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I. Executive Summary – Suncor's input on the draft Clean Electricity Regulations

Background

Suncor's recommendations are specific to the draft Clean Electricity Regulations (CER) released on August 10, 2023, by Environment and Climate Change Canada (ECCC). The CER is an important regulation for Suncor as our latest power generation project will place the company as the third largest power producer in Alberta. All of Suncor's power generation is based in Alberta and operates as cogeneration, which is a technology that supplies both heat and power within industrial facilities. Suncor's cogeneration supplies process heat while generating electricity as a byproduct to power internal operations, with surplus power being exported to Alberta's power grid.

We share in the ambition to accelerate progress towards Canada meeting its global commitments to reduce GHG emissions on a path to net zero by 2050. Given that electricity's contribution is expected to grow in a net zero economy, additional power should be generated at a low GHG intensity to ensure low life cycle emissions and to avoid constructing higher GHG intensive assets within the sector as we approach 2050.

While Canada already has a relatively low GHG emitting power sector overall, there are provincial differences, with some provinces not having access to significant hydroelectric or nuclear generation and therefore relying on natural gas-fired power to provide baseload and dispatchable power. The CER must balance the sector's need to decarbonize existing assets and expand low carbon capacity, all while keeping power reliable and affordable to promote electrification.

Key Considerations

The draft CER would result in some unintended consequences that need to be addressed:

- The CER may unintentionally influence operators to turn down existing cogeneration and switch to boilers to avoid coverage. This approach would lead to lower power exports from industry and a less reliable grid.

- The requirements of the draft CER could lead to declines in Alberta's power output in 2035 as over half of the natural gas-fired units in the province would be subject to the CER's Emissions Performance Standard (EPS). This would lead to lower reliability and the potential for significant increases in power costs.

- Ambitious and inflexible targets in the draft CER make investment decisions risky and hinder the deployment of mitigation technologies that the CER aims to incentivize, such as Carbon Capture and Storage (CCS). Including cogeneration in the draft CER would lead to

lower economy-wide emission reductions as CCS capital will need to be diverted from more GHG-intensive applications like upgraders and boilers to less GHG-intensive areas like cogeneration.

Suncor's Recommendations

- **Exempt or limit exposure of cogeneration from the CER:** Keep existing cogeneration on a net zero target by 2050 trajectory so industry can focus on capital-efficient decarbonization. Failing this approach, apply minimum thresholds, limit CER coverage to net exports of power (not internal use), and provide flexible compliance to meet obligations to ensure ongoing operations.

- **Increase flexibility:** This includes managing facility requirements to avoid large portions of generation being subject to the CER's EPS in 2035 or any other year. Another example is adding flexibility or leniency to the EPS (set at 30 kg CO_2/MWh in the draft CER). This unproven standard would have to be met by many facilities beginning in 2035 with no alternative compliance options. Flexibility around asset life, the EPS, and other elements can unlock investments and limit potential disruptions in power generation.

- **Avoid a one size fits all approach:** As designed, the draft CER is challenging for many provincial grids, including Alberta. These provinces do not have sufficient hydroelectric power or interprovincial ties to provide low-carbon baseload and dispatchable power. As written, the draft CER will limit the power required to balance expanding wind and solar generation in Alberta. Allowances are needed in provinces reliant on natural gas-fired power, giving sufficient time to retrofit assets and deploy low carbon alternatives.

- **Clarify the role of the CER with existing and planned regulations:** The CER is one of several regulations that will come out of the Emissions Reduction Plan (ERP) of March 2022. The ERP framework is being overlaid on existing federal carbon pricing framework, which only provides policy certainty up to 2030. Suncor is concerned about the compliance interaction of the CER, future carbon pricing and competitiveness protections, and planned regulations like the Oil and Gas Emissions Cap.

- **Improve the clarity of the draft CER:** Some of Suncor's cogeneration facilities share common infrastructure. Based on the draft CER, our new cogeneration project could be grouped with some existing assets and be mandated to meet the CER's EPS in 2035, ten years earlier than expected based on the proposed Prescribed Life (PL).

Closing

Thank you for the opportunity to provide input on the draft regulations. Suncor officials would like to continue engagement with federal counterparts to discuss our concerns and possible solutions.