WRITTEN SUBMISSION FOR THE PRE-BUDGET CONSULTATIONS IN ADVANCE OF THE 2020 BUDGET

PREPARED BY:

Tim Eckel,

Vice-President of Asset Management, Planning & Sustainability

August 2, 2019

SaskPower
Powering the future®

Recommendation 1: That the Government of Canada recognize federal regulations to transition to a low carbon economy are putting SaskPower at a significant disadvantage in its ability to meet its commitment to reduce emissions by 40% below 2005 levels by 2030 in a way that can keep electricity rates fair for Saskatchewan electricity customers and not negatively impact Saskatchewan's economy. Any carbon tax collected from SaskPower should be returned to SaskPower and applied to investment in emission reductions.

Recommendation 2: That the Government of Canada provide significant funding for all regional transmission requirements – including interties and converter stations – to ensure adequate and cost-effective baseload electricity is available to Saskatchewan customers.

Recommendation 3: That the Government of Canada provide funding to demonstrate potential of energy storage to support increased penetration of intermittent renewable from wind and solar to ensure reliable electricity for the people of Saskatchewan and improve resilience to climate change.

Recommendation 4: That the Government of Canada expand the Northern Responsible Energy Approach for Community Heat and Electricity Program (Northern REACHE) to include diesel reliant and electrically heated communities in Northern Saskatchewan with the objective of increasing the use of local renewable energy sources and improve energy efficiency.

Recommendation 5: Development of a capital fund accessible by First Nations to make equity investment in clean and renewable energy projects in Saskatchewan.

Recommendation 1: That the Government of Canada recognize federal regulations to transition to a low carbon economy are putting SaskPower at a significant disadvantage in its ability to meet its commitment to reduce emissions by 40% below 2005 levels by 2030 in a way that will keep electricity rates fair for Saskatchewan electricity customers and not negatively impact Saskatchewan's economy. Any carbon tax collected from SaskPower should be returned to SaskPower and applied to investment in emission reductions.

SaskPower is navigating unprecedented change in the electricity industry. Federal and Provincial regulatory changes and carbon pricing are requiring SaskPower to reduce our greenhouse gas emissions through increased renewable generation and the retirement of conventional coal-fired power plants. The costs of this transition are significant.

SaskPower has a responsibility to deliver best value to our customers, keep Saskatchewan's economy strong and honour its commitment to reduce GHGs. SaskPower's generation supply plan is developed in a way that minimizes rate impacts on our economy by taking the lowest cost, most reliable and sustainable options to meet Federal and Provincial regulatory requirements as well as meet SaskPower's obligation to lower emissions. The most prudent way for SaskPower to ensure the province's economic strength as Saskatchewan transitions to a low carbon economy is expanding wind generation with baseload support from natural gas plants. SaskPower has now again been forced to consider more expensive ways to deliver reliable and sustainable electricity due to unexpected thresholds on new natural gas generation coming online in 2021 or beyond in the Output-Based Pricing System regulations.

Saskatchewan is at a competitive disadvantage to other jurisdictions when it comes to the cost of electricity despite ongoing efforts to manage rate increases. Our residential rates are the second highest in Canada, largely due to a sparse and dispersed population. In particular, with one of the lowest customer densities in Canada, we serve approximately four customers per kilometre of line and 533,000 accounts to generate revenue in support of an average $1 billion per year capital program. Meanwhile, in Western Canada British Columbia and Manitoba have less expensive and non-GHG emitting legacy hydropower assets and can export for additional revenue. Saskatchewan's electricity prices become even less competitive with the introduction of carbon pricing and limited interconnection lines restrict SaskPower's access to lower cost imports.

Recognition at the Federal level of the effect of its regulations on the Saskatchewan electric industry by modifying the recent changes to the OBPS system noted above, and returning carbon tax revenues to the corporation for renewable investment, would be of material

assistance. The target of 40% reduction in GHG emissions from the 2005 baseline exceeds the Paris Accord objective and needs to be recognized as such.

Recommendation 2: That the Government of Canada continue to provide significant funding for all regional transmission requirements to ensure adequate and cost-effective baseload electricity is available to Saskatchewan customers.

The Regional Electricity Cooperation and Strategic Infrastructure (RECSI) study made a significant conclusion: reinforcing existing interprovincial interconnects as an economical strategy to aid Saskatchewan and western Canada to a cleaner energy future that improves stability and reliability is a necessity. Recognition should be given to Saskatchewan's already existing disadvantage to generate low or zero emitting electricity and manage rate increases due to the regulated end of conventional coal and elimination of new natural gas fired generation.

There is evident economic potential for a 500-kilovolt (kV) line between Saskatchewan and Manitoba with potential to connect to Alberta. Significant support and resources should be considered by the Federal Government to investigate this high-potential project.

Recommendation 3: That the Government of Canada provide funding to demonstrate potential of energy storage to support increased penetration of intermittent renewable from wind and solar to ensure reliable electricity for the people of Saskatchewan and improve resilience to climate change.

Saskatchewan requests funding for up to a 30MW/30MWh battery storage project. Budgetary cost of approximately $25M. Project will facilitate integration of clean renewable generation into SaskPower's transmission system and help to meet emission reduction targets in Saskatchewan.

Installation of battery energy storage could address the system impacts caused by fluctuating or intermittent renewable generations (e.g., wind and solar power). Increased penetration of intermittent renewables can cause sudden changes in the balance between load and generation on a moment-by-moment basis on a transmission system. This balance is traditionally maintained by ramping up/down conventional generator units (e.g., hydro or gas) with relatively quick response times so as to not impact the load-generation balance of other transmission systems. SaskPower's transmission system's capability to do this can set a limit on renewable penetration. Battery storage can help increase the renewable penetration level by responding more quickly than conventional generators to sudden variations in wind and solar generation, and provide an emission-free solution as compared to gas generators.

Recommendation 4: That the Government of Canada provide funding up to $2.2 million to expand the Northern Responsible Energy Approach for Community Heat and Electricity Program (Northern REACHE) to include diesel reliant and electrically heated communities in Northern Saskatchewan with the objective of increasing the use of local renewable energy sources and improve energy efficiency.

With the exception of one community (Kinasaoo), Saskatchewan northern Indigenous communities are all connected to the Saskatchewan electricity grid. Many of these communities undeniably rely on electric heat. Due to a number of factors including relatively high electricity rates, poor housing conditions, overcrowding and lower incomes, many residents of these communities struggle to pay their electricity bills. SaskPower is working with northern communities on improving energy use and reducing costs. However, funding of $1.2 million for implementation of projects is needed. SaskPower is also considering a renewable/battery/propane storage pilot at Kinasaoo of approximately $1 million, which would improve reliability and environmental benefits for the community.

Expanding the REACHE program to Saskatchewan and to electrically heated as well as diesel reliant communities will provide environmental, social and economic benefits and support healthier, more sustainable Indigenous northern communities in Saskatchewan.

Recommendation 5: Development of a capital fund accessible by First Nations to make equity investment in clean and renewable energy projects in Saskatchewan

SaskPower will work with Canada regarding the establishment of a First Nations Energy Investment Fund (administered by First Nations Power Authority) to facilitate equity investments by First Nations in energy projects including power generation projects, transmission projects and oil and gas pipeline projects.

With access to equity/capital, the First Nations Power Authority could evolve into a service organization that develops energy projects on behalf of First Nations and collect project management fees, consulting fees and residual income from the operation of each project (monthly income from power purchase agreements and pipeline levies, etc).

Net income would be distributed as dividends to Saskatchewan First Nation members, such as is carried out through the Saskatchewan Gaming Agreement.