

## 2021 Long-term Outlook Scenarios – December, 2020

2021 Long-term Outlook Stakeholder Feedback



<b>Period of Comment:</b> December 15, 2020 through January 15, 2021	[REDACTED]
<b>Comments From:</b> Greengate Power Corporation	[REDACTED]
<b>Date:</b> 2020/01/15	[REDACTED]

Keeping with the mandate of providing safe, reliable and economic operation of the Alberta electricity system while facilitating a fair, efficient and competitive market for electricity, the AESO is developing the 2021 Long-term Outlook (LTO).

Given the challenges faced as a result of the COVID-19 pandemic and the low oil price, feedback provided to the AESO will be an important input into how we forecast Alberta's the near to long-term electricity. The AESO will use scenarios as a means of stress testing various market, technological, consumer behaviour, policy and economic outcomes, to assist stakeholders in understanding potential long-term future outcomes in the Alberta electricity market.

Please fill email your completed questionnaire to [forecast@aeso.ca](mailto:forecast@aeso.ca) by January 15, 2021.

We value stakeholder input and thank you for sharing your perspective. In alignment with our Stakeholder Engagement Framework ([link](#)) all stakeholder submissions, in their original state with personal information redacted, will be published online at [www.aeso.ca](http://www.aeso.ca)

Further stakeholder engagement on LTO scenarios and preliminary results can be expected as the AESO makes progress toward the anticipated publication date in Q2 of 2021.

Preliminary results will be based in part from stakeholder feedback received in June 2020.

The AESO thanks you for your time and appreciates your input.

The AESO is seeking comments from Stakeholders with regard to the following matters:

	Questions	Stakeholder Comments
1.	Do the proposed LTO scenarios cover a reasonable range of plausible future outcomes? Which scenario do you think is more likely? Which one is less likely?	<i>The proposed scenarios cover a reasonable range of outcomes. Greengate believes that the Clean-Tech scenario is the most likely, as the cost of renewables and storage decline and the carbon tax increases.</i>
2.	Does the “Clean-Tech” scenario focus on the appropriate technologies and policies?	<i>A Clean-tech focus will also lead to economic growth; therefore the GDP outlook should be improved from the reference case. It warrants consideration to change the \$100/t carbon price by 2030 to \$170/t, as per the current federal government’s stated intentions. In fact, the \$170/t should be used in the reference case. The reference case has very little storage being added by 2030 (65 MW), this is too low and should likely be multiples of this amount. The Clean-Tech scenario should therefore have an even larger level of storage. Storage projects will be constructed as the cost of storage declines, similar to the growth rates for wind and solar.</i>
3.	Are there different scenarios that warrant inclusion?	<i>The scenarios describe a reasonable future outlook possibilities.</i>
4.	What long-term hydrocarbon demand projections do you think are reasonable for the Robust and Stagnant Global Oil & Gas Demand scenarios?	<i>Greengate can support the alignment to the most optimistic scenario for oil and gas development. Global demand levels for oil and gas are likely to remain strong, Alberta can benefit from a robust oil and gas sector and at the same time, significant development of renewables.</i>
5.	Are there additional generation technologies that warrant inclusion in the 2021 Long Term Outlook Scenarios?	<i>There is limited inclusion of storage technologies. In slide 9, 65 MW of storage is forecasted by 2030.  The AESO should examine the impact of substantial decreases in costs for storage, as well as the impact of the inclusion of storage projects in current applications to the AESO. Further storage growth should be included in scenarios besides the clean</i>

		<i>tech scenario.</i>
6.	Do you disagree with any of the assumptions in Slide 4 for any of the scenarios? If so, what would you propose?	<i>It does not seem prudent to assume a \$50/t carbon price as the reference case (as well as the other scenarios besides clean-tech). Greengate believes it warrants consideration that carbon prices or equivalent regulation is likely to increase the costs of emissions by 2030 beyond \$50/t, likely to \$170/t (as per intentions of the current federal government).</i>
7.	The AESO has not yet determined the quantum of change in the scenario variables. Do you agree directionally with the scenario assumptions? Do you have insights regarding the magnitude of scenario changes?	<i>In regard to Storage, Greengate would support, at a minimum, an assumed 500 MW of storage being in service by 2030. Greengate supports the increase in wind and storage in the scenarios, however given trends in carbon pricing, this level is likely still understated.</i>