WindCharger Battery Storage Project

February 2019 Project Overview

Introduction

TransAlta Corporation ("TransAlta") is pleased to provide an update to our WindCharger Battery Storage Project (the "Project") – Alberta's first utility-scale lithium-ion battery storage facility prior to our submission of an Alberta Utilities Commission ("AUC") facilities application.

As a follow-up to our November 2018 project overview, we are pleased to provide you with this edition which outlines updates to the Project, including:

- Project Overview
- Technology Selection
- Final Project Footprint & Layout
- Alberta Environment and Parks Review
- Historical Resources Act Clearance
- Noise Impact Assessment
- Municipal Permitting
- AUC Application Process
- Alberta Transportation Review
- Project Schedule

This overview is being provided as part of TransAlta's ongoing stakeholder notification process. Our goal is to ensure that all stakeholder questions/comments and concerns are addressed to the best of our ability.

We welcome your feedback and look forward to hearing from you.

Laura Oosterbaan
Project Lead

Project Overview

The Project is located in the MD of Pincher Creek No. 9, approximately 13 km northeast of Pincher Creek on privately owned, previously disturbed land adjacent to the Summerview Wind Farm Substation.

The battery will utilize state-of-the-art Tesla technology and has a nameplate capacity of 10-megawatts with a storage capacity of 20-megawatt hours.

Electricity produced by wind turbines at TransAlta's nearby Summerview Wind Farm will charge the battery. The electricity stored within the battery will then be discharged into Alberta's electricity grid when needed.

This Project provides a means to address the variability of wind electricity generation, bolstering reliability without presenting the need to build more transmission infrastructure.

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Technology Selection

Following an internal technology review and negotiation process with several battery manufacturers, TransAlta selected Tesla as the preferred battery technology supplier for the WindCharger Battery Storage Project.

Tesla is a leader in the battery storage industry. For over 10 years, Tesla has been building battery systems for cars. Their expertise in car battery systems has informed their process for developing high-performance and reliable batteries for the grid.

Tesla's lithium-ion battery includes an internal liquid cooling and heating system which offers unparalleled safety, reliability and performance.

Final Project Footprint & Layout

The Project will cover a relatively small footprint on previously disturbed lands. The Project is located next to the Summerview Wind Farm Substation on the SW quarter of Sec. 30 Twp. 7 Rge. 28 W4M in the MD of Pincher Creek.

The batteries will be situated on pile foundations. For security, the facility will be contained within a 40m x 30m fenced area, using chain link fencing comparable in height and appearance to the current substation compound.

A copy of the Project layout is included in this overview.

Alberta Environment and Parks Review

TransAlta completed an environmental evaluation for the Project to identify potential effects and provide mitigation measures for the Project. The evaluation was shared with Alberta Environment and Parks ("AEP") for their review.

In December 2018, TransAlta received a letter from AEP-Wildlife Management Branch which summarized the potential risks to wildlife and wildlife habitat for the Project.

AEP concluded that the Project has been sited to avoid all wildlife features and determined that the WindCharger Battery Storage Project meets the requirements identified in the AEP Wildlife Management policy for the conservation and protection of wildlife and wildlife habitat.

A copy of AEP's letter will accompany our AUC application.

Historical Resources Act Clearance

Humans have inhabited this area for hundreds of years, and some reminders of the past survive as archaeological artifacts.

While the Project is sited next to the existing Summerview Wind Farm Substation on lands previously disturbed, TransAlta conducted a Historical Resource Assessment ("HRA") to ensure no historic resources would be impacted.

TransAlta submitted an HRA application to Alberta Culture and Tourism in November 2018 to obtain clearance for construction and was granted approval under the *Historical Resources Act* in January 2019.

A copy of the *Historical Resources Act* approval will accompany our AUC application.

Noise Impact Assessment

TransAlta conducted a Noise Impact Assessment ("NIA") in January 2019. The NIA evaluated the potential noise impacts taking into consideration any existing and proposed infrastructure in the area.

Given the Project has a very low noise profile, the NIA confirmed that the Project meets permissible sound levels as per AUC Rule 012: Noise Control.

A copy of the NIA results will accompany our AUC application.

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AUC Application Process

As Alberta's independent utilities regulator, the AUC regulates the utilities sector, natural gas, and electricity markets to protect social, economic and environmental interests of Alberta.

The AUC is also committed to ensuring that Albertans whose rights may be directly and adversely affected by a project have an opportunity to have their concerns heard, understood and considered.

As we prepare our AUC application for submission in March 2019, we recommend you review the enclosed AUC brochure which provides an overview of the application process.

If you have questions regarding this process, please contact the AUC at 780-427-4903 or email: consumer-relations@auc.ab.ca.

Municipal Permitting

In late 2018, TransAlta engaged planners from the MD of Pincher Creek to discuss permitting of the Project.

In February 2019, following an internal review, the MD of Pincher Creek determined that the Project was not subject to rezoning under the MD's Land Use Bylaw and that a Development Permit was not required under interpretation of the Municipal Government Act.

Alberta Transportation Review

Due to its proximity to Secondary Highway 785, TransAlta consulted with Alberta Transportation who reviewed the battery placement location and provided an approved Roadside Development Permit for the Project recommending a setback of 50m from the highway property line.

We have also used MD of Pincher Creek Land Use Bylaw Line of Sight guidance criteria for setbacks from an intersection in our siting.

Project Schedule

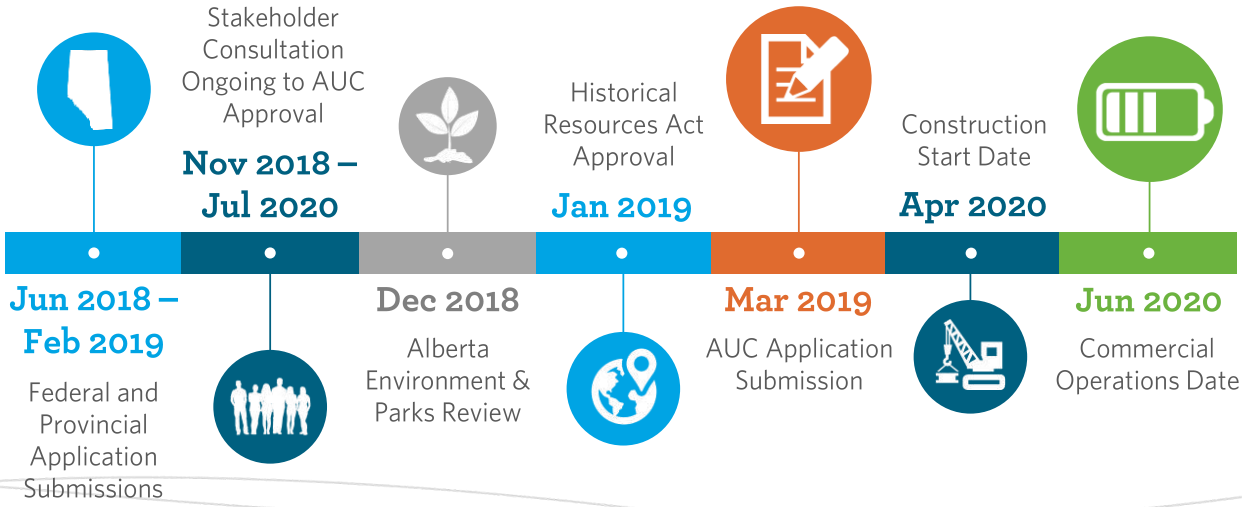
The updated Project schedule below shows key milestones of the Project leading up to commercial operations.

For more information about TransAlta or the WindCharger Battery Storage Project, please visit:

www.transalta.com

Toll Free: 1.877.547.3365 ext. 3

Email: projects@transalta.com



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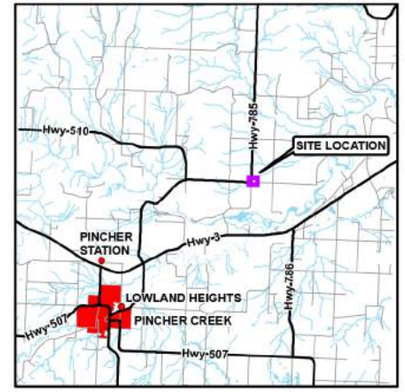

LOCATION

LEGEND

- Project Area
- Exisiting Summerview 354S Substation
- Soil Map Units
- Highway
- Local Road

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W E
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1:2,000
NAD 1983 UTM Zone 12N

20 10 0 20 40 60
m

DATE	LOCATION
FEBRURARY 2019	SW 1/4 SEC 30-7-28 W4M MD OF PINCHER CREEK

DESCRIPTION/TITLE

WINDCHARGER SITE LAYOUT

USE	SOURCE
FOR COORDINATION NOT FOR CONSTRUCTION USE	BING MAPS

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