



FortisAlberta Inc.

Waterton Battery Energy Storage System

January 15, 2021

Alberta Utilities Commission

Decision 26101-D01-2021

FortisAlberta Inc.

Waterton Battery Energy Storage System

Proceeding 26101

Application 26101-A001

January 15, 2021

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.

1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from FortisAlberta Inc. to construct and operate a battery energy storage system in Waterton Lakes National Park.

2 Introduction

2. FortisAlberta filed a letter of enquiry with the Alberta Utilities Commission, pursuant to Section 11 of the *Hydro and Electric Energy Regulation*, for a minor alteration to its distribution system. FortisAlberta proposed to construct a battery energy storage system in Waterton Lakes National Park.

3. The Commission issued a notice of application and received statements of intent to participate from the Consumers' Coalition of Alberta (CCA) and the Alberta Electric System Operator (AESO). The Commission denied standing to the CCA and found it unnecessary to rule on the standing of the AESO; based on the AESO's submissions the Commission considered that the AESO did not intend to participate in a hearing unless another party triggered a hearing.

3 Discussion

4. The proposed energy storage system would have a capacity of 1.6-megawatts / 5.2-megawatt-hours and would be located on the Parks Canada operations compound in Waterton Lakes National Park.

5. FortisAlberta explained that the hamlet of Waterton is normally served by a single feeder with no alternative backup during outages. It stated that the proposed energy storage system would provide temporary backup to Waterton in the event of a contingency to the distribution feeder. The battery would be trickle charged by the distribution feeder under normal conditions.

6. FortisAlberta stated that the energy storage system would only provide electricity to customers when the local distribution system is islanded from the Alberta Interconnected Electric System (AIES). It stated that the electric energy from the energy storage system would not be exported to the AIES and that FortisAlberta would not be competing in the energy-only or ancillary-services markets.

7. FortisAlberta indicated that the battery would be sufficient to meet Waterton's load requirements for approximately four hours under peak summer loading conditions and that based on historical outage data, it will be used for approximately nine hours per year.
8. FortisAlberta estimated that the energy storage system would cost \$4,230,000, a portion of which would be externally funded by Alberta Innovates, Emissions Reductions Alberta and Natural Resources Canada. It stated that it also evaluated a wires alternative that would resolve the unsupplied load issue by, among other things, constructing and/or upgrading 36 kilometres of distribution line. The cost of the wires alternative was estimated to be \$7,913,000.
9. FortisAlberta retained Golder Associates Ltd. to undertake a basic impact analysis. Golder concluded that the siting of the project on the Parks Canada operations compound would limit effects by reducing the amount of new disturbance required and that the energy storage system is not expected to have significant effects on the environment.
10. FortisAlberta provided a noise impact summary form that concluded that the project would comply with Rule 012: *Noise Control*.
11. Fortis submitted that there are no permanent occupants, residences or landowners situated within 800 metres of the project site. It stated that it was not aware of any concerns regarding the project.
12. In its statement of intent to participate, the AESO stated that it does not oppose the project as "the Waterton BESS [Battery Energy Storage System] will only discharge limited amounts of energy during islanded conditions, such that the market impacts will be negligible." However, the AESO went on to provide comments on the general issue of regulated entities owning energy storage systems.

While the AESO recognizes that the market impacts of negligible amounts of unmetered energy produced by a single energy storage facility may be minor, negligible amounts produced by several energy storage facilities will become increasingly impactful and may warrant different treatment. Further in the AESO's view, regulated transmission or distribution-energy storage facilities should not be allowed to participate in the deregulated market. Given that regulated entities receive a defined rate of return, this would result in an unlevel playing field and market distortions.

Although it does not oppose the Waterton BESS at this time, the AESO remains of the view that it is preferable for energy storage facilities to be owned by unregulated entities that can compete in the market while also providing reliability services to the transmission and distribution systems. This approach is similar to the current provision of ancillary services, such as Transmission Must Run. It would allow for greater efficiencies in the system overall by enabling the asset to monetize market services that the energy storage facility could provide in addition to the distribution or transmission service.¹

¹ Exhibit 26101-X0007, LT AUC re AESO SIP, PDF page 2.

4 Findings

13. The issue of whether regulated entities can or should own energy storage facilities is broad and complex, and its determination is beyond the scope of this proceeding. In this particular instance the Commission accepts that the effects of the energy storage system on the markets will be negligible, because the proposed battery will only discharge under islanded conditions, and energy from the proposed storage facility will not be exported to the AIES. The Commission therefore finds that there is no reason to delay consideration of this project until the broader issues are resolved. The Commission's decision on this application is not, however, intended to establish a precedent for similar proposals or to communicate any direction or opinion on the broader issues; each such proposal will be considered on its own merits and with regard for any market impacts that may arise. The Commission expects that FortisAlberta will comply with any rules or legislation established in the future that affect its ownership of or intended use of the proposed facility.

14. Based upon the information provided, including the AESO's non-objection to the project, the Commission is satisfied that the proposed energy storage system is a minor alteration to FortisAlberta's electric distribution system, that no person is directly and adversely affected by the proposal, and no significant adverse environmental impact will be caused, thereby meeting the requirements of Section 11 of the *Hydro and Electric Energy Regulation*.

15. Given the unresolved broader market impact issues, which are outside the scope of this proceeding, the Commission imposes the following as conditions of approval:

- a. The battery energy storage system shall not export electric energy to the Alberta Interconnected Electric System.
- b. FortisAlberta shall obtain Commission approval prior to making any substantive changes to the energy storage system or substantially varying the design or specifications of the energy storage system from what was stated in the application or what the Commission has approved.
- c. FortisAlberta shall obtain Commission approval prior to making any substantive changes to how the energy storage system will be used or operated from what was stated in the application or what the Commission has approved.

5 Decision

16. Pursuant to Section 11 of the *Hydro and Electric Energy Regulation*, the Commission approves the application and grants FortisAlberta Inc. the approval set out in Appendix 1 – Waterton Battery Energy Storage System – Approval 26101-D02-2021 – January 15, 2021 (Appendix 1 will be distributed separately).

Dated on January 15, 2021.

Alberta Utilities Commission

(original signed by)

Carolyn Dahl Rees
Chair

(original signed by)

Cairns Price
Commission Member

(original signed by)

Vera Slawinski
Commission Member