Meadow Lake Area Reinforcement Project
Q and As

Why is SaskPower building these power lines and switching station in our area?

We need the new facilities to improve power reliability in the Meadow Lake, Glaslyn and Spruce Lake areas. The project will also support future area growth and power supply needs. Currently there's only one transmission line that supplies all customers to the northwest of Glaslyn, and one line that supplies the Meadow Lake Mechanical Pulp and Tolko Industries mills near Meadow Lake. This means the current system does not have a backup in the event of an outage. With the new lines and switching station, we'll have backup options. These new facilities will allow us to continue to provide reliable power to all customers in the area.

What if SaskPower doesn't build the lines and switching station – what would that mean for the area?

The new lines and station will help us restore power faster in the event of an outage in the area. Without a backup, if the other line serving the area experienced an equipment failure or was damaged (e.g. due to a weather event) it could result in a long outage to our customers in urban and remote communities until our team can complete repairs.

Will the new lines affect my health or the health of my livestock?

Short answer, no. International health agencies, such as Health Canada, and a large number of independent scientific bodies have been unable to establish any associated health risks from exposure to extremely low frequency electric and magnetic fields (EMF).

Extremely low frequency electric and magnetic fields (EMFs) are around us every day. They're found wherever we use electricity – whether that's a television, a computer, a hair dryer, cell phones, Wi-Fi, a power line or a smart meter. Most of our daily exposure comes from appliances that are a regular part of our lives. SaskPower's equipment makes up a small amount of the EMFs we encounter every day.

We design and operate our electrical generation, transmission and distribution systems to comply with recognized standards, including maintaining safe distances from habitable residences, and we provide EMF estimates for proposed electrical facilities. This ensures that we comply and cooperate with regulatory agencies established at both the provincial and federal levels.

SaskPower customers are welcome to request an EMF reading around residential, commercial and public buildings.

How many lines are you building and how much space is needed for the new lines?

We're building two kinds of power lines – two 138-kilovolt (kV) lines and one 230-kV line. For each, we developed route options that were presented to the public for feedback. Only one of those options (or a combination) will be built for each of the lines. Those final routes will be decided and communicated to the public before the end of 2023. We will need a 35-metre-wide easement for the 138 kV lines and 40-metre-wide easement for the 230 kV line. For planning purposes, the route options are temporarily shown on the map as 300 metres wide.

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Q and As

Do you already know which routes you will chose for the new lines?

We won't have a decision until November 2023. Stakeholder and rightsholder participation are an important part of our planning process, and we want to hear many perspectives on the route options. Providing your input early means your knowledge and concerns can be considered before decisions are made. As time goes on, there's less flexibility to work with feedback. By November/December 2023, we'll come back out again with a decision on where the new lines will go.

Can I still provide feedback to SaskPower?

Yes! We welcome feedback from all stakeholders. And we want to hear your concerns before we make big decisions. Some of the ways you can share your comments include attending our public engagement events, completing a survey on www.saskpower.com/meadowlakeproject. You can also contact us at:

- 1-833-223-3370
- PublicEngagement@saskpower.com
- IndigenousRelations@saskpower.com

Why do I sometimes hear humming near a power line?

Sometimes you can hear low-level noise when driving or walking near a high voltage power line. Electric fields can sometimes become concentrated around a transmission line and create a small discharge. This type of discharge is called a corona and it ionizes the air around the conductor wire. Conductor voltage, shape and diameter as well as scratches, dust and water on the wire can affect the creation of coronas. When a corona forms, there can be audible noise coming from the transmission line. Because corona can contribute to energy losses, transmission lines are designed so that, normally, they do not produce corona. The existing switching station in Meadow Lake has a backup generator that kicks in only when extra power is needed. This was a temporary solution until additional reinforcement facilities are built. The unit's life has been extended several times and further extensions are no longer an option. The unit will be converted to a synchronous condenser, which will help with voltage control on the system. It will not be used as a back-up any longer and should reduce the noise.

What is the minimum distance allowed for a home to be built from the line?

The easement is limited to the width of the right-of-way (ROW) that is acquired for a power line. For this project, the ROW is 35 metres wide for the 138 kV lines and 40 meters wide for the 230 kV line. ROWs are required for public safety and safe construction, operation and maintenance of the transmission line. SaskPower will not allow any dwelling within this ROW. SaskPower doesn't limit how the land outside the ROW is used. If you're using the area outside the ROW, ensure that your activities do not cause public safety issues or block safe operation of the line.

Why do these lines have to go through high-valued land rather than through the bush where farmland would not be affected?

Finding a route for a power line is challenging. Every route option has its pros and cons. We're currently looking at the whole project area, and no decision has been made yet. We're learning about different

constraints in the area through discussions with stakeholders and site visits. Our engagement process is helping us learn about what's important to different stakeholder groups. Land use, the environment, social values, etc., are some of those important things. These align with SaskPower's routing considerations and will help us in our decision making.

What is a switching station?

A switching station is a facility containing transformers, regulators, switches and protective equipment. It helps us to change voltages between transmission lines. The image below is what the existing Meadow Lake switching station looks like and currently has three transmission lines going in/out of it.

The new station we're building as part of the Meadow Lake Area Reinforcement Project will be located on SW 03-59-17 W3. This station site may change if we find a different site that is more technically suitable and reduces impact to the environment and residents.

Initially, the new station will have three transmission lines going in/out of it. In terms of size, the new switching station will be about 250 by 250 metres and may expand to 400 by 400 metres in the future to meet growing power needs in the area.

What if I don't want any line on my property?

We continue to hold discussions with stakeholders. We're exploring all viable route options for the new lines. We recognize landowners and rightsholders' contributions to bringing power to homes and businesses in Saskatchewan. We acknowledge that siting these new facilities will impact some stakeholders, including landowners, once decisions are made. That's why we're engaging with them to understand what matters to them as we plan the project. No route chosen will be perfect. If the line ends up on your property, we'll reach out to you to discuss an easement and compensation. We'll also look at any accommodation we can make with structure placement to reduce impacts as best as possible.

Meadow Lake Area Reinforcement Project
Q and As

Can I plant or keep existing trees if they're along the power line right of way?

We acknowledge that trees hold economic, social and aesthetic values. And in some cases, they're used as shelter belts and to provide privacy for homesteads. For public safety, no permanent structure, including trees, are allowed in the right of way (ROW). Prior to construction, we clear vegetation along the ROW, including trees that are likely to grow into energized power lines. This process also helps reduce the number of power outages.

Are you going to bury the new power lines?

The new lines will be built overhead. The 138-kV and the 230-kV lines are high-capacity lines. They move power from a source to a station before it is distributed to homes and businesses. It would cost significantly more to bury and maintain these types of lines. Compared to overhead lines, it also takes longer to find and fix problems with underground lines, especially in the winter when the ground is frozen.

How can I be a supplier to SaskPower?

We're committed to fair and transparent procurement processes with world-class ethical standards as our guiding principle. Our procurement process is designed to respect all suppliers, treating each fairly with open and honest competitions. You can find more information at Doing Business with SaskPower or email our Supplier Relationship Management team at srm@saskpower.com.

How were the initial route options determined?

Once the project scope was finalized, we identified the end points that help frame the project study area. Next, we used our desktop database and other data sources such as HABISask, Google Maps etc. to identify key features in the project area. Some of those attributes include environmental and archeological features within the area. Other features we consider include land use, residences, existing utility and infrastructures including gas line, highways, rail tracks, etc. Each of these features have setback requirements. We also visited the project area to add any further information. Our engineers then carefully identified initial route options that meet technical requirements. We took this information out for public feedback.

During engagement with stakeholders, we learn more about the project area and what's important to people and the communities. This helps us further review and assess the initial route options as needed.

How is the final route determined?

Choosing routes for transmission lines is never an easy task. There are pros and cons to every option and many routing considerations. Participation from stakeholders and rightsholders is important in our planning process, and we want to hear all perspectives on the route options. To help us find a final route, we work with stakeholders using our routing considerations to understand what's important to them at individual and community levels. Next, we carefully apply what we've learned to assess each route option to see which one has the least impact on what the community prioritizes, while meeting SaskPower's technical requirements.