SaskPower: Paying the way for innovation

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SUMMARY

SaskPower is a crown corporation established in 1929. With a staff strength of approximately 3200 permanent, full time employees, SaskPower supports growth and improvement of quality of life of nearly 528,000 customers spread across 652,000 square kilometres.1 With a population of over one million people Saskatchewan is one of the fastest growing provinces and its demand for electricity will only increase over time.2 SaskPower maintains nearly 54 high voltage-switching stations, 159,000 kilometres of power lines and 195 distribution substations. It connects to the electrical systems at Manitoba, Alberta and North Dakota borders.3

Saskpower manages over $9 billion in generation, transmission and distribution assets. It operates five natural gas power stations, three coal-fired power stations, seven hydroelectric power stations and two wind facilities.4 Saskpower buys power from the North Battleford Generating Station, Cory Cogeneration Station, Meridian Cogeneration Station, Spy Hill Generation, Red Lily Wind Power facility, SunBridge Wind Power Facility and NRGreen Kerrobert, Loreburn, Estlin and Alameda Heat Recovery Facilities.5

NorthPoint Energy Solutions Inc. is SaskPower’s wholly owned subsidiary. This subsidiary is involved in electrical energy marketing and trading, risk and contract management and market settlement activity.6

Some historical facts about SaskPower7:

• SaskPower pioneered use of a single-wire, ground return distribution system.

• One of first Canadian utilities to use fibre optic technology.

• Developed only wetland in North America designed to supply cooling water to a power station.

• First Canadian power utility to achieve ISO 14001 full registration of environmental management system.

• Emission Control Research Facility develops particulate, SO2, NOX and mercury technologies.

• First utility in the world to complete a workable design for a large-scale near-zero emissions pulverized coal plant.
HISTORICAL OVERVIEW

Saskpower is Saskatchewan’s leading supplier of electricity. It was established in 1929. As a crown corporation, The Saskatchewan Power Commission (as it was initially named) was established to provide safe, reliable, cost-effective power to all Saskatchewan people.

The Saskatchewan Power Commission in its early years endured hardship during the great depression and 2nd world war. Despite these difficult times the Commission built new transmission lines in the early 30s from Shellbrook to Moose Jaw via Rosetown and Saskatoon and as the government shifted its material attention to the war efforts in the 40’s. Saskpower went ahead and acquired 3 plants in 1942 in Kelvington, Rose Valley and Meadow Lake.

In 1945, the commission added 2 electric systems, Dominion Electric Power Ltd and Prairie Power Company Ltd, increasing the transmission lines by and additional 1384 km. The Commission would go on to add the Canadian Utilities Ltd in 1947. During this period the Commission would employ over 500 people across the province.

By the end of this decade, the Commission served 400 communities with 7390 km of transmission lines connecting the province. In 1949, the Rural Electrification Act (1949) was enacted and called for electrical services to all farms in the province. In the same year, the Commission was renamed the Saskatchewan Power Corporation.

With even more rural customers receiving electricity, the Corporation developed the Penny Powers Home Economics Program in 1956. This included using a persona named Penny Powers to assist rural women with choosing, using and maintaining electric appliances through the use of cookbooks, articles, pamphlets and live demonstrations. In 1961, 58,000 farms were officially connected to the power grid that spidereed off the 90,000 km single line wire, more than enough wire to wrap all the way around the Earth’s circumference twice.

In 1963, Saskatchewan Power Corporation built their first hydroelectric station: Squaw Rapids (later renamed E.B. Campbell) on the Saskatchewan River. Throughout the 1970s, unprecedented increases in the price of oil results in people exploring coal as an alternative source of energy. The Corporation began testing lignite coal deposits in southern Saskatchewan, becoming a leader in Canada for the production of this fossil fuel.

In 1981, the corporation increased its presence in northern Saskatchewan by purchasing the Island Falls Hydroelectric Station, the oldest hydro station in the province. In 1985, the Saskatchewan Power Corporation became the third utility in Canada to use fibre optic technology thereby allowing for more reliability when delivering power.

After nearly forty years of being known as the Saskatchewan Power Corporation, 1987 marked the beginning of the company known today as SaskPower. This abbreviated name was chosen as it aligned with the naming protocol of the rest of the Crown Corporations in the province.

In 2000, SaskPower became the first electric utility in Canada to achieve corporate-wide ISO 14001 registration—an environmental management certification and has continued a culture of innovation and leadership in recent times.
CURRENT ISSUES

Saskpower continues to expand its operations with the development of the Boundary Dam Integrated Carbon Capture and Storage Demonstration Project. The corporation plans to continue increasing its renewable generation by 50% of Saskpower’s total capacity by the year 2030.

Saskpower estimates that this should reduce greenhouse gas emissions to approximately 40% less than levels in 2005. SaskPower has also launched a competitive process for up to 200 MW of new wind generation capacity with service beginning in 2020. It also launched a process for the province’s first 10 MW utility scale solar project, part of that program was expected to add an extra 60 MW of solar power to Saskatchewan’s electricity system. A current project under construction is a new 350 MW natural gas-fired Chinook Power Station and the 200KM double circuit 230/138-Kilovolt transmission line from Swift Current to Pasqua.

QUICK STATISTICS

According to the 2016-2017 annual report,

- The current available SaskPower generating capacity stands at 4,491 megawatts.
- As at 2017, SaskPower completed $130 million in new construction projects to connect customers to electricity grid.
- SaskPower also completed $309 million of sustainment upgrades to the province’s aging generation, transmission and distribution infrastructure.
- SaskPower has produced 643,844 SaskPower Shand Greenhouse seedlings reaching a total of almost 11 million provided to residents and communities in the province.
- SaskPower has achieved incremental electricity demand savings of 18MW through a portfolio energy efficiency and conservation programs. This exceeds the goal of 10MW for the year 2017.


5Ibid


10Ibid

11Ibid


16Ibid

17Ibid

18Ibid

19Ibid

20Ibid


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