Repowering Projects Summary

The Repowering Projects (the “Project”) refers to the construction of a new combined cycle power plant at Sundance Unit 5 and Keephills Unit 1. The Project is a hybrid solution consisting of new combustion turbine generators and heat recovery steam generators that will be integrated into the existing infrastructure at each plant to produce electricity and steam.

The Project will create highly efficient combined-cycle, natural-gas units at each plant site that will have higher gross electricity output with lower emissions' intensities compared to the approved configurations of Sundance 5 and Keephills 1 that they will be replacing. The Project is designed to provide the ability to ramp up more quickly and with more flexibility to respond to electricity market needs, in order to deliver the lowest cost per megawatt (MW) possible for Albertans.

Regulatory Update

On December 20, 2019, TransAlta submitted amendment applications to the Alberta Utilities Commission (AUC) and Alberta Environment and Parks for the Project. The AUC issued public notice of TransAlta's applications to repower assets at the Sundance and Keephills power plants on January 16, 2020, assigning Proceeding 25239 and 25240 for these applications. The applications and any associated documents are publicly available and can be accessed from the eFiling System on the AUC website - [www.auc.ab.ca](http://www.auc.ab.ca) or directly from TransAlta by emailing: repowering@transalta.com.
**Kineticor Acquisition**

On October 30, 2019, TransAlta announced the purchase of two 230-MW gas turbines and related equipment from Kineticor Holdings Limited Partnership #2 located at the Three Creeks site northeast of Peace River, Alberta. These assets will be redeployed to the Sundance plant site to repower Sundance 5. This acquisition will reduce the time to design and construct the repowered combined-cycle unit by three to six months and increases the generating capacity of Sundance 5 to approximately 730 MW based on annual average, ambient conditions.

The new design and configuration for repowering Sundance 5 will consist of two gas turbines, two heat recovery steam generators and the existing steam turbine. The repowered facility built at Sundance will be located on the southwest side of the Sundance power plant as shown in the 3-D architectural drawing below.
Questions and Answers

Does TransAlta intend to proceed with the repowering of Keephills 1?

Keephills 1 is part of the Repowering Projects and our amendment applications to the Alberta Utilities Commission (AUC) and Alberta Environment & Parks. TransAlta intends to maintain the option to repower the Keephills 1 unit to a combined cycle unit or to convert the unit to gas via a boiler conversion, depending in each case on market fundamentals.

Will two gas-turbines and two heat recovery steam generators increase the noise output compared with one at Sundance 5?

It is expected that there will be additional noise with the installation of more equipment. The gas turbine generators are smaller than the gas turbine generator considered under our original design. The noise impact assessment submitted as part of our AUC application included the new configuration for Sundance 5 and demonstrated compliance with the noise requirements specified by the AUC.

What is the expected construction date for the Repowering Sundance 5 project?

Construction is anticipated to begin in 2021 after approvals are received and commercial operation is scheduled for 2023.

Questions? Comments? Contact us:

If you have any questions about the Repowering Projects, please contact us at:

Email: repowering@transalta.com
Toll-free: 1-877-636-7822
For more project information, please visit:
https://www.transalta.com

TransAlta is committed to protecting your privacy. Collected personal information will be protected under the Freedom of Information and Protection of Privacy Act. As part of the regulatory permitting process, TransAlta may provide your personal information to provincial regulators and public responses may be reported in our regulatory application, which becomes part of the public record. Personal information we collect may be used to contact you in the future.