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November 2, 2023

The Honourable Steven Guilbeault, P.C., M.P. Minister of Environment and Climate Change House of Commons Ottawa, Ontario K1A 0A6

Re: Proposed Clean Electricity Regulations – Canada Gazette, Part I

Dear Minister:

On behalf of SaskPower — Saskatchewan's Crown electric utility — I am writing to express my concern regarding the proposed *Clean Electricity Regulations* (CER) and the threat they represent to the reliability and affordability of electricity in Saskatchewan and Canada.

I can assure you that SaskPower remains committed to moving to a net-zero greenhouse gas (GHG) future as quickly as possible. As well, we fully understand our company's critical role in unlocking an electrification pathway that results in a low-carbon economy for our province.

SaskPower is rising to the decarbonization challenge

Our company has one of the longest decarbonization paths of any Canadian jurisdiction. Like other provinces, historically we have relied on the resources that have been readily available and affordable for power generation. This means that in the absence of viable large-scale in-province hydroelectricity potential, fossil fuels have played a critical role in our electricity system.

However, we have already charted an aggressive course for transitioning our electricity system to low- and zero-carbon resources while enhancing our transmission and distribution systems to enable electrification. We are currently on track to meet our commitment to reduce GHG emissions by 50 per cent below 2005 levels by 2030 — a commitment made in advance and greater than federal government targets that we made prior to the CER.

However, for SaskPower to comply with the CER, the majority of our company's current generating capacity of more than 5,400 megawatts (MW) will need to be expanded, replaced, and rebuilt in just over 11 years – which is not possible from technological, financial and logistical perspectives.

SaskPower has already committed billions in its transition to a net-zero GHG future. This is evidenced by:

- Our investment in nearly 450 MW of wind, solar and biomass generation in the last five years, with a minimum requirement now introduced for Indigenous equity for all new wind and solar projects;
- The planned build-out of over 3,000 MW of wind and solar energy capacity by 2035;
- Investment in life extensions at key legacy hydroelectric facilities;
- Expanding import agreements with Manitoba Hydro to 290 MW;
- Investment in nuclear Small Modular Reactor (SMR) development, with the potential for a first unit to be commissioned by 2034;
- A commitment to a regional transmission interconnection expansion to support a major build-out of intermittent renewables and to act as a bridge to the potential construction of nuclear SMRs in Saskatchewan;
- The planned integration of multiple utility-scale Battery Energy Storage Systems, one of which would be among the largest in Canada;
- Support for geothermal project development in Saskatchewan;
- Development of the Boundary Dam Integrated Carbon Capture and Storage (CCS) Project the world's first commercial scale CCS facility at a coal-fired power station that has captured over 5.5 million tonnes of carbon dioxide (CO₂) to-date;
- Development of the SaskPower Carbon Capture Test Facility at Shand Power Station, capable of long-term technology evaluation using up to 120 tonnes/day of CO₂;
- Co-founding the International CCS Knowledge Centre, sharing SaskPower's experience with the world to advance CCS technologies;
- Our existing and planned investment in 1,500 MW of efficient natural gas-fired generation to support our unprecedented build-out of intermittent renewable energy and assist us with bridging away from conventional coal until zero-emissions baseload options can be commercialized for use in Saskatchewan;
- Execution of a distribution transformation program; and
- Construction of the Descharme Lake Microgrid in Northern Saskatchewan, which will increase reliability and reduce the reliance on diesel generation through solar generation and a battery energy storage system.

Overall, our company is moving as quickly as possible to a net-zero GHG future and it will be impossible to deliver the amount of work currently planned by the end of 2034 due to logistical

constraints. The CER will only impose more cost and risk — which will be borne by our customers and the provincial economy — without helping us achieve a net-zero GHG future more quickly.

SaskPower's major concerns with the CER are summarized below, with additional details appended to this letter.

The CER does not recognize Saskatchewan's unique context

- The model used to design the CER is nationally optimized and does not accurately represent Saskatchewan or SaskPower's electricity system, resulting in significant risk to reliability and affordability. In addition to the model and its detailed inputs not being shared by Environment and Climate Change Canada (ECCC) for discussion prior to Gazette I of the CER, a Saskatchewan-focused segment has not been developed to truly test the impacts of the CER on our province.
- Currently, there are no commercially available non-emitting baseload generation technologies available for Saskatchewan that can replace baseload conventional coalfired generation by the end of 2029 and baseload natural gas-fired generation by the end of 2034.
- The CER will be inflationary and increase pressure on an already stressed supply chain in the run-up to 2035. Saskatchewan will be competing with many other jurisdictions in North America for the same labour and material resources to build the low- and non-emitting generation sources and supporting infrastructure needed to enable the global transition to a low-carbon economy.
- The timeline required to build the generation, transmission and distribution infrastructure needed for Saskatchewan to comply with the CER is not achievable by 2035.

The CER will threaten reliability for Saskatchewan customers

- Restrictions imposed by the CER on existing and future natural gas-fired generation will put SaskPower in the position of having to choose between providing reliable electricity for our customers and compliance with the CER.
- The CER does not consider Saskatchewan's extreme weather conditions, such as during extreme hot or cold temperatures when wind generation can be near zero for extended periods, from several hours to a number of consecutive days.
- The allowances provided in the CER to run natural gas-fired generation are inadequate. Increased flexibility for natural gas-fired generation will be critical to ensuring reliability in Saskatchewan well beyond 2034, until non-emitting baseload generation options and long duration utility-scale energy storage are commercially available and deployed at the scale required to replace natural gas-fired generation.

The CER will make electricity unaffordable in Saskatchewan

- The overall net economic benefits estimated by ECCC for the CER downplay the disproportionate and major negative affordability impact the CER will have on Saskatchewan.
- Within federal CER analysis, the upward trajectory of wind and solar generation costs has not been recognized, nor have first-of-a-kind technologies such as nuclear SMRs and CCS on natural gas-fired generation been appropriately costed.
- In addition to the replacement of the majority of SaskPower's generating fleet in such a short time to meet federal requirements, SaskPower must also continue to make historic investments in new transmission and distribution lines, grid modernization and the sustainment of our province's existing electricity system.
- Saskatchewan's rate disparity with hydro-rich jurisdictions will only widen under the CER. Higher rates will deter conversion to electricity from other competitive energy alternatives.
- The profitability and competitiveness of industry including the critical minerals mining and agricultural sectors will be significantly impacted. The result will be a substantial decline in investment in major Saskatchewan industries, resulting in lower employment and income.
- With carbon emissions being a national issue and recognizing regional differences related to the extent of required decarbonization efforts (hydro vs. non-hydro jurisdictions), the costs to comply with federal emission reduction regulations should be shared by the national tax base rather than exclusively by the provincial rate base.

The CER doesn't allow sufficient time for emerging technologies to develop and be commercially available in Saskatchewan

- The CER will require fossil-fuel reliant utilities to prematurely lock in large investments for commercially unproven technologies rather than benefitting from technological advances and cost reductions that will occur over time. A target of a net-zero GHG electricity system by 2050 provides the time necessary for these emerging technologies to be commercially proven, mitigating cost and risk.
- The CER Performance Standard of 30 tonnes CO₂/gigawatt hour (GWh) by 2035 is excessively stringent. Until CCS is commercially proven, the strict performance standard proposed, coupled with the associated legal implications, will prevent utilities from investing in CCS. As a result, CCS is unlikely to be a viable option for utilities by 2035.

- The CER does not recognize the parasitic load of CCS approximately 25%. This means that if SaskPower converted four natural gas-fired units to CCS, a fifth natural gas-fired unit would need to be built just to power the four CCS facilities.
- The CER does not recognize the limitations that a CCS facility can place on generating facility availability, nor the limitations of placing CCS on peaking natural gas-fired facilities.
- With nuclear SMRs being an emerging technology that will not be commercially available in Saskatchewan until at least 2034, natural gas-fired generation is the only baseload option available at the scale required to bridge between the end of conventional coal-fired generation in 2029 and SMRs in the mid-2030s.

Collaborating on the decarbonization of Saskatchewan's electricity system

As I have stressed, SaskPower is fully committed to moving to a net-zero GHG electricity system as quickly as possible. However, Saskatchewan's unique challenges must be recognized and taken into account.

We are committed to ongoing dialogue to ensure an equitable and effective electricity transition for Saskatchewan. Please don't hesitate to contact me with any questions or to arrange further discussion.

Yours sincerely,

Rupen Pandya President and CEO SaskPower

Attachment: SaskPower Response: Federal Clean Electricity Regulations — Canada Gazette, Part I

Cc: The Honourable Jonathan Wilkinson, P.C., M.P., Minister of Natural Resources

The Honourable Dustin Duncan, Minister Responsible for SaskPower

Chief Darcy Bear, Chair, Board of Directors, SaskPower

Kent Campbell, President and CEO, Crown Investments Corporation of Saskatchewan

Christine Hogan, Deputy Minister of Environment and Climate Change

Michael Vandergrift, Deputy Minister of Natural Resources

Paul Halucha, Deputy Secretary to the Cabinet (Clean Growth)

Terence Hubbard, President, Impact Assessment Agency

Francis Bradley, President and CEO, Electricity Canada

David Brock, Vice President, Energy Security, Crown Investments Corporation of Saskatchewan

Troy King, Executive Vice President, Chief Strategy, Technology & Financial Officer, SaskPower

Tim Eckel, Vice President, Energy Transition, SaskPower

Rachelle Verret Morphy, Executive Vice President, Legal & Corporate Services and General

Counsel, SaskPower