ONTARIO ENERGY ASSOCIATION

ERO 19 8767: Regulating Commercial-Scale Geologic Carbon Storage Projects in Ontario

August 23, 2024

To shape our energy future for a stronger Ontario.



ABOUT

The Ontario Energy Association (OEA) is the credible and trusted voice of the energy sector. We earn our reputation by being an integral and influential part of energy policy development and decision making in Ontario. We represent Ontario's energy leaders that span the full diversity of the energy industry.

OEA takes a grassroots approach to policy development by combining thorough evidence based research with executive interviews and member polling. This unique approach ensures our policies are not only grounded in rigorous research, but represent the views of the majority of our members. This sound policy foundation allows us to advocate directly with government decision makers to tackle issues of strategic importance to our members.

Together, we are working to build a stronger energy future for Ontario.

The Ontario Energy Association would like thank the Ministry of Natural Resources and Forestry for the opportunity to comment on the discussion paper entitled "Regulating Commercial-Scale Geologic Carbon Storage Projects in Ontario" (ERO – 019 8767).

As many have pointed out to the ministry, all avenues need to be explored and utilized in order for Ontario to meet its short and long-term decarbonization goals. This is particularly important for hard-todecarbonize industries (e.g. steel) where gas utilization, economical and technically feasible electrification, the utilization of hydrogen-blends, Carbon Capture and Storage (CCS) and carbon credits are all utilized as a part of the full toolkit necessary to achieve net-zero.

How the government approaches the critical element of CCS will decide whether industry has another policy and technological tool available or not.

Our submission, informed by member input, will focus on factors that ease regulatory and economic burden for CCS to succeed in Ontario.

Vesting Pore Space and the Broader Issue of Rights:

The single most important action that the province could do in the short-term is to vest **all** available pore space into provincial control. The ministry-proposed "phased" approach focusing on particular geological features (e.g. saline aquifers) and geological depths (e.g. 800 meters or more) is problematic in that it fragments access to pore space.

The economics of pore space will be decided by both technology and geology, where feasibility may change depending on the business case and technical efficiencies as they become available. While particular geological features may be economically feasible under current economic and technical conditions, other types of pore spaces may still have marginal economic value that is unlocked as business cases and technology matures. Waiting to vest particular types of geological features conditional on other external factors will slow down access, especially when factoring into account cabinet processes, comparative ministerial priorities and electoral cycles.

Furthermore, given that geological features may extend for dozens of kilometers, it will be challenging to engage in CCS activity without infringing on someone else's sub-surface right, thereby forcing the unenviable task of negotiating on a household-by-household basis.

As the ministry has pointed out, there are multiple jurisdictions that have successfully vested pore space into provincial control. Alberta is one such jurisdiction and could be considered a "best-practices" model for Ontario to emulate.

In general, the OEA acknowledges that the issue of rights may not be limited to that of just sub-surface rights and that there may broader rights-based considerations that would have to be taken into account (e.g. merging evaluation rights with access to private pore space to mitigate isolation requirements). We urge the ministry to take a holistic approach when dealing with rights and accessibility.

Financial obligations, Charges and Fees:

CCS projects are technically feasible, however may have marginal economic viability depending on the project's unique circumstances, which makes the government's financial obligations, charges and fees a critical factor between project success and failure.

The OEA recommends a scalable approach, commensurate to the type of project and the associated risks. An example is monitoring credit worthiness for a project proponent over the duration of the project and making sure financial assurances are appropriate. Other approaches could include modifying

well bond requirements in Ontario to include CCS well. Creating a stewardship fund could help cover longer-term post-closure costs and liabilities.

Our members have also indicated that the financial/royalty structure underpinning the gas-storage projects in Ontario is unsuitable for CCS type for a variety of reasons. First and foremost, gas storage operations have a business model based on recurring usage and seasonality-based pricing variations. CCS on the other hand is a single application model, where, once a geological formation has been used to its maximum capacity, cannot be reused. In addition, the gas-storage revenue flows and economics are large enough to sustain the royalties and payout obligations. This will not be the case with CCS, where financial payouts based on gas-storage figures are sufficient to kill the economics of the CCS project.

The fundamental point is that CCS projects will be highly susceptible to incremental and marginal costs which are impacted by government fees, charges and other payouts. Care must be taken in ensuring that these do not kill otherwise financially viable projects.

Community Engagement:

As many in the energy sector can attest, the role of community support is absolutely crucial for the success of CCS policy in Ontario. This means that both the government and industry needs to work collaboratively and persistently to engage impacted communities, create win-win scenarios, dispel false narratives and ensure transparency on projects, technology, processes and hazards.

Advancing Commercial Scale Projects:

The OEA recommends that the government of Ontario acts quickly (but comprehensively) in advancing to commercial scale projects as soon as possible, rather than enabling limited demonstration project. It should be noted that commercial scale projects are substantially larger than demonstration projects in terms of expenditure, size and geography and may be more financially viable due to its increased economies of scale.

Enabling commercial scale projects such as open-access hubs will require several supporting actions including; vesting pore space, defining geological boundaries for each project, ensuring the full complement of rights and responsibilities within a cohesive regulatory framework (e.g. carbon transportation regulations), a transparent RFP Process for project processes and other factors as required.

In conclusion, the OEA recommends that the government of Ontario enable commercial scale carbon capture and sequestration projects as soon as possible in order to meet the provinces own net-zero targets. Delays now, will only make the job of attaining net-zero targets that much more difficult.

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CONTACT

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Let's unravel complex energy challenges, together.