



TransAlta Corporation

Pinnacle 1 & 2 Peaking Thermal Electric Power Project

February 2, 2024

Alberta Utilities Commission

Decision 28464-D01-2024

TransAlta Corporation

Pinnacle 1 & 2 Peaking Thermal Electric Power Project

Proceeding 28464

Application 28464-A001

February 2, 2024

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1 Decision summary

1. In this decision, the Alberta Utilities Commission approves an application from TransAlta Corporation to construct and operate a power plant project, which consists of a 44-megawatt (MW) thermal power plant and an associated substation.

2 Introduction and background

2. TransAlta Corporation owns and operates the Keephills Generating Station (KGS), which is located in Parkland County, approximately 60 kilometres (km) west of Edmonton and five km south of Wabamun Lake. TransAlta has applied for approval of a 44-MW natural gas-fired power plant and an associated substation (the project), both located within the existing fenceline of the KGS site.

3. The Commission issued a notice of application and received statements of intent to participate from the Committee on Keephills Environment (COKE) and from the Lac Ste. Anne Métis Community Association (LSAMCA).

4. In its submission, LSAMCA requested that TransAlta revise its participant involvement program (PIP) to reflect certain specific corrections related to TransAlta's characterizations of its interactions with LSAMCA. LSAMCA indicated that if TransAlta voluntarily made the revisions, LSAMCA did not intend to participate in this proceeding. On November 27, 2023, TransAlta revised its PIP, as requested by LSAMCA. On December 5, 2023, COKE informed the Commission that its concerns regarding the project had been addressed. As the concerns from COKE and LSAMCA have been addressed, the Commission proceeded to make a decision on the application.

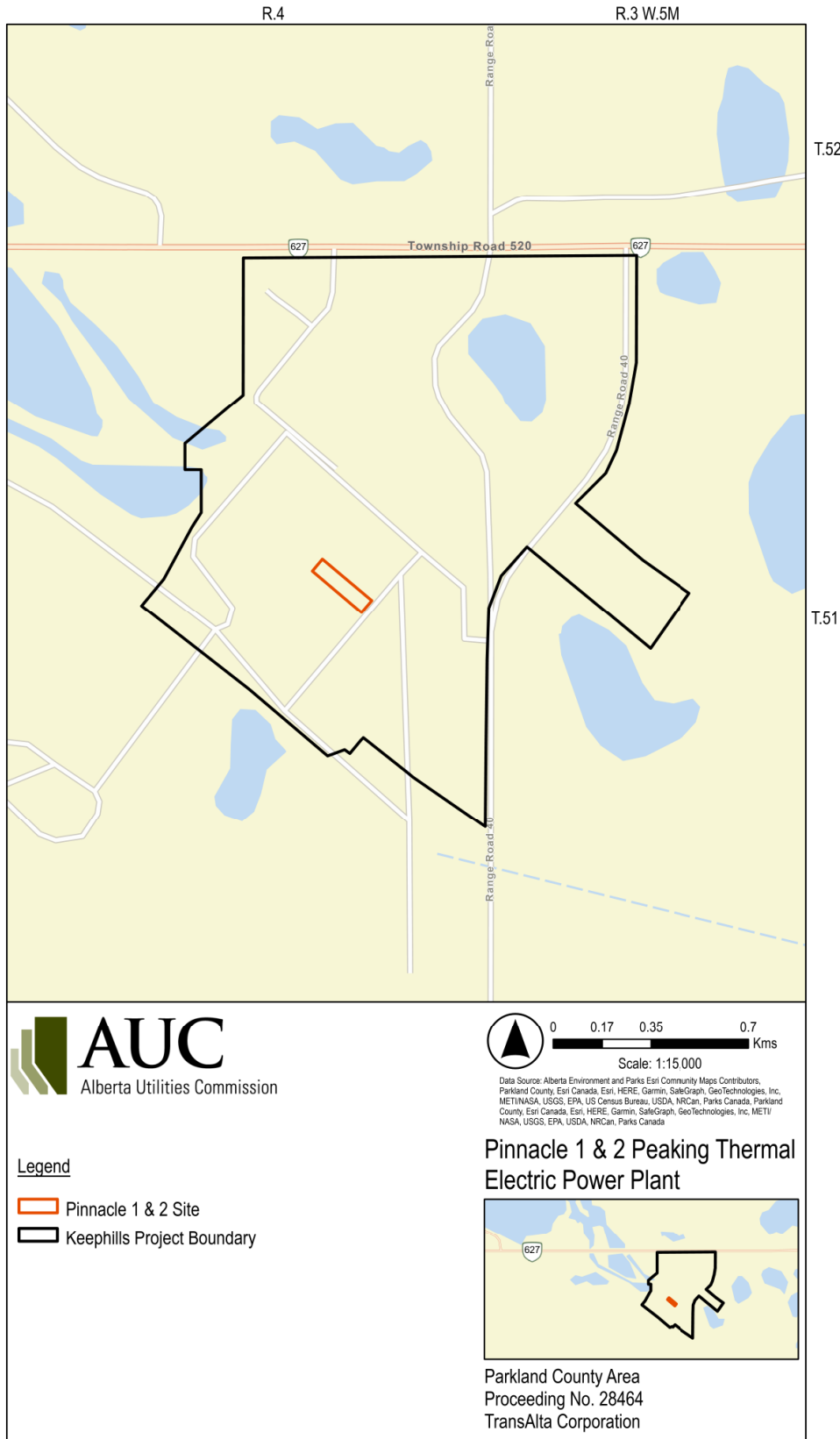
3 Application

5. The project is located within the fenceline of the existing KGS, in Parkland County, as shown on the map in Figure 1.

6. The proposed thermal power plant consists of two 22-MW units, Pinnacle 1 and 2, each consisting of two 11-MW generating units. TransAlta described these as “peaker” units, which would operate on an as-needed basis during peak electricity demand periods and are expected to operate approximately 20 per cent of the time on an annual average basis.

7. The proposed substation consists of two 18/24/30-megavolt ampere generator step-up transformers. TransAlta stated that the Alberta Electric System Operator (AESO) has not yet confirmed the electric facility ID for the substation and that it would file an update with the Commission once the facility ID becomes available.
8. TransAlta's application and supplemental information included:
 - a. A participant involvement program.
 - b. A noise impact assessment (NIA), completed by WSP Canada Inc., which predicted that the project would comply with Rule 012: *Noise Control*.
 - c. An air quality assessment report, completed by WSP Canada Inc., which evaluated the potential change in air emission of nitrogen oxides (NOx), fine particulate matter (PM2.5), carbon monoxide (CO) and ammonia (NH3) and stated that the project will meet the *Alberta Ambient Air Quality Objectives*.
 - d. Responses to the Commission's interim Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines* information requirements.
9. TransAlta expects the project to be in-service by the fourth quarter of 2025, with construction starting in the second quarter of 2024.

Figure 1. Proposed Pinnacle 1 & 2 Peaking Thermal Electric Power Project location



4 Is approval of the power plant and the substation in the public interest?

10. For the reasons outlined below, the Commission finds that approval of the project is in the public interest having regard to the social, economic, and other effects of the project, including its effect on the environment.

11. The Commission has reviewed the application and has determined that the information requirements specified in Rule 007 have been met. The Commission also finds that the PIP complies with the requirements of Rule 007 and, given that the concerns from COKE and LSAMCA have been addressed, there are no known concerns with the project.

12. The project's NIA identified one dwelling, R02, located approximately 2.6 km from the centre of the KGS, as the closest and most affected receptor. The NIA considered two assessment cases, the baseline case¹ and the application case.² The NIA concluded that the cumulative sound levels at receptor R02 meet the Rule 012 permissible sound limits (PSLs) by a minimum margin of one A-weighted decibel (dBA) during the nighttime periods and by at least four dBA during the daytime periods in the baseline case and zero dBA during the nighttime periods and by at least four dBA during the daytime periods in the application case. The Commission accepts the conclusion that the project will comply with Rule 012.

13. The Commission is satisfied that, given the power plant is situated within an existing gas plant on pre-disturbed land, there will be no incremental adverse effects on the environment. TransAlta confirmed that it will continue to follow the existing environmental management plans and monitoring programs at the KGS site. The Commission accepts TransAlta's submission that there is limited potential for adverse environmental effects as the project will be constructed and operated on existing brownfield disturbance at the KGS site, and is satisfied that TransAlta's existing environmental compliance requirements, including the environmental management plans and monitoring programs, are appropriate mitigation to address the project's limited potential for adverse environmental effects. The Commission also accepts the findings of the air dispersion modelling assessment that air emissions will comply with the *Alberta Ambient Air Quality Objectives* and the *Alberta Ambient Air Quality Guidelines*.

14. TransAlta submitted that the project's effects on agricultural land are minimal, as it will be located within the current KGS plant boundary and as it will not significantly impact soil quality or hydrology beyond what has already occurred at the KGS site. Given the existing disturbance within and surrounding the project site, the Commission accepts that the project's impact on agricultural land is likely to be minimal.

15. TransAlta submitted that the project area will be reclaimed as part of the overall decommissioning and reclamation of the KGS. TransAlta also stated that it maintains an asset retirement obligation (ARO) for all its assets, which includes this project and that the ARO ensures that the necessary funds are set aside to meet reclamation requirements, similar to a financial provision on their balance sheet. The Commission is satisfied that TransAlta's approach

¹ Baseline case consists of cumulative noise levels associated with natural sources, non-industrial sources, industrial facilities that are not regulated by the AUC or Alberta Energy Regulator (AER), and existing, approved, and proposed industrial facilities that are regulated by the AUC or AER.

² Application case consists of cumulative noise levels associated with the baseline case in combination with the predicted noise contribution from the project.

to reclamation costs is sufficient to address its reclamation responsibilities at the project's end of life.

16. Based on the foregoing, the Commission finds that the project is in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

17. Because the AESO has not yet assigned the substation a name and electric facility ID, the Commission imposes the following, proposed by TransAlta, as a condition of the substation's approval:

- a. TransAlta shall submit confirmation of the substation name and electric facility ID once those have been assigned by the independent system operator. The permit and licence for the substation will be issued once written confirmation of the substation name and electric facility ID has been filed with the Commission.

5 Decision

18. Under sections 11 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 28464-A001 and grants TransAlta Corporation the approval set out in Appendix 1 – Power Plant Approval 28464-D02-2024 to construct and operate Pinnacle 1 & 2 Peaking Thermal Electric Power Project.

19. The Commission will issue the permit and licence for the substation once written confirmation of the substation's name and electric facility ID have been filed with the Commission.

Dated on February 2, 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 is a condition of Decision 28464-D01-2024 that requires a subsequent filing with the Commission:

- a. TransAlta shall submit confirmation of the substation name and electric facility ID once those have been assigned by the independent system operator. The permit and licence for the substation will be issued once written confirmation of the substation name and electric facility ID has been filed with the Commission.