



January 15, 2025

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Ministry of Energy and Electrification
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RE: ERO-019-9501: Consultation to support the important role for natural gas in Ontario's energy system and economy.

StormFisher Hydrogen (StormFisher) would like to thank the Ministry of Energy for its efforts to further develop the role of natural gas in the province's energy system and supply. As we understand, the Province is seeking feedback on:

- **Plan for Growth:** Regulatory and planning frameworks aimed at supporting and accelerating the growth of Ontario's economy and energy infrastructure while maintaining the balance between the needs of both producers and consumers.
- **Affordability, Customer Choice and Modernization:** Proposed regulatory and process changes aimed at minimizing costs for consumers, increasing existing natural gas infrastructure efficiency and reliability and improving accessibility for consumers.
- **Regulatory Support to Implement Ontario's Affordable Energy Vision:** Continued development of regulatory support and tools aimed at providing affordable and reliable energy supply while serving high growth areas such as electrification

StormFisher views this as an opportunity to further solidify Ontario's position as a leader in clean energy while continuing to promote economic growth and diversification. There is an opportunity to utilize the Province's existing supply of low-cost, clean electricity in off-peak times to produce low-carbon molecules that can be used for the energy transition domestically and through export opportunities.

To realize this, StormFisher proposes two key recommendations that are intended to stabilize the investment environment and incentivize developers and gas utilities to continue decarbonizing their operations:

1. Introduction of a renewable fuel blending mandate which progressively increases the required share of renewable fuels needed in Ontario's gas grid/infrastructure
2. Adoption of regulatory limitations on the development and permitting of new natural gas connections to only allow new connections when accompanied by a comprehensive plan to reduce overall emissions

StormFisher is a developer, owner and operator of green hydrogen and efuel production facilities throughout North America. StormFisher has a site in Ontario that we are developing in Thorold that has all of the necessary ingredients to allow for a large-scale, 150-200 megawatt (MW) low-carbon hydrogen facility including water, wastewater infrastructure, properly zoned land, access to roads, rail, and waterways. In this location, we would look to produce green hydrogen and source carbon dioxide (CO₂) from off-site locations for utilization to produce e-fuels including e-Methane. For more clarity, e-methane is chemically the same as natural gas and similar in nature to renewable natural gas from a carbon intensity perspective. The sourcing of the CO₂ would support Ontario's ethanol and landfill gas and other industrial point sources by purchasing their CO₂ for reuse which allows these facilities to be more resilient and diversify their revenue streams.

StormFisher's prospective \$600M (2024, CAD) investment in Thorold, Ontario could be accelerated by considering the feedback offered below in combination with our previous sentiment surrounding the role of Hydrogen in Ontario's energy system (ERO: 019-9324). In addition to accelerating StormFisher's contributions to Ontario's economy, the two key proposals and following feedback are expected to drive broader economic growth, job security and Ontario's existing clean energy advantage. Please find our responses to the proposed questions below:

What principles should the government provide to the OEB to help inform the Board's ongoing development of natural gas connection policies?

StormFisher believes Ontario should adopt a policy similar to British Columbia- allowing/permitting new natural gas connections only when accompanied by a comprehensive plan to reduce overall emissions. Emission reductions can be achieved through Renewable Natural Gas ("RNG") or hydrogen blending, improved efficiency, reduced consumption from existing connections, and other strategies, with a focus on implementing multiple approaches rather than relying on a single solution. British Columbia's plan, which ties continued connections to emission reduction commitments, and Quebec's RNG program, which represents a similar compromise, serve as valuable references for such a policy direction.

What role should natural gas play in supporting energy affordability and customer choice in residential and small commercial applications (e.g., space and water heating)?

StormFisher believes that natural gas should continue to be the low-cost energy option for residential and small commercial applications. However, cleaner alternative energy sources should be economically incentivized and made more affordable to consumers in order to keep pace with the energy transition. Without regulatory support key technologies such as RNG and hydrogen will lag in their domestic adoption, diluting Ontario's leadership position in the energy transition.

What role should natural gas play in supporting economic development in Ontario's industrial and agricultural sectors, including those processes that may be difficult to electrify?

Ontario's natural gas system should continue its role in supporting the economic development of Ontario's industrial and agricultural sectors as a reliable and affordable energy source. It should continue its role as the backbone of Ontario's economy.

However, sectors and industries that are particularly hard to electrify should instead seek to rely on a steadily increasing mix of both RNG and hydrogen (including its derivatives). These alternative energy source provide the same reliability

and dispatchability benefits as traditional natural gas while also significantly reducing GHG emissions- often making them the most suitable decarbonization solution.

What role should the government play in supporting and expediting the rational expansion of the natural gas system to make home heating more affordable and support economic growth in communities that are seeking natural gas service?

StormFisher believes that the government should support the expedition of the expansion of Ontario's natural gas system given there are feasible plan to reduce Green House Gas ("GHG") emissions in tandem.

As explored in the previous question, natural gas must continue expanding its capacity to meet the immediate needs of Ontario- especially for those seeking it as a service. However, to avoid entrenching natural gas as the incumbent in the long term, the government should seek to ensure that there is a feasible and actionable roadmap to progressively reduce it's dependence on natural gas and avoid its associated GHG emissions.

For natural gas expansion projects receiving government support, should the approvals processes be streamlined to support affordable home heating for Ontarians? In what ways?

No comment.

What role should natural gas play in supporting power system security and resiliency?

Ontario's Natural Gas System plays a critical role in power system security and resiliency. It stores approximately 311 PJ¹ of energy compared to batteries which only have the capacity to store ~1PJ² of energy, amongst other forms of storage. Additionally, it can convert this stored energy into power quickly and effectively in peak demand hours and during other power system upsets. Ontario's Natural Gas System must continue to play this critical role in the future.

A role that the natural gas should not play is baseload power source. Even with RNG and hydrogen blending, this will unnecessarily increase the GHG emissions of power. Ontario must continue to add other non emitting power source to ensure that natural gas remains a peak demand power source rather than baseload makeup.

What role should natural gas play in offsetting higher GHG-emitting fuel sources?

It is no longer enough to offset GHG-emitting fuel sources with natural gas. We need to reduce the GHG intensity of natural gas with RNG and hydrogen.

Historically, natural gas has been used to successfully offset carbon emissions from higher GHG-emitting fuel sources such as coal and oil. Now, these measures are no longer enough- further reduction of GHG emissions is necessary to maintain course for decarbonizing Ontario's energy system.

That is not to say natural gas has no role to play- it is a key transitional energy and fuel source that provides Ontario with a reliable and affordable energy supply. It being the best and lowest emitting energy source means that natural gas will form the backbone from which Ontario will decouple and decarbonize its energy supply. Its use should be continued until such a time where renewable alternatives such as RNG and hydrogen can feasibly fulfill all future use-cases.

What are the challenges and opportunities for enhanced energy efficiency, adoption of clean fuels (e.g., RNG, Hydrogen) and emission reduction methods (e.g., carbon capture and storage) to lower emissions in the natural gas system?

StormFisher believes there is a strong opportunity to accelerate the adoption of alternative energy sources such as RNG and hydrogen (including its derivatives) by introducing and adopting a renewable fuel blending mandate. The mandate would accelerate emissions reductions by specifying a progressive proportion of natural gas consumption to be renewable (fulfilled by either RNG or hydrogen and derivatives), increasing over time as technology advances and developments enter operation. By progressively increasing the fraction of renewable fuels, their higher initial costs can be effectively managed while ensuring investment continues to be made during the early foundational stages. This sentiment is further supported by Enbridge's position on the potential of RNG and hydrogen within Ontario's energy system³. These investments will foster economic diversification, security and growth while also driving the cost of these renewable fuels down in the long term.

In combination with the above, there is an opportunity to coordinate this mandate with new connection plans that ensure GHG emissions do not increase over time. Overall, despite the cost challenges that are present, there is a feasible pathway to overcome them while enhancing Ontario's natural gas systems resiliency and driving economic growth and security.

Sincerely,

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