

Power Plant Approval 25239-D02-2020

Appendix 1 to Decision 25239-D01-2020	April 8, 2020
TransAlta Corporation Alter Sundance Power Plant	Proceeding 25239 Application 25239-A001

TransAlta Corporation, pursuant to Approval 23807-D02-2018,¹ has approval to alter and operate a power plant designated as the Sundance Power Plant, in the Wabamun Lake area. Specifically, TransAlta has approval to convert units 3 to 6 from coal-fuelled to natural gas-fuelled.

TransAlta, by Application 25239-A001 registered December 20, 2019, applied to the Alberta Utilities Commission for approval to alter and operate the power plant by converting the simple-cycle natural gas-fuelled Sundance Unit 5 to a combined-cycle natural gas-fuelled unit.

The Commission, pursuant to sections 11 and 19 of the *Hydro and Electric Energy Act*, approved the application in Decision 25239-D01-2020,² and granted an approval to TransAlta to alter and operate the power plant, subject to the provisions of the *Hydro and Electric Energy Act* and the *Alberta Utilities Commission Act*, any regulations made under the acts, any orders made under the acts, the Commission rules made pursuant to the *Alberta Utilities Commission Act*, and the following terms and conditions:

1. The power plant shall be located in the northwest quarter of Section 20, Township 52, Range 4, west of the Fifth Meridian, on the south shore of Wabamun Lake.
2. The power plant shall consist of four natural gas-fired electric generating units, namely:
 - a. Unit 3 – 390 megawatts (MW)
 - b. Unit 4 – 435 MW
 - c. Unit 5 – 742 MW
 - d. Unit 6 – 433 MW

for a total generating capability of 2,000 MW. Unit 1 is a 300-MW generating unit that ceased operations effective December 31, 2017. Unit 2 is a 300-MW generating unit that ceased operations effective July 31, 2018.

¹ Power Plant Approval 23807-D02-2018, Proceeding 23807, Application 23807-A001, December 21, 2018.

² Decision 25239-D01-2020: TransAlta Corporation – Sundance Power Plant Repowering, Proceeding 25239, Application 25239-A001, April 8, 2020.

3. The following is a condition of Decision 25239-D01-2020:
 - a. Once TransAlta has made its final selection of equipment for the Sundance Unit 5 project, it must file a letter with the Commission that identifies the make and model of the generating units. In this letter, TransAlta must also confirm that the project will not increase the land, noise, or environmental impacts beyond those reflected in the materials submitted by TransAlta in its application and approved by the Commission. The letter is to be filed no later than 30 days before construction of the project would commence.
4. The power plant shall be provided with cooling facilities for the power plant's circulating cooling water system that operates independent of Wabamun Lake. These facilities shall include a 740-hectare cooling pond, a 12-cell mechanical draft wet cooling tower, and 30 water spray modules located in the circulating cooling water discharge canal.
5. The cooling pond shall be located in sections, or portions of sections, 3, 4, 8, 9, 10, 16, 17, 20, 21 and 29, all in Township 52, Range 4, west of the Fifth Meridian.
6. Existing coal burning and handling equipment will be retired, cleaned, and stored in place following the conversions. Ash handling equipment associated with ash production will be retired, cleaned and stored in place following the conversions. All such equipment will be decommissioned when the power plant is decommissioned.
7. TransAlta shall notify the Commission within 30 days of completing the alterations to the power plant.
8. Unless otherwise authorized by the Commission, the alterations to Unit 5 shall be completed by January 31, 2024.
9. Unless otherwise authorized by the Commission, the alterations to units 3, 4 and 6 shall be completed by December 31, 2025.
10. Units 3 to 6 may be operated as coal-fuelled units until alterations are complete.
11. TransAlta shall obtain Commission approval prior to making any material changes to the power plant or substantially varying the design and/or specifications of the power plant from what was stated in the application or from what the Commission has approved.
12. This approval is not transferable unless approved by the Commission.

Approval 23807-D02-2018 is rescinded.

The Commission may cancel or suspend this approval, in whole or in part, in accordance with Section 41 of the *Hydro and Electric Energy Act* or may review this approval, in whole or in part, upon its own motion or upon an application by an interested party, in accordance with Section 10 of the *Alberta Utilities Commission Act*.

The Commission may, within 30 days of the date of this approval and without notice, correct typographical, spelling and calculation errors and other similar types of errors and post the corrected approval on its website.

Alberta Utilities Commission

(original signed by)

Neil Jamieson
Commission Member