

PA4 & B4P 138 kV TRANSMISSION LINE UPGRADE PROJECT

CONSTRUCTION UPDATE

JANUARY 2018



ABOUT SASKPOWER



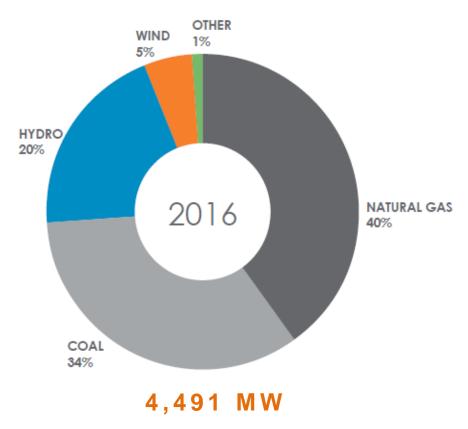
OVER 528,000 CUSTOMERS

3,747 MW
NEW PEAK
LOAD (2017)
ALSO NEW
SUMMER PEAK
AT 3,470 MW

158,000 KM OF POWER LINES

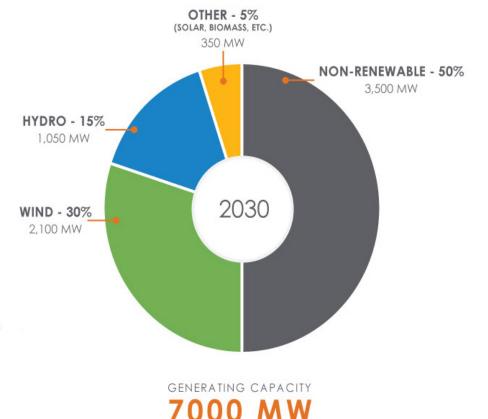
MORE POWER POLES (1.25 M) THAN PEOPLE!

OUR MISSION: Ensuring reliable, sustainable, cost-effective power for our customers and the communities we serve.



2030 SNAPSHOT







7000 MW

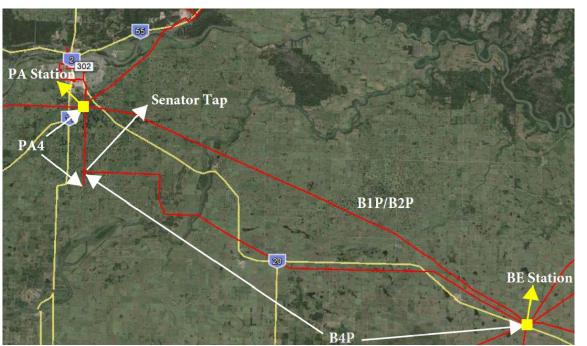
ADDING ABOUT 2,200 MW TO OUR GENERATION MIX

ADDING MORE POWER LINES TO DELIVER ELECTRICITY TO **OUR CUSTOMERS**

PROJECT NEED



- SaskPower is investing in the province's electricity system to ensure we have the infrastructure in place to meet the growing need for reliable, sustainable and costeffective power in Saskatchewan.
- As part of this investment, SaskPower has initiated a project to rebuild two aging power lines that service Prince Albert and area:
 - The PA4 line connects the Prince Albert Switching Station just south of the city and east of the Number 2 Highway, to the Senator Substation 10 kilometers (km) south from there.



- The B4P line serves the Senator Station through a tap off the B2P line at the Beatty Switching Station. B4P is approximately 65 km in length.
- PA4/B4P serve as a backup to the Prince Albert Station should anything disrupt service over the B1P/B2P line.

ABOUT THE PROJECT



- Rebuild PA4 (~10 km) and the B4P line (~65 km) prolonging the life of the lines for at least another thirty years and adding backup for PA and area.
- Current wood H-Frame structures will be replaced with weathering steel. New structures will be slightly wider and taller. The size of conductor will be upgraded to accommodate higher load and add reliability. Shield wire will be added to protect the conductor.
- The majority of construction will take place within the existing right-of-way in order to minimize the impact on the environment, agricultural operations, and residents in the area.
- In situations where operations and maintenance are compromised by a change in landscape since the original construction (ex. new or larger waterbody), structure placement has been altered and new easement may be required.
- The estimated project cost is approximately \$30 million.





PROJECT SCHEDULE

PA4 Re-route Design

Consult with RM of PA

Easement Acquisition

PA4 Construction

B4P Construction

Ready to Energize

Dec 2016

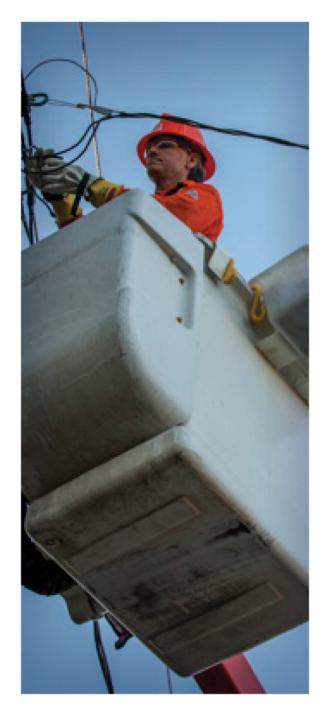
Jan 2017

Jan 2018

Begins Jan 2018

Begins Nov 2018

Q1 2020





PA4 CONSTRUCTION SCHEDULE

Staking/ Surveying

Contractor Mobilized

Structure Work

Stringing Work

PA4 Closing Activities

Ready to Energize

Jan 8, 2018

Jan 15, 2018

Jan/Feb 2018

Feb/March 2018

March 2018

May 2018



Old: Single-Circuit
Wood H-Frame
Tangent Structure



New: 138 kV Single-Circuit Weathering Steel H-Frame Tangent Structure





138 KV MINIMUM CLEARANCE OF CONDUCTOR

Over Highway 7.80 metres (25.6 feet)

Over Farmland 7.50 metres (24.6 feet)

Over High load Corridors 10.65 metres (34.9 feet)

Over Railways 8.70 metres (28.5 feet)

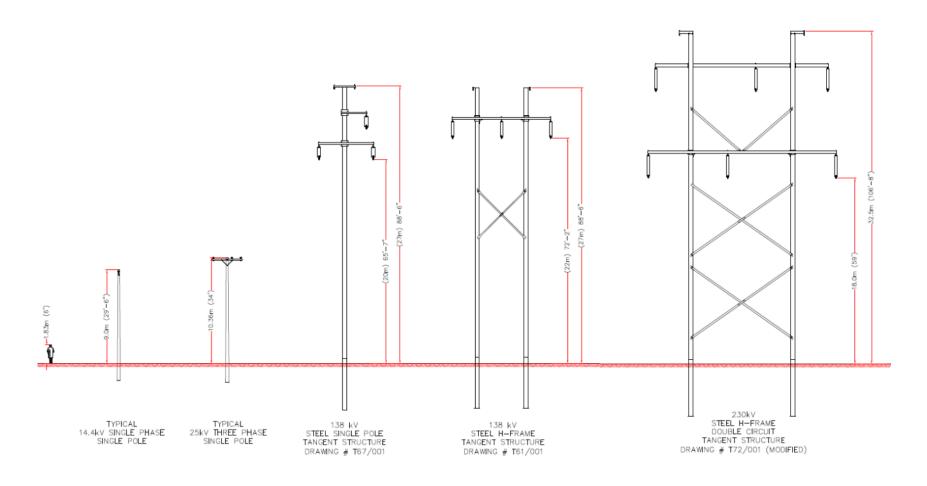
TYPICAL 138 KV RIGHT-OF-WAY WIDTH

Single-Pole Right-of-Way 20 metres (65.6 feet)

Two-Pole H-Frame Right-of-Way 35 metres (114.8 feet)



SIZE COMPARISON OF DISTRIBUTION & TRANSMISSION LINES





QUESTIONS?

Call: 1-855-566-2903 or

Email: PublicConsultation@SaskPower.com

