

December 22, 2021

**RE: WaterCharger Battery Storage Project**

Dear Stakeholder,

TransAlta is pleased to inform you that we have published additional Project information including the following reports on the Project website at: <https://transalta.com/plants-operation/watercharger/>

- Environmental Evaluation
- Environmental Protection Plan
- Noise Impact Assessment

These reports will be submitted as part of our Facility Application to the Alberta Utilities Commission (AUC). TransAlta had originally planned to submit the Project application to the AUC in December 2021, however given some recent feedback and questions we have received from stakeholders, we have decided to delay the submission until January 2022 to allow for this additional information to be shared. As we have received recent questions related to the risk of battery fires, the risk of leaching or leaking from the batteries, noise concerns and the construction of power lines we are providing the following questions and answers for your review.

**There are documented cases of battery fires that have occurred at other locations, how is TransAlta taking the risk of fires into consideration with the development of the WaterCharger Project?**

Safety is paramount to TransAlta, its employees, and the communities in which we operate. Safety is a top priority in determining the type of battery, the manufacturer, the design of the facility, and our emergency response plans throughout the construction and operation of the facility.

Battery manufacturers have been very focused over the last few years on fire safety and incorporating lessons learned from past events. As a result of these continuous design improvements, battery facilities are considered quite inherently safe. The same lithium-ion battery technology proposed for this project is being deployed in millions of electric vehicles around the world and is proving a very safe track record given the recent advancements in battery chemistry and safety protocols. In the rare occurrence of a fire within a battery module, monitoring systems quickly detect and isolate the module from the rest of the system, preventing propagation within the facility, minimizing the gases released to atmosphere.

Battery manufacturers are required to adhere to strict safety codes and standards, including UL 1642 Standard for Lithium Batteries and UL 9450A Test Method for Fire Propagation in Battery Storage Systems. In addition, the facility will be designed to meet the National Fire Protection Association (NFPA) Standard for the Installation of Stationary Energy Storage Systems (NFPA 855).

TransAlta maintains Emergency Response Preparedness Plans and shares these with local authorities. TransAlta is reviewing the Emergency Response Plan (ERP) for the Ghost Hydro-electric site and we intend to incorporate Project specific details into the existing ERP, including vendor specific safety recommendations once the battery manufacturer has been selected. We are working with Rocky View County in the development of the ERP and will also include the County's specific requirements in the plan.

TransAlta's core values of safety, innovation, sustainability, respect and integrity guide the actions of our employees and our business decisions. Aligned with this approach, we see safety and stakeholder transparency as an integral part of battery storage development. TransAlta would not be investing in a facility that we felt had the potential to jeopardize any of our core values.

## **What about the risk of leaching or leaks from the batteries into the Bow River?**

TransAlta values the environmental significance of the Bow River and our operations comply to the highest environmental standards and regulations so there is no release of contaminants to any water body. Individual battery cells are fully sealed and further contained within the battery modules (sealed enclosures), minimizing the risk of a leak from the battery. TransAlta continues to engage with Alberta Environment and Parks through the development of the WaterCharger Project and we have prepared an *Environmental Evaluation Report* and an *Environmental Protection Plan* to be submitted as part of our Alberta Utilities Commission (AUC) Facility application. These reports provide an assessment of the potential environmental impacts as part of the Project approvals and they are available on our Project website for your review.

## **What about noise from the Project once it is operational, will noise affect neighbouring residents?**

As part of our AUC Facility application, a Noise Impact Assessment (NIA) has been completed and this report is available for review on our Project website. The NIA for the WaterCharger Project confirms that the Project is below the permissible sound levels per *AUC Rule 012: Noise Control*.

## **Is there a need for DC power lines or other power lines to be constructed as part of this project?**

The batteries are equipped with inverters that will alter the power from direct current (DC) power to alternating current (AC) power, therefore there is no need for DC power lines. One of the key factors TransAlta used to identify the WaterCharger site is the proximity to the existing capacity available on the power lines out of the existing substation, offering up to six different paths that power from this site can flow onto the connected electrical systems.

Our initial assessment indicates that no additional power lines are needed and the connection for the facility would be limited to modifications within the existing substation. However, given TransAlta is not a Transmission Facility Owner in this area, we are currently working with the Alberta Electric System Operator (AESO) to identify, study, and verify feasible transmission voltage connection options to connect WaterCharger to the Alberta Interconnected Electric System at, or adjacent to, the Ghost substation. It is expected that once the transmission system connection is determined, details will be shared with the public by the relevant Transmission Facility Operator for feedback.

Our team also remains available to you throughout the regulatory review process. If you have any questions about the Project please reach out to the Project team by phone at **1-888-893-8054** or by email at: [TransAltaWaterCharger@maskwaenv.com](mailto:TransAltaWaterCharger@maskwaenv.com) The Project website (<https://transalta.com/plants-operation/watercharger/>) will be maintained and remain available to you throughout the regulatory and construction phases of the Project where we will continue to provide regular Project updates.

We thank you for your feedback and remain committed to continuing to work with you as we progress with the Project.

Yours truly,

TransAlta Corporation



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