



TERIC Power Ltd.

Sturgeon Battery Energy Storage System

October 23, 2024

Alberta Utilities Commission

Decision 29130-D01-2024

TERIC Power Ltd.

Sturgeon Battery Energy Storage System

Proceeding 29130

Application 29130-A001

October 23, 2024

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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 TERIC Power Ltd. to construct and operate the Sturgeon Battery Energy Storage System, and to connect the project to ATCO Electric Ltd.'s distribution system.

2 Introduction

2. TERIC applied to the Commission for approval to construct and operate a 23.1-megawatt Sturgeon Battery Energy Storage System (the project). The project consists of 12 1.9-megawatt Tesla Megapack 2XL units with a total nameplate storage energy capacity of 46.3 megawatt-hour, transformers, associated underground cabling and a control building. In addition, TERIC applied to connect the project to ATCO Electric's distribution system.

3. The project is sited on private and previously cultivated land in the northwest quarter of Section 33, Township 68, Range 21, west of the Fifth Meridian, approximately 15 kilometres southeast of the town of Valleyview, in the Municipal District of Greenview No. 16, Alberta.

4. The Commission issued a notice of the application in accordance with Rule 001: *Rules of Practice*. No submissions were received in response to the notice.

3 Findings

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, environmental and other effects of the project.

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

7. The Commission finds that TERIC's participant involvement program satisfies the requirements of Rule 007. The participant involvement program included notification to and consultation with stakeholders within 1,000 metres of the project. Given the project's close proximity to the Goose River, TERIC consulted with four First Nations and two Metis Settlements identified in the Landscape Analysis Indigenous Relations Tool. In addition, TERIC advertised the project information in a local newspaper and on the website of the Municipal District of Greenview No. 16.

8. TERIC retained RWDI AIR Inc. to conduct a noise impact assessment (NIA) of the project. The NIA concluded that the cumulative noise levels are predicted to comply with the daytime and nighttime permissible sound levels. The NIA also found that there is low potential for a low frequency noise condition at the only identified receptor, R1. Therefore, the Commission accepts the conclusion in the NIA that noise from the project will comply with Rule 012: *Noise Control*.

9. The Commission observes that the project has a small footprint within a cultivated area that does not offer significant wildlife value. There is no intersection with wetlands and watercourses that might have offered more wildlife value. TERIC received a *Historical Resources Act* approval from Alberta Arts, Culture, and Status of Women for the project. Considering TERIC's commitment to implement all mitigation measures recommended in the environmental protection plan, and its commitment to adhere to all applicable standards and guidelines, the Commission is satisfied that the project will have minimal effects on the environment.

10. TERIC submitted an air dispersion modelling and risk assessment, concluding that the maximum predicted air quality concentrations at the closest residence comply with the Alberta Ambient Air Quality Objectives and the Immediately Dangerous to Life and Health limit will not be exceeded at or beyond the fenceline for the air contaminants of concern. TERIC developed its site-specific emergency response plan in consultation with the local fire department and the Municipal District of Greenview No. 16. It committed to continue working and coordinating with the local fire department and the Municipal District of Greenview No. 16 throughout the life of the project. The plan included site-specific responses and manufacturer information from the Tesla Lithium-Ion Battery Emergency Response Guide.

11. The Commission finds that the project would include local equipment controls that constantly monitor critical parameters, including the Tesla megapacks, and allow the site to be shut down or isolate itself if required. Tesla data centre would remotely monitor the project site and trigger a protection mode isolating the unit until an investigation occurs. TERIC is planning to install a thermal imaging camera external detection system at the project site that would capture early signs of thermal runaway in the megapacks and monitor security of the overall site 24 hours a day and seven days a week. However, given that not all risks related to fire can be mitigated, the Commission imposes the following conditions of approval:

- a. TERIC, and any subsequent operator, shall implement any ongoing upgrades to improve the safety of the project, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.
- b. TERIC, and any subsequent operator, will continually update the site-specific emergency response plan, and incorporate input received from local fire departments, Municipal District of Greenview No. 16 and other interested stakeholders. The updated plans are to be provided to Municipal District of Greenview No. 16 and local fire departments.

12. The Commission considers it reasonable to require TERIC and subsequent operators to maintain adequate insurance coverage throughout the life of the project. Consequently, the Commission imposes the following condition of approval:

- c. TERIC, and any subsequent operator, shall at all times during the construction and operation of the project, maintain insurance coverage that is sufficient to protect against any reasonably foreseeable liabilities.

13. TERIC engaged a third party, Kilo Power Inc., to estimate the costs of reclamation and decommissioning for the project. Kilo estimated a total reclamation cost of \$330,000 and a salvage value of \$100,000, resulting in a net decommissioning cost of approximately \$230,000, with the potential to reduce further if the resale of the battery energy storage system and 25-kilovolt transformers into the secondary market is considered. As the project approaches 20 years of operation, TERIC plans to review salvage and/or resale value of project components into the secondary markets and also the potential opportunities to extend operations beyond 20 years.

14. TERIC's reclamation security program includes a letter of credit with the hosting landowner as the beneficiary. Half of the reclamation security will be posted at the tenth year of the operational period with the full reclamation cost in place at year 15. The decommissioning cost will be re-evaluated at year 20. In addition, TERIC committed to meeting any applicable reclamation commitments for battery energy storage projects including the provision of reclamation security as required by the Government of Alberta. The Commission finds that TERIC's approach to reclamation is sufficient for the purposes of satisfying the Commission that approval of the project is in the public interest.

15. The project would be charged from and discharged to the Alberta Interconnected Electric System through an existing ATCO Electric feeder at the Sturgeon 734S Substation. ATCO Electric confirmed its non-objection to connect the project to its distribution system. The Commission finds that TERIC has met the information requirements for a connection order.

4 Decision

16. Pursuant to sections 13.01(1), 18 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 29130-A001 and grants TERIC Power Ltd. the approval set out in Appendix 1 – Energy Storage Facility Approval 29130-D02-2024 to construct and operate the Sturgeon Battery Energy Storage System and Appendix 2 – Connection Order 29130-D03-2024 to connect the project to the distribution system of ATCO Electric Ltd.

17. The appendixes will be distributed separately.

Dated on October 23, 2024.

Alberta Utilities Commission

(original signed by)

Douglas A. Larder, KC
Vice-Chair

Appendix A – Summary of Commission conditions of approval in the decision

This section is intended to provide a summary of all conditions of approval specified in the decision for the convenience of readers. Conditions that require subsequent filings with the Commission will be tracked as directions in the AUC's eFiling System. In the event of any difference between the conditions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

The following are conditions of Decision 29130-D01-2024 that do not require a subsequent filing with the Commission:

- a. TERIC, and any subsequent operator, shall implement any ongoing upgrades to improve the safety of the project, including but not limited to firmware and software enhancements, monitoring capability enhancement, process changes and safety standards as they are developed.
- b. TERIC, and any subsequent operator, will continually update the site-specific emergency response plan, and incorporate input received from local fire departments, Municipal District of Greenview No. 16, and other interested stakeholders. The updated plans are to be provided to Municipal District of Greenview No. 16 and local fire departments.
- c. TERIC, and any subsequent operator, shall at all times during the construction and operation of the project, maintain insurance coverage that is sufficient to protect against any reasonably foreseeable liabilities.