

May 17, 2024

Mr. Brian Hewson Vice President, Consumer Protection & Industry Performance Ontario Energy Board 2300 Yonge Street Toronto, ON, M4P 1E4

RE: Board File Number EB-2024-0126 Transmission Connections Review

Dear Mr. Hewson,

Thank you for the opportunity to provide initial insights and commentary as it relates to the effectiveness of transmission connection processes, procedures, and requirements. The Ontario Greenhouse Vegetable Growers (OGVG) represent over 170 farm families growing more than 4,000 acres of fresh tomatoes, peppers, and cucumbers. In 2023 the greenhouse vegetable sector generated \$1.4B in export activity with a farmgate value of \$1.6B that employs more than 32,000 workers across the agri-food value chain further contributing \$2.3B to the provincial Gross Domestic Product (GDP).

Ontario's greenhouse vegetable sector has grown at an average rate of 6% per annum since 2015. The anticipated growth rate, as supported by a recent Growth and Sustainable Prosperity study, demonstrates that over the next decade, sectoral growth will continue at a rate of 5% per year. The 4,000 production acres of greenhouse vegetables represent private capital investments of \$7.2B. Moreover, there is an additional \$87M invested in on-farm energy production by way of cogeneration systems, where heat and carbon dioxide (CO₂) byproducts are recaptured and utilized as crop inputs.

As an innovative sector which utilizes the latest technologies in lighting techniques and automation, the energy consumption per acre for lit acreage ranges from 0.3 megawatt (MW) per acre to 0.5 MW per acre dependent on the technologies adopted. Estimated costs to build a high-tech greenhouse with supplemental lighting can cost up to \$2M per acre which are substantial capital investments in our province that continue to be threatened by additional upfront costs for infrastructure which is years from being built. Provided below is a snapshot of current and 5-year projected energy consumption based on the sector's anticipated growth.

Year	Acreage	Energy Draw	Energy Requirement	Total Energy Consumption
2024	4,024	LED: 705 acres	LED : 220 MW	
		HPS: 433 acres	HPS : 434 MW	735 MW
		Baseload: 4,024 acres	Baseload: 80.5 MW	
2029	5,136	LED: 1,223 acres	LED : 408 MW	
		HPS: 750 acres	HPS : 375 MW	886 MW
		Baseload: 5,136 acres	Baseload: 103 MW	

Note that other agricultural operations not represented by OGVG but located in the same regions (i.e. greenhouse berry and lettuce cultivation) in 2024 required an additional 177

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MW which is expected to increase to 350 MW by 2029. Combined, 2024 regional electricity demand in 2024 will be 800+ MW and increasing to at least 1,109 MW by 2029.

In southwestern Ontario, winter peak demand has begun to exceed summer peak demand, requiring extensive infrastructure investments to meet demand of economic investment imperatives. Significant challenges in electrical infrastructure expansion are encountered through OEB regulated upfront capital cost collection. Although this limits the risk of stranded assets, the mass electrification efforts of the province derisk any potential stranded asset situation from materializing. When new infrastructure is tabled, a 15-year commitment is required by Hydro One with guaranteed kW usage. This commitment does not consider potential rate changes, meaning the grower is liable for considerable long-term risk.

If the electricity rates increase substantially, it is no longer economically viable for growers to turn on the lights, and our members will not utilize the committed kW. However, there is a true-up process in place where Hydro One will eventually recuperate the costs of the kW commitment even if the electricity was not used. When costs rise beyond a sustainable business plan, even if usage is reduced, members remain liable for the fully committed usage. When new infrastructure is tabled and the 15-year kW commitment is made, an upfront "contribution" fee is required from the grower in the form of \$/MW, with the cost increasing each year. A recent example is seen in the South Middle Road Transmission Station expansion, where SMR2 costs in Fall 2025 = \$30k/MW, 2026 = \$46k/MW, 2027 = \$62k/MW. This is a substantial cost that growers pay in advance but does not guarantee pricing, supply, nor mitigate any risks.

Ultimately, the required contributions paid to transmitters and builders like Hydro One are costprohibitive and detract from viable business cases. Regional solutions to generation, distribution, and transmission can reduce building time, capital costs, and create conditions for affordable and accessible energy in rural Ontario. Presently, Hydro One has priced a 200-Megawatt (MW) transmission station at \$80M, and with an additional \$8M for each kilometer (km) of transmission lines (poles and wires).

As an example, if a greenhouse farm makes a commitment to utilize 10 MW of electricity and pays the corresponding contribution fees, the farm remains liable for added costs that are out of the control of growers. If another grower or entity backs out of their commitment, Hydro One will pursue the remaining rate payers, such as greenhouse farm businesses, to make up the cost difference. Although electricity prices have declined slightly from their recent highs, delivery charges have increased dramatically. The delivery charge is now more costly than the commodity based on the most recent invoices. As greenhouse farmers continue to identify and adopt economically sustainable growing practices to conserve energy usage, the increase in delivery charges is extremely discouraging.

In summary, new infrastructure is completely funded by the growers with no cap on rates, a 15-year commitment and a true-up process results in *all risk inherited by growers*. Why does Hydro One still require an upfront payment of 100% of the upstream costs if contracts are signed for a project such as SMR2? Capital related to the expansion/new build project requiring the MW will not be available when the commitment is required by Hydro One, leaving the grower to absorb a cost burden for years before capital can be generated from the infrastructure being utilized. Moreover, there is considerable delay in reimbursement or return of expansion fund deposits to farm operators. We would recommend the OEB apply amortizing cost recovery horizons that replicate of the methodology used for gas infrastructure

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which is spread out over 40 years.

Further challenges arise from discrepancies between programs relating to agricultural rates and obtaining a Farm Registry number that is hindering industry growth. For example, a 30-acre farm in southwestern Ontario was not able to qualify for a rebate program until completing 1 year of operations and submitting their financial statements. During this initial year without eligibility, this farm is not able to utilize the agricultural rebate program that unfairly results in significant premiums for electricity usage even though they are an active farm using grow lights. Growers are being penalized due to a biased qualification process even after providing support of their electrical demand has been provided to service providers.

Timelines for construction and expansion of electrical infrastructure are another challenge. As part of the 15-year commitment and contribution fee, Hydro One expects the grower to begin utilizing energy on a set date, meaning the new investment by the grower must be timed exactly to match Hydro One's project or growers risk paying for electricity that is not being used. Timing the build of a greenhouse to coincide with the completion of electrical infrastructure is a daunting task. Farms are penalized should they build too early that results in capital assets sitting idle. Conversely, if the greenhouse is built too late growers are subjected to upstream costs shift / payments. These penalties all fall back to the rate payer but when Hydro One fails to meet the completion date, there are no penalties or compensation back to the growers who are left without power. Future reliability, contingencies, and a need for audited statements by larger corporations to justify spending should be considered as current agreements with Hydro One provide an economic no-win scenario.

Housing, energy, domestic economic investments, and food security are priorities for the government of Ontario. Currently, there is a shortage of homes and access to energy that forces potential investments to jurisdictions outside of Ontario that includes the future investment into greenhouse vegetable farming. There is an opportunity to develop affordable infrastructure that will enable housing, food production, and economic development imperatives in southwestern Ontario. The red tape created by municipal and provincial regulations takes resources, time, and money to navigate when looking to expand electrical, water and wastewater infrastructure. The Ontario Energy Board decision making process for building electrical or natural gas transmission projects is not nimble. What is needed is a dynamic solution that addresses time and cost while being responsive to key regulatory processes that ensure accountability to developers and rate payers to align with the speed of business.

We value the opportunity to collaborate and provide insights into the experiences of large-volume electricity consumers. There is a substantial opportunity for continued growth of greenhouse horticulture production in Ontario; access to available and affordable critical infrastructure is imperative to support this potential development. OGVG would welcome an opportunity for further engagement through focus groups, roundtables, or additional stakeholder outreach.

Sincerely,

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Jan VanderHout Energy and Environment Chair

Richard Lee Executive Director

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