

Birtle to Tantallon

230 kV Transmission Line Project

October 2016

PROJECT NEED

SaskPower continues to invest in the province's electricity system to ensure we have the infrastructure in place to meet the growing need for reliable, sustainable and cost-effective power in Saskatchewan.

As part of this investment, SaskPower is increasing the amount of its renewable capacity to meet new and emerging emissions regulations through importing 100 megawatts (MW) of renewable baseload hydropower from Manitoba Hydro.

PROJECT DESCRIPTION

In order to transmit the power from Manitoba to Saskatchewan, SaskPower is proposing to build a 230 kilovolt (kV) transmission line to meet Manitoba Hydro at the border. The line will run from Manitoba Hydro's Birtle Station – 5 kilometres (km) south of Birtle, MB, to SaskPower's Tantallon Switching Station – 6 km north of Tantallon, SK.

Total estimated length of the new line will depend on the final alignments chosen in each province; estimated length of the Saskatchewan portion line varies between 25 – 35 km, depending on the route alternative.

SaskPower and Manitoba Hydro evaluated potential "tie point zones" along the provincial border and ultimately agreed on two (2) zones. Seven route alternatives have been identified for SaskPower's first round of public consultation, with multiple alternatives ending at each of the two tie point zones.

ROUTE SELECTION CRITERIA

In developing route options, SaskPower works to:

- comply with environmental, safety, and all other applicable regulations;
- minimize agricultural environmental, social, and other impacts (such as land use);
- minimize economic impacts (construction cost, maintenance, and operations); and
- construct on favourable topography and foundation conditions.

PROJECT SCHEDULE

Border Tie Point Selection	May – July 2016
Alternative Route Selection	Jul – Oct 2016
1 st Round of Consultation	Oct 2016
Preferred Route Selection	Nov 2016 – Jan 2017
Round 2- Public Consultation	Jan – Mar 2017
Environmental Field Studies	Mar – Oct 2017
Transmission Line Design	Mar 2017 – May 2018
Easement Acquisition	May 2018 – Jul 2018
Construction	2018 - 2020
Energization	2020 - 2021

Consultations are currently underway and landowners and members of the general public are encouraged to provide their comments and suggestions on the proposed transmission line project. The comments and other inputs SaskPower receives are taken into consideration when making final decisions on the project.

For additional information on this project, please contact SaskPower's Stakeholder Engagement department by email at publicconsultation@saskpower.com or by telephone at 1-855-566-2903.

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STRUCTURE DESIGN

230 kV single-circuit steel H-frame structures will be used for this project.

Standard Right-of-Way Width: 40 m (131 feet)

Pole Spacing: ~6.6 m (22 feet)

Structure Height: ~19 – 27 m (62 – 89 feet)

Average Span: ~300 m (985 feet)

Deflection Structures: Guy-anchored

230 kV MINIMUM CLEARANCE OF CONDUCTOR

Over farmland: 8.10 metres (26.6 feet)

Over highways: 8.40 metres (27.6 feet)

Over railways: 9.30 metres (30.5 feet)

POTENTIAL STRUCTURE TYPES



230 kV Single-Circuit
Galvanized Steel
H-Frame Structure



230 kV Single-Circuit
Tubular Steel
H-Frame Structure

POTENTIAL ROUTE ALTERNATIVES

