



Coal to Gas Conversions Project Parkland County Council, May 22

TransAlta™ *CLEAN POWER
TODAY AND TOMORROW*





RENEWABLES

CANADA'S
LEADING CLEAN
POWER GENERATOR
and growing.

- Canada's largest producer of wind energy
- Largest hydro energy producer in Alberta



Accelerating the transition to clean energy

Coal to Gas Transition Plans

TransAlta plans to accelerate the conversion of our coal-fired generating units to gas-fired in support of recent Provincial and Federal policy announcements.

Coal Phase Out

- Alberta – Climate Leadership Plan requires coal emissions to be eliminated by 2030
- Canada – Regulations to eliminate coal use by end of 2029

Carbon Price

- Alberta – Climate Leadership Plan implemented a \$30 price on carbon with specific Output Based Allocations for the electricity sector
- Canada – Require all provinces to implement a carbon price

Coal to Gas Regulations

- Alberta – CASA regulations have been updated to include provisions for coal to gas conversions
- Canada – Establishing new regulations under the Federal Natural Gas regulations to include requirements for coal to gas conversions

The Project will significantly reduce air emissions from both power plants:

A Cleaner Future

- Sulphur dioxide reduced to negligible levels
- Particulate matter reduced to negligible levels
- Mercury emissions reduced to negligible levels
- Nitrogen oxides reduced (meeting new CASA guidelines)
- Greenhouse gas emissions reduced by 30 to 45 per cent



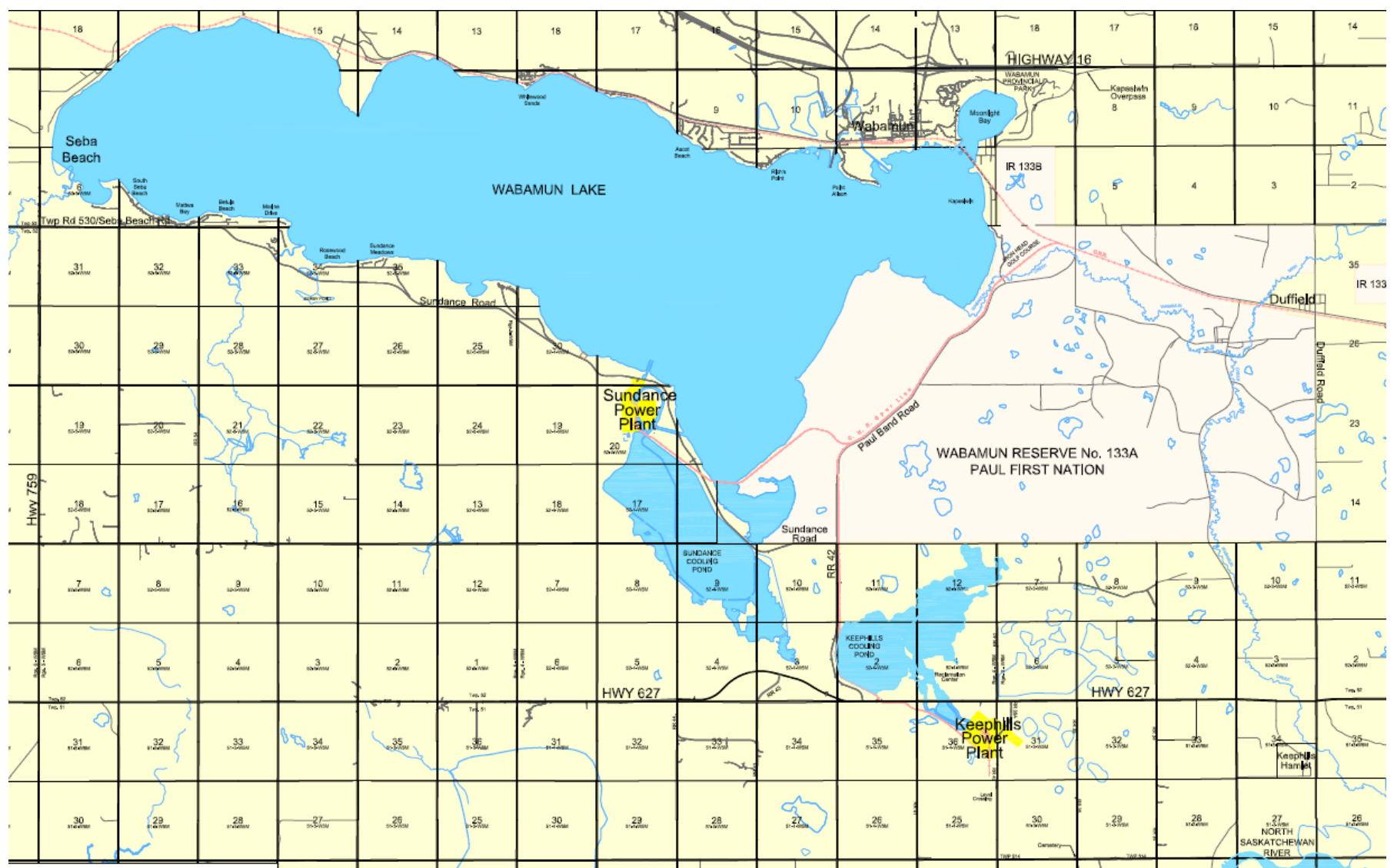
Conversions at our Sundance and Keephills power plants



Convert up to seven of our coal-fired generating units to natural gas at the Keephills (units 1 - 3) and Sundance (units 3 – 6) power plants

- Preparatory work to start in 2019; unit conversions as early as 2020.
- The Project will help us achieve provincial and federal emission targets while using existing plant sites that power the province.

Site Locations



Scope of Coal-to-Gas Conversions

- Each unit boiler will be retrofitted with new burners and combustion air equipment to allow for the burning of 100% natural gas
- Control systems will be upgraded to be compatible with continuous natural gas operation
- New equipment will be installed including: natural-gas burners, igniters, scanners, piping and valves.
- Existing coal-handling equipment will be retired, cleaned, and stored in place
- Once converted, the units will operate exclusively on natural gas



Project overview

- Today, we are preparing our applications, engaging with the public, conducting environmental studies and working on front-end engineering and design.
- Amendment applications filed to Alberta Utilities Commission & Alberta Environment & Parks – Summer 2018.

Application Development ✓ Public engagement ✓ Environmental studies ✓ Engineering / Design	Submit Application	Regulatory Review ✓ Review of application ✓ Information requests ✓ Stakeholder participation	Approval Issued	Equipment Acquisition ✓ Order, fabrication and delivery of required equipment	Equipment Arrives	Construction ✓ Preparatory work ✓ Install and modify equipment	Conversion
Q1 - Q2 2018		Q3 2018 - Q1 2019		2018 - 2019		2019 - 2022	

Timing of Conversions

- We intend to convert the units one at a time over a three year period, starting as early as 2020 (pending regulatory approval)
- Conversions would occur during a ~60 day planned outage on each unit
- The order of unit conversions and final timing will be determined by asset conditions and commercial considerations

	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1/2	2019 Q3/4	2020	2021	2022
Pubic Engagement									
Environmental Studies									
Submit Regulatory Applications									
Regulatory Review									
Unit Conversions / Construction (pending regulatory & Board of Director approvals)									

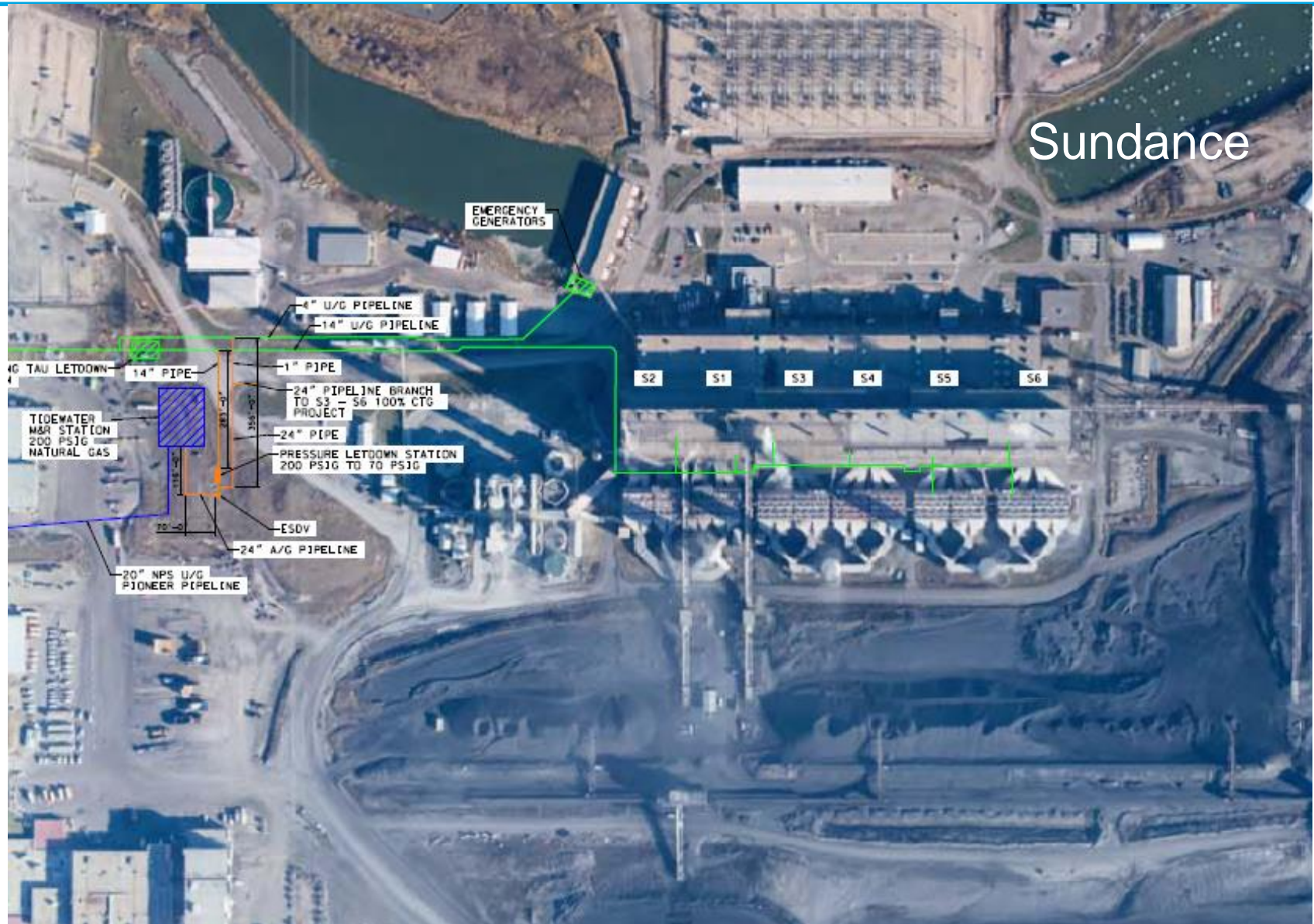


Preparatory Work



NG Conversion

Sundance Site Pressure Letdown Stations & Natural Gas Piping Additions



Keephills Site Pressure Letdown Stations & Natural Gas Piping Additions



Public Open House

Public Open House

To learn more about the project and to provide your feedback,
please join us at our community open house:

Wednesday, May 30, 2018 4:30 – 8:00 p.m.

Keephills Community Hall
51515 Range Road 32A
Parkland County, Alberta

All are welcome to attend. Light refreshments will be served.

Questions? Comments?



Contact us:

Email:
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Call: **1-855-339-3052**

Website:
www.transalta.com/coal-to-gas



Question and Answer

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