Feedback Form

Hydrogen Innovation Fund: Draft Application Guideline (Program Rules) and Materials Webinar– February 22, 2023

Feedback Provided by:

Name: Islam Elsayed

Title: Government Relations Specialist

Organization: Enbridge Gas Inc.

Email:

Date: March 8, 2023

Following the February 22, 2023 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the <u>engagement web page</u>. For more details on the Hydrogen Innovation Fund, please see the <u>Low-Carbon Hydrogen Strategy</u> engagement page.

Please submit feedback to <u>engagement@ieso.ca</u> by **March 8, 2023**. If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.



Funding Requirements

| Торіс | Feedback |
|--|---|
| Do you have any general feedback on the funding requirements? | Based on the complexity and scope of the required research and feasibility studies, the IESO should revise the suggested December 31, 2023 deadline for report submission. Additionally, given the execution of contribution agreements with successful proponents planned for Q3 2023, the December 21, 2023 commencement deadline for demonstration projects at existing facilities also needs revision to ensure successful outcomes, allow for proper planning and execution, and provide applicants with sufficient time to complete the required activities and adhere to safety standards. |
| | Therefore, we strongly recommend extending the deadline for research/feasibility studies reports and the demonstration projects at existing facilities to March 31, 2024. |
| | This extension will allow applicants sufficient time to gather and analyze the necessary data to produce accurate and meaningful reports and prepare for the demonstration projects at existing facilities. Doing so will significantly contribute to the program's success by ensuring applicants can produce high-quality research and feasibility studies reports and execute successful demonstration projects that inform and guide different hydrogen approaches and future project decision-making. |
| | Enbridge also recommends extending the commencement date of the demonstration project operation to June 30, 2026 to allow for adequate lead time for equipment orders to be fulfilled and facilities to be commissioned . The proposed commencement date of June 30, 2025 is insufficient as the lead time to the commencement date must accommodate the ordering and delivery, installation, testing, and approval of equipment. Currently, the lead time for hydrogen equipment is around 18 to 24 months. Additionally, for large electrolysis plants, component procurement may require longer than the proposed lead time to the commencement date. |

Enbridge also notes that the availability of labour and manufacturing capacity is currently strained, which is directly tied to the supply chain, and will affect the inservice date. Therefore, it may be necessary to **reconsider the commencement date on a category basis, such as for new builds with long lead times versus a retrofit or a study**.

Furthermore, Enbridge points out that the sale of hydrogen to off-takers is critical to the economic viability of many hydrogen projects, which should be considered in evaluating proposals. However, the RFP's scope only considers GHG emissions reductions and the financial performance of hydrogen projects within the context of their direct effects on the electricity system. Therefore, **Enbridge recommends clarifying the system boundaries considered in evaluating proposals**.

Enbridge also recommends **ensuring the funding scope includes behind-the-meter projects that meet the IESO's transparency requirements.** This will empower businesses to reduce their carbon footprint, encourage innovation in distributed energy systems, and provide valuable insights into different approaches to hydrogen technology. In addition, including transparency requirements will ensure alignment with the IESO's goals of creating a fair and reliable energy system.

Finally, Enbridge recommends **funding and supporting projects that produce hydrogen by utilizing either waste energy recovery from existing processes or waste heat from gas turbine exhausts, i.e., replacing a regulating valve with a turbo expander.** This technology has the potential to reduce greenhouse gas emissions significantly, lower the need for electricity, and put less pressure on the electricity grid to produce hydrogen. Such projects benefit from utilizing existing infrastructure for waste energy recovery. In addition, these projects can serve as a model for other gas compression and large industrial processing facilities across Ontario, helping the province achieve its net-zero emissions target.

Evaluation Criteria

| Topic | Feedback |
|---|----------------------------------|
| Are the evaluation criteria clear and complete? | Click or tap here to enter text. |

General Comments/Feedback

Enbridge appreciates the opportunity to provide feedback and recommendations. If you have any questions or require additional information, please do not hesitate to contact Islam Elsayed, Government Relations Specialist (