

# MORE INFORMATION ABOUT

## Lloydminster to Spruce Lake Project

### HIGH VOLTAGE (138KV) TRANSMISSION LINE

- The first segment of the power line will originate at the existing Lloydminster Switching Station, cross the North Saskatchewan River and connect to the new Paradise Hill Substation.
- The second segment of line will go east from the new Paradise Hill Substation and replacing the existing 72 kV GL6 transmission line to upgrade to 138 kV service.
- The third segment of line will tap off of the second segment (GL6) and go north to connect to the new Spruce Lake Substation.
- The total length of new line will be approximately 76 km.
- The first and third segments of line are planned to be constructed with H-frame structures.
- Lattice tower structures will be used on either side of the North Saskatchewan River crossing to span the approximately 1400 m distance.
- The majority of the second segment of line will use single pole structures within the south road allowance of Township Road 520.
- H-frame and tap structures are planned to be used where the third segment of line taps the second segment.
- Two line switches are planned to be installed on the second segment of line. One switch will be located east of the new Paradise Hill Substation and the other switch will be located east of the tap point for the third segment of line.

### PROJECT SCHEDULE:

Route selection	Nov 2016 - Feb 2017
First round of consultation	March 2017
Preferred route selection	April- May 2017
Second round of consultation	June 2017
Geotechnical study of river crossing	July - August 2017
Environmental field studies	July 2017 - Sept 2018
Submission to Ministry of Environment	October 2018
Engineering design	July 2017- Dec 2018
Easement acquisition	Sept 2018 - Dec 2018
Construction	Dec 2018 - Dec 2019
Energization	Early 2020

### SUBSTATIONS

- SaskPower is planning to construct two new substations as part of this project.
- The new Paradise Hill Substation will be constructed directly south of the existing substation location approximately 10 km south of the Village of Paradise Hill.
- A site has been purchased for the Spruce Lake Substation northeast of the Hamlet of Spruce Lake.
- The existing Paradise Hill and Bolney Substations will be salvaged.

### PROJECT SCHEDULE:

Site selection	Dec 2016 –Nov 2017
Site design	Jan 2017 - September 2018
Lloydminster Switching Station construction	July 2018 - April 2019
Paradise Hill Substation construction	July 2018 - April 2019
Spruce Lake Substation construction	Oct 2018 - December 2019
Energization Paradise Hill Substation	Mid 2019
Energization Spruce Lake Substation	Early 2020

# MORE INFORMATION ABOUT Lloydminster to Spruce Lake Project

## LOWER VOLTAGE POWER LINES

- SaskPower will construct new 25 kV distribution lines (feeders) from the Paradise Hill and Spruce Lake Substations.
- The total length of new distribution lines will be approximately 100 km.
- Either single circuit or double circuit single poles may be used for the new distribution lines.
- The distribution structures are planned to be located 0.5 m into the road allowance.