

May 12, 2023

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Sent via email to: P2D.Consultation@ontario.ca & ruby.poinen@ontario.ca
and submitted online via the Environmental Registry of Ontario (ERO) website.

Dear Ruby Poinen,

Re: ERO 019-6647: IESO Pathways to Decarbonization Study

The Ontario Federation of Agriculture (OFA) is the largest general farm organization in Ontario, proudly representing more than 38,000 farm family members. OFA has a strong voice for our members and the agri-food industry on issues, legislation and regulations administered by all levels of government. We are passionate and dedicated to ensuring that the agri-food sector and rural communities are considered and consulted during any new or changing legislation that would impact the sustainability and growth of our farm businesses.

Ontario's agri-food sector is an economic powerhouse – producing more than 200 farm and food products, fuelling rural communities, generating nearly 750,000 jobs, and contributing over \$47 billion to Ontario's annual GDP. The province's agri-food strategy, Grow Ontario, aims to strengthen the agri-food sector, support economic growth, and ensure an efficient, reliable and responsible food supply. By removing barriers, unnecessary costs and red tape, Ontario farmers will be positioned to seize opportunities and rise to the challenge of an ambitious growth strategy, allowing the agri-food sector to drive the economy forward.

We are pleased to provide comments on the IESO's (Independent Electricity System Operator) Pathways to Decarbonization Study presented to the Minister of Energy, from the perspective of Ontario's agricultural sector.

Preservation of our finite farm land inventories

OFA believes that farming to produce food, fibre, fuel, flowers, and nursery stock is the best use for farmland. Ontario's limited supply of farmland is a scarce resource, making up less than five percent of all the land in the province. It's vital that Ontario has a strong, viable and sustainable supply of food products grown, harvested, and processed right here at home. Ontario's shrinking

agricultural land base is alarming. The current rate of loss is measured at 319 acres per day in our province, according to the 2021 Census of Agriculture. These losses are not sustainable. When agricultural land is developed, it is lost forever.

Over the next 12 years, Ontario will complete an intensive electricity system decarbonization, overlaid with the first steps to increase the capacity of the system to meet higher electrification of our building, transportation and manufacturing load sectors. The electrification is forecast to add 69,000 MW of capacity to Ontario's grid system by 2050, including both the decarbonization aspect and replacing end of life assets such as Pickering Nuclear. Decarbonization and electrification, according to the Pathways Study, will require a footprint of 2.2 million acres, about 14 times the size of the city of Toronto.

The IESO projects higher amounts of variable generation – coupled with battery energy storage systems (BESS) – needed to enable solar, wind, and other intermittent generators to participate in the IESO-administered markets. Most of this industrial-scaled infrastructure will be in rural areas under a decentralized generation model, with green energy generation and storage built throughout much of our farm communities.

OFA recommends the Ministry of Energy policymakers consider the impact of Pathway forecasts on the finite supply of farm land. As we replace our remaining fossil-fuelled generation with net zero generation, it is important to prioritize the reuse of existing sites, before considering the absorption of specialty crop and Canada Land Inventory Class 1 through 4 farm lands.

Local Support for Infrastructure Projects

The Green Energy Repeal Act restored municipal powers on how renewable energy land use is regulated and approved, including project siting authority under the Planning Act. OFA recommends that decarbonization and electrification project approvals continue to require local government support resolutions, as is the case in the IESO procurement of battery energy storage systems (BESS). We recommend the Ministry and the IESO be explicit that local council support is needed for approval of proposed projects, separate from permitting and regulatory requirements.

Environmental Assessments (EA) and Energy Approvals

Decarbonization and electrification project proponents should need to obtain energy, environmental and municipal approvals. Ontario's Guide to Environmental Approval Requirements (GEAR) for Electricity Projects, Chart 1, details Environmental Approval requirements based on Resource Types designated in Ontario Reg. 116/01 Electricity Projects. Non-designated resource types are categorized Class A, regardless of size, and do not require an Environmental Assessment for approval. BESS are not designated, and to date, no BESS have required an environmental assessment. They are managed under GEAR Chart 1 as a source not designated in the Regulation.

OFA recommends that, as with transmission lines over 2 km in length and transformer stations over 115kv triggering EA requirements, stand-alone BESS, or BESS integrated with renewable

generation, should also trigger EA requirements. This is in addition to Renewable Energy Approvals (REA) or Environmental Compliance Approval (ECA).

Specific to the Pathways recommendations

To address streamlining regulatory, approval and permitting processes, we recommend investigating how reuse of decommissioned assets and sites could be streamlined.

Related to nuclear generation, waterpower facilities, and long-life energy storage, OFA recommends the full life-cycle carbon impacts of these expensive-to-construct resources be included in cost decisions. Considering the full cost of these types of assets, OFA encourages government to contemplate the merits of private-, Indigenous- and government-owned projects.

Related to the continued short-term investment in clean energy resources to offset natural gas plants, and the associated cost of energy to customers, OFA notes that Ontario's Clean Energy Credit registry does not include fuel sources such as biogas and RNG as molecules. We recommend Ontario include these renewable fuels in any credit system as both combustible fuel and for electricity generation, and review the viability of supporting an RNG production credit to help commercialize RNG production from forest, agriculture and municipal biomass waste.

Related to estimated 2050 build-out capital costs of \$400 billion, and the potential increase to electricity customer billing costs, OFA supports the IESO position that removing all natural gas generation by 2030, even without including other low-emission fueled capacity to provide system flexibility, is unacceptable to customers and tax payers. We recommend a careful timeline to meet provincial and federal emission targets that does not overburden customers. While Ontario is closer to a decarbonized electricity system per capita than most other provinces, no other jurisdictions need the scale of assets as Ontario does. This cannot come at further costs to residential and small business customers such as farm businesses – the driving source of Ontario's economy.

Related to the transmission capacity needed to balance intermittent resources (solar, wind) and meet decentralized generation throughout the province, OFA recommends the IESO take an aggressive approach to ensuring existing corridors, and commercial and industrial lands are used and repurposed, and are ranked as priority siting locations. Where possible, OFA recommends the IESO and government encourage designs that locate generation in urban centres to reduce the need for extensive transmission corridor construction.

Distributed energy systems will play an important role to meet balancing needs in rural and urban regions. From an agricultural perspective, decarbonization and electrification presents opportunities to advance regional electricity infrastructure. OFA recommends decision-makers take a practical approach to improving local and grid system level deficiencies when designing procurement requirements, including developing three-phase power, looping terminal lines to help mitigate stray voltage, brownouts, and voltage drops, and reducing downtime during outages.

OFA strives to ensure farming and agri-food has a voice in regulations related to energy policy, and the design, construction and operation of energy infrastructure. This is meant to help insure

the sustainability, growth and modernization of our farm sector. We appreciate the opportunity to present a perspective from the viewpoint of Ontarians living in rural and farm communities.

Regards,



Peggy Brekveld
President

cc: OFA Board of Directors
The Honourable Todd Smith, Minister of Energy
The Honourable Lisa Thompson, Minister of Agriculture, Food, and Rural Affairs
The Honourable Steve Clark, Minister of Municipal Affairs and Housing