

Feedback – IESO Gas Phase-Out Impact Assessment

Submitted by the Society of Professional Engineers and Associates (SPEA), June 17, 2021

At the request of stakeholders, the IESO has launched an impact assessment for the phase-out of gas generation facilities in the Province. At this stage of the assessment, the IESO is seeking public input on the scope of its assessment, specifically:

“Are there additional considerations the IESO has not identified in defining the scope of the assessment to examine the reliability, operability, timing, cost and wholesale market implications of reduced emissions on the electricity system?”

Introduction

The Society of Professional Engineers and Associates is an independent union representing engineers, scientists, technical and administrative staff, who work for Candu Energy Inc- Nuclear division of SNC-Lavalin (formerly (AECL) CANDU Commercial Reactor Division (CRD)) in Mississauga, Ontario and abroad. Formed in 1974, SPEA is one of the oldest professional unions in Canada.

Comments

We thank the IESO for the opportunity to comment on the scope of the current engagement on the Gas-Phase-Out Impact Assessment.

SPEA notes that the scope of the planned impact assessment, as outlined in the May 27, 2021 presentation by the IESO, will not include “Demand impacts from decarbonization of the economy.”

SPEA believes it is critical to increase the scope of the assessment to evaluate alternate demand scenarios.

More specifically, SPEA is concerned that the 2020 Annual Planning Outlook was conservative in its estimates on the impact of widespread electrification. Even with Pickering operating, Ontario’s available capacity would only support electrification of a modest percentage of the transportation grid. If consumer and investor appetite for electrification outpaces government policy benchmarks, particularly within the Transportation sector, demand growth in Ontario by 2030 could exceed IESO projections. Any examination of the impact of removing gas generation from Ontario’s fleet would, in turn, be inaccurate.

Further, Ontario’s load pattern could be impacted both by a shift in demand as a result of electrification of the province’s transportation network, as well as a shift in home heating from fossil fuels to

electricity. Variances in the overall demand and load pattern could both affect the supply mix required to provide low carbon, affordable and reliable electricity for our Province.

SPEA recommends the IESO evaluate the impact of gas phase-out for each of the three scenarios using at least two different demand forecasts to determine whether there is significant sensitivity of the results to accelerated demand.

Additional Comments on the presentation

While not specifically requested in the current consultation, which seeks comments on the scope of the assessment, SPEA requests clarification on two of the points made on scope in the presentation.

1. SPEA requests clarification on the phrase "reduce emissions" in its description of the final product of the assessment (p. 7) ("Provide insights on the reliability, operability, timing, cost and wholesale market issues that would need to be addressed in reducing emissions on the electricity system"). Please clarify what this baseline represents. Does it refer to "an average of electricity sector emissions from 2016 to 2020 will be used to avoid single year fluctuations from external factors like weather"?
2. SPEA would further request IESO to clarify whether the impact assessment will differentiate between the role gas generation plays in delivering baseload versus load following power in its final product. The May 27, 2021 presentation anticipates the need for additional baseload capacity to compensate for the planned closure of the Pickering Generating Station as well as planned refurbishments at Darlington and Bruce, which could be filled by other, low carbon technologies like nuclear.

SPEA thanks the IESO for this opportunity to provide input. We look forward to participating in the engagement process.

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ⁱ <https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Gas-Phase-Out-Impact-Assessment>