberta Interconnected Electric System (AIES) (the project).

2 Introduction

2. Signalta filed an application with the AUC for approval to construct and operate a 19.95-megawatt (MW) natural gas-fired internal combustion engine peaking plant, in the High River area, pursuant to Section 11 of the *Hydro and Electric Energy Act*. Signalta also applied to connect the power plant to the AIES. This application was registered on November 27, 2020, as Application 26127-A001.

3. The Commission issued notice of the application and received one statement of intent to participate from Elemental Energy Renewables Inc. Elemental indicated that it had executed an Option to Lease agreement in October 2018 for solar development on lands which included a portion of the project area. The Commission granted standing to Elemental and scheduled an oral hearing for the project. On March 31, 2021, Elemental withdrew its statement of intent to participate and stated that it was satisfied that Signalta had a valid leasehold interest in the project land, and submitted that it did not have any objections to the project. The Commission subsequently cancelled the planned oral hearing.

3 Discussion

3.1 Power plant

4. Signalta applied to construct and operate the High River Peaking Power Plant, a 19.95-MW natural gas power plant.¹ Signalta proposed the project as a cost effective source of reliable natural gas-fuelled electricity supply that would contribute as a new source of electricity and ancillary services operating primarily during periods of high electrical demand and power pricing. Signalta stated that the dispatchable and fast responding facility would offset renewable generation and assist in the reduction of grid supply volatility.

5. Signalta maintained that the project is designed to provide peaking services to the AIES during periods of high energy demand and power pricing. It would be constructed with

¹ Exhibit 26127-X0011, AUC Application Signalta High River Peaking Power Plant 11252020.

individual generators in stages, and started and operated to match the Alberta Electric System Operator's (AESO) electricity and ancillary services requirements.

6. Signalta proposed to install the project in three stages, with all three stages being applied for at this time and the construction and operation of the second and third stages anticipated to proceed within two years of the first stage. Stage one would include eight 1.415-MW natural gas generators with a gross generation capability of up to 12 MW. Stages two and three would each include four 1.415-MW natural gas generators with a gross generation capability of up to 5.6 MW for each stage. Signalta noted that it would limit the combined output for all three stages to 19.95 MW via operating procedures and power flow controls.

7. Signalta anticipated the project's heat rate to be 8.6 gigajoules per megawatt-hour with an efficiency rating of 41.9 per cent at full load. The project's cooling system would consist of a 50 per cent glycol, 50 per cent water, closed circuit system with engine auxiliary and jacket cooling water for all units, circulated through external radiators. The project's fuel requirements would consist of sweet natural gas sourced from a new ATCO Energy Services tap from an existing ATCO Gas pipeline.

8. Signalta proposed to construct the project on a pre-existing oil and gas lease located approximately 0.9 kilometres north of High River, in the southwest quarter of Section 13, Township 19, Range 29, west of the Fourth Meridian. Signalta stated that there are two abandoned natural gas wells on the site, for which it had elected to take over end-of-life obligations. Signalta noted that the project would be located in an area designated by the municipal district as an industrial corridor.

9. Signalta scheduled construction to start immediately after all project approvals had been received, and anticipated the in-service dates to be August 15, 2021 for stage one, August 2022 for stage two, and August 2023 for stage three.

3.2 Connection

10. Signalta applied to connect each stage of the proposed project to the AIES via three existing FortisAlberta Inc. 25-kilovolt distribution lines located on or near the project site. Signalta provided a letter of non-objection regarding the proposed project from FortisAlberta,² and noted that the AESO had been informed of the project.

4 Findings

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. 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 and Hydro Developments* have been met. Signalta's participant involvement program has been conducted and there are no outstanding public or industry objections or concerns.

² Exhibit 26127-X0017, FortisAlberta - High River Signalta AUC Letter.

13. The Commission finds that the proposed project has been adequately sited because of the limited potential impacts to the industrial corridor in which it will be located. There are, for example, two abandoned natural gas wells on the site. Signalta's impacts will be largely confined to environmental impacts to air quality and emissions. In that regard, Signalta has prepared an air quality assessment and the project will comply with the *Alberta Source Emission Standards* and the *Alberta Ambient Air Quality Objectives and Guidelines Summary*. In an information response, Signalta further explained that, because the proposed project is a peaking power plant, the facility will operate much less than a continuous duty base load power plant, and that the project's total emissions per year will be 70 to 86 per cent less as a consequence.³ Given Signalta's assertion that the project will not result in any major impacts to the environment, and the existence of the two abandoned wellsites, the Commission agrees that the environmental impacts will not be significant.

14. The Commission is satisfied that Signalta has demonstrated the project will comply with the requirements in Rule 012: *Noise Control* and not exceed permissible sound levels. Signalta retained SLR Consulting (Canada) Ltd. to prepare a noise impact assessment report for the project.⁴ SLR conducted the assessment for all three stages of the project and concluded that the project would be compliant with the permissible sound levels at all surrounding receptors in accordance with Rule 012.

15. The Commission notes that Signalta holds a valid *Historical Resources Act* approval for the project and will contact the Historical Resources Management Branch for further instructions in the event that historic resources are encountered.⁵

16. The Commission finds that Signalta has conducted its participant involvement program in accordance with the requirements of Rule 007. As part of its participant involvement program for the project, Signalta provided notification of the project to all landowners and interested parties within 2,000 metres of the project site.⁶ Signalta subsequently followed up with all landowners and interested parties to confirm receipt of the package. Signalta also consulted with the stakeholders located within 800 metres of the proposed project.⁷ Additionally, Signalta consulted with local jurisdictions including the Municipal District of Foothills and the Town of High River. Signalta stated that there were no objections to the project. The Commission is satisfied that there are no outstanding concerns or objections to the proposed project as the sole party who filed a statement of intent to participate in the proceeding withdrew its submission.

17. The Commission finds that the connection of the project to FortisAlberta's distribution system is in the public interest and is satisfied that there are no objections or concerns relating to the connection.

18. Based on the foregoing, the Commission considers that overall, the project is in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

³ Exhibit 26127-X0023, 26127_X0021_AUC IRR 1 - Signalta-AUC-2020DEC17-001 to 003_000021 SRL Response 2021Jan07, PDF pages 2 and 3.

⁴ Exhibit 26127-X0009, Noise_Impact_Assessment_203.50216.00000 Signalta High River Peaking Plant.

⁵ Exhibit 26124-X0018, Signed_HRA_Response_019351534.

⁶ Exhibit 26127-X0005, Participant Involvement Summary-2000m Radius.

⁷ Exhibit 26127-X0004, Participant Involvement Summary-800m Radius.

5 Decision

19. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants Signalta Resources Limited the approval set out in Appendix 1 – Approval 26127-D02-2021, to construct and operate the High River Peaking Power Plant.

20. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants Signalta Resources Limited the order set out in Appendix 2 – Order 26127-D03-2021, to connect the High River Peaking Power Plant to the FortisAlberta Inc. distribution system.

21. The appendices will be distributed separately.

Dated on April 29, 2021.

Alberta Utilities Commission

(original signed by)

Douglas A. Larder, QC
Panel Chair

(original signed by)

Cairns Price
Commission Member