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Canada Energy Regulator
Suite 210, 517 Tenth Avenue SW
Calgary, Alberta
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Reference: Response to Public Comment Period on CER Filing Manual Updates Regarding Greenhouse Gas Emissions and Climate Change

Headquartered in Edmonton, Alberta, Stantec is a global multi-disciplinary consultancy of approximately 25,000 employees providing professional services ranging from engineering and architecture to environmental services. Our Environmental Services business unit in Canada includes over 3,000 staff in 20 environmental specialties. Environmental assessment is a core practice area and we have more than four decades of experience preparing environmental and socio-economic assessments (ESAs) for National Energy Board (NEB) and Canada Energy Regulator (CER) regulated projects across the country. These include assessments in support of applications under section 183 (new pipelines of 40 km or more), section 214 (new infrastructure that does not fall under section 183), section 241 (abandonment of existing infrastructure) of the Canadian Energy Regulator Act (CERA) and section 45.1 (decommissioning of existing infrastructure) and section 50 (abandonment of existing infrastructure) of the Onshore Pipeline Regulations (OPR).

Given Stantec's extensive involvement in NEB and CER regulated projects, modification to greenhouse gas emissions and climate change-related filing guidance is of considerable relevance and interest to us. The team contributing to this submission has expertise in the areas of environment, regulation and greenhouse gas emissions calculation relating mainly to oil and gas pipeline facilities. As a result, our feedback will largely be provided for oil and gas applications (as opposed to electricity applications).

Please accept the following as Stantec's comments in response to the CER's call for public comment per its email of June 3, 2022 *Public Comment Period on revisions to CER Filing Manuals: Greenhouse Gas Emissions and Climate Change (affecting Tables A-2 and A-4 in the Filing Manual, and Tables 6-2 and 7-1 in the Electricity Filing Manual) and the draft Greenhouse Gas Emissions and Climate Change Supplemental Guidance*. Comments are organized by themes that reflect the information and organizational structure of the draft updated text to Guide A and the Supplemental Guidance document.

GENERAL COMMENT

CANADA'S COMMITMENTS IN RESPECT OF CLIMATE CHANGE

The following is not a comment on the proposed updates; however, the subject matter raised here is fundamental to the proposed updates and their implications for filed evidence and application outcomes.

Filing requirements under Direct Emissions include "*discuss how the project may hinder or contribute to Canada's efforts to reduce GHG emissions*", and, under Guidance, "*Project design features or proposed mitigation measures should limit or reduce the extent to which a project hinders Canada's ability to meet its commitments in respect of climate change.*" The revised Guidance section also prompts applicants to

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consider the “*Impact Assessment Agency of Canada’s guidance: Policy Context: Considering Environmental Obligations and Commitments in Respect of Climate Change under the Impact Assessment Act*”.

The Agency’s guidance and the CER’s “*Greenhouse Gas Emissions and Climate Change Supplemental Guidance (draft)*” both offer useful guidance, but also contain many broad statements leading to discretionary interpretation and uncertainty. Further guidance on how to address Canada’s commitments in respect of climate change would be beneficial, as both documents provide limited detail indicating what constitutes useful and meaningful evidence in the context of a regulatory application (Stantec is not aware of other documents issued by the federal government that are instructive in this regard, including the *Strategic Assessment of Climate Change* [SACC]). The Agency’s guidance comment that “*Climate change commitments include: Those set out in the International Paris Agreement and articulated domestically in the Pan-Canadian Framework on Clean Growth and Climate Change*” is a good first step; however, more specific direction from the CER, through the use of examples, of how these various guidance documents are to be considered and applied in regulatory applications, would greatly improve clarity for project proponents.

Also helpful from the above CER document is “*The Commission recognizes that certain projects may have the potential to reduce emissions by either displacing high emission intensity projects with lower emission intensity projects, or by facilitating GHG removals, thereby contributing to Canada’s climate change commitments.*” However, most projects regulated by the CER (and former NEB) are hydrocarbon pipelines, and as such may not readily lend themselves to contributing to Canada’s commitments in respect of climate change (and hence by default are hindering). The opportunity to claim a CER-regulated project will lead to overall emission reductions is relatively uncommon. Given the understandable hesitation proponents of such projects may have in self-declaring their projects a hindrance, and that such projects also dominate the CER’s project review portfolio, the need for as much detailed guidance as possible on the question of hindrance or contribution to Canada’s climate change commitments becomes all the more important.

SPECIFIC COMMENTS

Comments on specific subject areas is provided below.

GUIDE A, TABLE A-2

General

Throughout the guidance provided in Table A-2, the CER refers to the requested GHG calculations as an assessment. While the term “assessment” has typically been used to describe the information, metrics, professional judgement, residual effects characterization and conclusions provided in ESAs for valued components listed in the Filing Manual, the information requested for GHGs is limited largely to provision of calculations and comparisons to emissions totals. Perhaps it may be better to refer instead to GHG Emissions Estimation, rather than GHG Emissions Assessment.

When considering what carbon dioxide equivalents to use in GHG calculations, it is suggested that the CER refers applicants to the most current National Inventory Report. We recommend the same global warming potentials are used for the calculations prepared for a project’s application to the CER and the National Inventory Report.

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Direct Emissions – Construction Phase Mitigation Measures

Applications to the CER typically include a limited number of mitigation measures to address GHG emissions during construction. This has sometimes triggered Information Requests from the CER questioning whether additional measures might be feasible. A list of potential construction phase mitigation measures could be included in the Guidance column, to which project proponents could refer when preparing a project application. Potential measures that were considered but not adopted can be discussed within application documents.

Direct Emissions – Maintenance Activities

Direct emissions guidance has been updated to include emissions that may arise from maintenance activities. What pipeline maintenance activities does the CER envision that might release “non-negligible” GHG emissions that merit inclusion in calculations? Perhaps providing examples of such maintenance activities in the Guidance column would be helpful to proponents.

Direct Emissions – Land Clearing Calculations

The SACC includes a land clearing threshold of 30 ha to transition from Tier 1 to Tier 2 calculations (i.e., to provide more precise estimates). Based on our application of this threshold to date, this appears to offer a practical approach to differentiate between smaller projects where estimation of GHG emissions from land clearing at a high level is appropriate versus requiring a more detailed approach for larger projects.

Direct Emissions - Avoided Domestic Emissions and Offset Measures

Stantec notes that the CER has added wording in the Guidance column requesting that proponents identify “the approach to determining avoided domestic emissions and what project-specific mitigation and offset measures have been taken into account”. Filing Manual guidance should also require a proponent to discuss the project’s expected impact on offshore GHG emissions, for example where there is a risk of carbon leakage if the project is not built in Canada or where a project may displace emissions internationally.

We also note that many projects, including those harnessing emerging technologies, are being contemplated by proponents as part of the Energy Transition. Many are being proposed to decrease the need for fossil fuel-generated energy globally and also to address international energy demand and supply security concerns. Would the CER consider including wording to require proponents to explain how their project fits into the global energy demand-supply system (e.g., will the project lead to avoided offshore emissions)?

Net Zero Plans

It is noted that for some projects, a project net zero plan is required, while for others, a corporate net zero plan is recommended. Could the CER provide additional guidance regarding expected content for these two different plan types? Stantec also notes in the Operational GHG emissions flow chart a proposed threshold of 10 kt CO₂e/year is the suggested differentiator between the need for a project-specific versus corporate net zero plan. This appears to be a conservative threshold, essentially requiring most projects that add gas-driven equipment, such as compressor station unit additions, to prepare a project-specific net zero plan. Is it

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reasonable to request a project-specific net zero plan for annual emissions for all projects emitting more than 10 kt CO₂e/year, or should this threshold be higher?

With respect to using offset credits to achieve net zero, Stantec suggests that proponents provide information on the potential sources of offset credits (e.g., which program(s) would be considered). Depending on the undertaking, a substantive number of offset credits may be required to reach net-zero. Proponents should provide a schedule for the purchase of offset credits in advance of 2050. In the event that insufficient offset credits are available for purchase, an alternate approach to reach net-zero should also be provided by the proponent.

GUIDE A, FLOW CHARTS

Applicability to All Projects

Stantec appreciates the efforts the CER is making to clearly outline how the GHG and Climate Change assessment is scalable according to the size of the project using flowcharts. While the initial flow chart titled “Climate change factor assessment” specifically references new build applications under s.183, s.214 and s.298 of the CER Act, it is less clear about the requirements for other types of applications, namely those for decommissioning, abandonment, and reactivation, which may all result in GHG emissions. It should be noted that the recently updated Guides B and K for abandonment and decommissioning (respectively) specifically mention a need to discuss GHG emissions. The guidance would benefit from clarifying expectations for GHG information provided for applications for decommissioning, abandonment, and reactivation.

Operational GHG Emissions Chart

Stantec notes that the CER has included three emissions sources within this flowchart that should be considered, namely “Fugitive emissions, leaks, unplanned releases”, “Combustion, venting and planned emissions”, and “Third-party emissions”. How should a proponent anticipate or calculate the volume of GHGs associated with a “leak or unplanned release”? Additionally, the inclusion of “Third-party emissions” in this chart seems to indicate that it is expected that a project’s indirect emissions be compared with provincial and national totals. Can the CER please clarify if this is the updated expectation?

Thresholds for Direct Construction and Operational GHG Emissions Assessments

The volume of construction emissions varies depending on the size of the undertaking. In general, construction activities for a project such as a compressor or pump station release very small volumes of GHGs and, unless the project also includes road or transmission line construction to connect the station to existing services, there seems little benefit to estimating GHG emissions as the volumes will be negligible when compared with provincial and national emissions totals. Annual operational emissions associated with a typical compressor or pump station tend to be larger and thus may merit estimation. In comparison, the volume of GHG emissions associated with pipeline construction tend to be higher, while operations phase emissions tend to be negligible. The proposed threshold of 10 kt CO₂e/year for operation emissions seems appropriate. This is in line with the proposed lowering of the GHG Reporting Program threshold. A threshold of 10 kt CO₂e/year for construction phase emissions may also be suitable for use in the flowcharts, consistent with the proposed operations phase threshold.

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GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE SUPPLEMENTAL GUIDANCE (DRAFT)

Upstream Emissions

The SACC's guidance with respect to upstream emissions includes both a quantitative and qualitative section. While the quantification of potential upstream emissions is generally attainable, the qualitative assessment of incrementality is more challenging. Stantec recommends that text be added to constrain the scope of the incrementality assessment. For example, it is onerous to require a proponent to conduct detailed modelling to determine incrementality, and this step should perhaps be reserved for only the largest, most potentially impactful projects. A more appropriate level of effort for most projects might be to base incrementality assessments on expected changes in fuel use and available technologies derived from existing published information.

CLOSURE

Stantec appreciates the opportunity to provide the CER with feedback on the proposed Filing Manual updates. The Filing Manual has been an invaluable guidance tool for assessment practitioners and proponents preparing applications under sections 183, 214 and 241 of the CERA, and sections 45.1 and 50 of the OPR. With some additional clarity and guidance we are confident the updated Guide A and associated supplemental guidance document will be of equal value. If you would like to discuss any of our comments or recommendations, please contact any one of the undersigned.

Regards,

Stantec Consulting Ltd.