



13 December 2025

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**Re: ERO-025-1212 – Enhancing Transmission Capacity North of Dryden – The Red Lake Transmission Project**

Dear Ms. Robinson:

The Ontario Rivers Alliance (ORA) is a not-for-profit grassroots organization with a mission to protect, conserve, and restore riverine ecosystems across the province. The ORA advocates for effective policy and legislation to ensure that development affecting Ontario rivers is environmentally and socially sustainable.

ORA appreciates the opportunity to comment on ERO-025-1212, which proposes to:

1. Declare the Dryden–Ear Falls–Red Lake 230-kV transmission project a “priority project” under s.96.1 of the Ontario Energy Board Act, 1998.
2. Direct the Ontario Energy Board (OEB) to amend Hydro One’s transmission license to require it to develop and construct the line.
3. The proposal would pre-determine “need” at the political level, constrain the OEB’s independent review, and fast-track a line explicitly intended to support rapid mining expansion and at least 200 MW of new generation in the Red Lake area.

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## **Executive Summary**

The Ontario Rivers Alliance (ORA) strongly opposes the proposed “priority project” designation for the Red Lake Transmission Project under s.96.1 of the Ontario Energy Board Act. This designation would predetermine need, bypass independent review, and lock Ontario into a transmission corridor intended primarily to enable new northern hydropower and mining development—an agenda the government never presented to voters and has no public mandate to pursue.

Ontario’s Energy for Generations plan frames 3,000–4,000 MW of new northern hydropower as central to positioning Ontario as an “energy superpower,” yet northern hydropower is an energy-limited, climate-vulnerable, high-emissions resource with firm capacity as low as 15–30% of installed capacity. Climate change is already degrading hydropower reliability across Canada through drought, extreme weather, and unstable hydrologic regimes, forcing operators to conserve water, curtail supply, or turn to fossil-fuel generation.

The Energy for Generations report also mischaracterizes hydropower as “clean” and “non-emitting,” despite decades of global research confirming that reservoirs are significant methane sources, often on par with gas plants. Emissions intensify as reservoirs warm, water levels fluctuate, and organic sediments accumulate behind the dam—conditions prevalent across northern Ontario.

No cumulative-effects assessment has been conducted. The Province has not evaluated the combined impacts of hydropower expansion, mining, new transmission corridors, wastewater and agricultural inputs, industrial discharges, or climate-driven hydrologic shifts—contrary to federal science guidance from DFO and Environment and Climate Change Canada.

Ratepayers also face growing financial increases and risks. The government is proposing to shift early-stage hydropower planning, incentives, and consultation costs—including Indigenous consultation costs—onto electricity bills, an unprecedented transfer of speculative project risk from proponents to the public. Transmission capital costs are likewise recovered from consumers, meaning premature expansion will financially burden households and businesses for decades.

For Indigenous Nations, equity participation cannot replace consultation, consent, or transparent assessment of long-term liabilities, including reservoir methane, methylmercury contamination, fish and habitat disruption, hydrologic instability, dam-safety risks, and eventual decommissioning obligations. The Crown must consult early and directly before committing to long-lived infrastructure in Indigenous territories.

ORA recommends rejecting the priority designation. The Province must first complete and publicly release a full climate-resilience, cumulative-effects, and ecosystem-services assessment for the North-of-Dryden/Red Lake sub-region, developed in partnership with Indigenous Nations and consistent with federal science frameworks. The Ontario Energy Board (OEB) must evaluate this evidence before determining need. The Red Lake Transmission Project also meets the criteria for federal designation under s.9 of the Impact Assessment Act.

Approving this Ener now would expose northern watersheds, communities, and future generations to unnecessary and irreversible harm.



## 1. Ontario Wants to Be an “Energy Superpower” on the Backs of its Ratepayers:

ORA supports transmission lines where they are demonstrably necessary, climate-resilient, and aligned with the protection of freshwater and Indigenous rights. Although this proposal is framed as promoting economic development and Indigenous partnerships, the government’s own planning documents reveal a much deeper and unstated objective: accelerating northern hydropower expansion and repositioning Ontario as an “Energy Superpower”.

The 2025 **Energy for Generations, Ontario’s Integrated Plan to Power the Strongest Economy in the G7**, stated, “*We will cement Ontario’s position as a national, continental and global energy superpower*”.<sup>1</sup> This is not a mandate the public ever endorsed. The Premier did not campaign on becoming an “energy superpower”, nor did the PC Party’s election platform seek voter approval for an energy-export agenda, new northern hydropower development, or building electricity supply beyond our own domestic needs. This framing appeared **only after the election**, through ministerial statements and government planning documents. Nothing in the PC Party’s public-facing platform communicated a mandate for an export-oriented hydroelectric expansion strategy. Although the federal government under Prime Minister Mark Carney campaigned to position Canada as a national energy superpower, that federal mandate does not transfer to Ontario’s electricity system; the Province did not seek voter approval for a provincial energy-export agenda or for a hydropower-driven expansion strategy. Ontario cannot rely on federal political messaging to justify a provincial energy export agenda that voters were never asked to endorse.

**Ontario ratepayers were not consulted on this shift**, yet the government is already proposing to shift early-stage hydropower planning, incentives, and consultation costs—including Indigenous consultation costs—onto ratepayers’ hydro bills, an unprecedented transfer of speculative project risk from proponents to the public.<sup>2,3</sup> Supporting Indigenous prosperity is essential, but it should not be leveraged as a vehicle for an “energy superpower” build-out in some of Ontario’s most vulnerable and ecologically intact northern watersheds. In a period of accelerating climate uncertainty, imposing unnecessary, speculative system-expansion costs on ratepayers is irresponsible and lacks democratic legitimacy. We are living in very uncertain times, and this is not the time to add unnecessary costs to ratepayers’ hydro bills.

Although the regulatory amendment is framed as applying only to OPG’s hydropower portfolio, it establishes a structural precedent that other proponents will inevitably seek to replicate. Once such a mechanism exists, the transfer of early-stage planning and consultation costs from industry to ratepayers risks becoming normalized, compounding the financial burden on households and businesses while undermining the rigorous front-end scrutiny that protects ratepayers from uneconomic, high-risk projects. This approach is neither ethical nor economically defensible, and it further illustrates the extent to which the Province is attempting to advance its hydropower expansion agenda by shifting climate, financial, and development risks away from government and industry onto electricity consumers.

The province’s **Energy for Generations** plan positions 3,000–4,000 MW of new northern hydro potential as a tool to “enhance reliability and reinforce Ontario’s position as an ‘Energy Superpower,’ and highlights new Moose River Basin projects at Nine Mile Rapids and Grand Rapids alongside recontracting programs for small- and northern-hydro. This ERO must be read squarely in that context. However, it omits critical climate-change considerations and risks locking Ontario into an intermittent, unreliable and high-emissions energy pathway.



The only “consultation” ratepayers have received regarding future electricity costs has been through Hydro One’s customer-engagement survey for its 2028–2032 Investment Plan — an operational exercise that asks customers to choose among various infrastructure and reliability options, each tied to projected bill increases. The survey explicitly stated that its purpose was to guide Hydro One’s draft investment decisions. It did not seek public consent for an energy-export agenda, for new northern hydropower development, or for repositioning Ontario as an “Energy Superpower.” These surveys are narrow, utility-specific research tools; they are nowhere close to the democratic consultation required for a province-wide policy shift of this magnitude.

We oppose using “priority” designations and emergency rhetoric to hard-wire a long-lived transmission corridor that is primarily a launch pad for new northern hydropower and critical minerals extraction under the “Energy Superpower” agenda.

## 2. Northern Hydropower is an Energy-Limited and Highly Variable Resource:

A fundamental analytical failure in this proposal is the complete absence of the Ontario Climate Change Impact Assessment (OCCIA 2023), despite its direct relevance to hydropower and transmission system planning in northern Ontario. OCCIA documents severe increases in drought frequency, extreme precipitation, hydrologic instability, rising summer water temperatures, and ecosystem stress—conditions that fundamentally undermine the performance, certainty, and safety of hydropower infrastructure. Ignoring OCCIA’s findings is a major flaw that renders the proposed priority designation unsupported by science or sound planning.<sup>4</sup>

The supporting documentation greenwashes northern hydropower as a clean, non-emitting, and dependable baseload, whereas the IESO’s own North of Dryden Integrated Regional Resource Plan unequivocally reports that it is an **energy-limited, highly variable resource** with firm capacity as low as 15–30% of nameplate.<sup>5</sup>

The same IESO analysis concluded that “*Northern hydroelectric generation is an energy-limited resource known to have significantly reduced output and availability during drought conditions of the river system supplying these generating units.*”<sup>6</sup> In fact, the recommendation of their report was not to build any new hydroelectric facilities but to build new transmission lines.

In other words, IESO’s own planning documents already acknowledge that North-of-Dryden **hydropower is intermittent, drought-sensitive, and expensive per-unit of dependable capacity.** It is not a robust baseload resource for the kinds of large, continuous mining loads now being promoted under the Critical Minerals Strategy.

The role of hydropower in providing reliable baseload power, system balance and stability will be severely affected by climate-related events, which have reduced water availability in many regions in Canada over the last few years, straining power grids, resorting to burning diesel to fill the gap<sup>7</sup>, and raising serious questions about the resilience and reliability of hydroelectric generation.<sup>8</sup> For instance, Manitoba Hydro boasts that it has one of the cleanest grids in the country, but because of growing drought conditions, it is banking on using fossil fuels for the long term. It has used more electricity from natural gas in the last 12 months than in the last decade. It’s a foreshadowing of the uncertain future hydropower faces. From 2013 to 2023, the utility operated its natural gas generators for an average of 54 gigawatt-hours of power; in 2024, the province used 122 GWh, according to data provided by Manitoba Hydro. The drought conditions took a toll on the province’s hydroelectric reservoirs, prompting the utility to import electricity and run its



backup thermal generators. “*Dry conditions in Manitoba over the past year had already left the utility with \$160 million in net negative income by the end of the third quarter as hydraulic generation dropped 25 percent below projected levels and the utility was forced to import energy...*”<sup>9</sup> This is not an isolated case—it is a preview of what Ontario’s northern hydropower fleet will experience under accelerating climate change.

The World Meteorology Organization (WMO) reported that 2024 was the hottest year on record, and “*Every additional fraction of a degree of warming drives more harmful heatwaves, extreme rainfall events, intense droughts, melting of ice sheets, sea ice, and glaciers, heating of the ocean, and rising sea levels.*”<sup>10</sup>

When these hydropower facilities are no longer viable, there are no upfront provisions in place to decommission dams that have outlived their useful life, threaten a valued or at-risk species, or have become unsafe or uneconomical. However, they must be maintained and/or removed with taxpayers' dollars, because there are no funds in place to remove dams.

Solar, wind, battery storage and distributed energy deliver far more deliverability per dollar; they are the most scalable clean energy technologies, the quickest to deploy, with none of the long-term safety and environmental liabilities. Yet these technologies are being sidelined over the next 15 years, while investment continues to flow into hydropower, with its long lead times, high construction costs, and environmentally and ecologically damaging effects.

Henvey Inlet Wind is the largest First Nation wind energy partnership in Canada, featuring 87 turbines that can generate up to 300 megawatts of renewable energy. This massive capacity contributes significantly to Ontario’s renewable energy targets, displacing greenhouse gas emissions equivalent to taking approximately 87,000 cars off the road each year—one turbine effectively erasing emissions of 1,000 vehicles.<sup>11</sup> It looks to be an excellent model for remote and northern projects to follow!

### **3. A Transmission Project Built for Mining and New Hydro:**

The proposal is framed as an urgent response to “*anticipated growth,*” “*critical mining projects,*” and the Critical Minerals Strategy, with the Red Lake area identified in **Energy for Generations** as a key region requiring a “*flexible, reliable, and ready to scale*” transmission system. The ERO notes that the 2025 Northwest Region IRRP Addendum recommends a double-circuit 230-kV line from Dryden TS to Ear Falls TS, and from Ear Falls TS to Red Lake SS, “to support critical mining projects in the region” and to “support the integration of at least 200 MW of new electricity generation projects.”

At the same time, the **Northwest Ontario Scoping Assessment Outcome Report** stresses that planning is being accelerated to align with “*government priorities, particularly around economic development and critical mineral mining,*” and that an urgent IRRP Addendum has already resulted in “*significant transmission reinforcement into the Ear Falls and Red Lake areas.*” The Report lists a series of major transmission reinforcements either completed or under construction—East-West Tie, Wataynikaneyap, Waasigan, and a Dryden-Ear Falls-Red Lake Transmission Plan with an in-service target of 2031–2033—showing that a large part of the infrastructure build-out is already committed.<sup>12</sup>



ERO-025-1212 therefore does more than “enable” one line; it cements a **hydro-and-mining-centred build-out** in a region already undergoing intensive infrastructure and land-use change, while truncating the OEB’s discretion by forcing it to “*accept that this line is needed*” under s.96.1(2).<sup>13</sup> However, there were other, less ambitious transmission-line options in the 30 July 2025 IESO engagement presentation that would have met local needs without the push for new hydroelectric development to help meet the goal of becoming an Energy Superpower.<sup>14</sup> The single 230 kV line at an estimated cost of \$760M, or the double 230 kV line at a cost of \$820M.

## North of Dryden - Options Overview

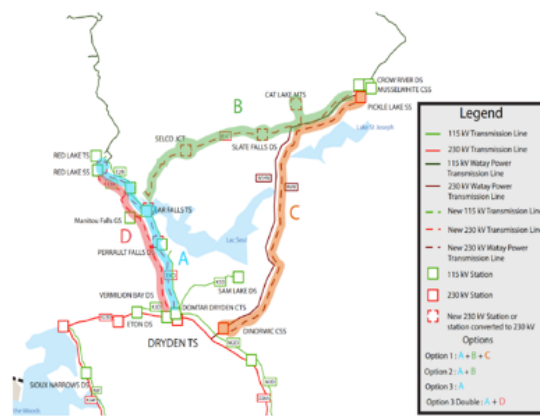
To address the supply capacity need identified in the Red Lake area, the following options were further analyzed:

### Wire options:

- **Option 1\*:** 230 kV transmission line from Dryden to Ear Falls to Pickle Lake, 115 kV transmission line from Ear Falls to Red Lake, and 230 kV transmission line from Dinorwic Junction to Pickle Lake (parallel to W54W)
- **Option 2\*:** 230 kV transmission line from Dryden to Ear Falls to Pickle Lake, and 115 kV transmission line from Ear Falls to Red Lake
- **Option 3\*:** 230 kV transmission line from Dryden to Ear Falls to Red Lake
- **New - Option 3 Double:** Double circuit 230 kV transmission line from Dryden to Ear Falls to Red Lake

### Non-Wire Alternatives:

- Battery Energy Storage Systems (BESS) (in combination with solar and on-shore wind)
- **New** – Biomass Generation excluded



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\*Single circuit



That is not a neutral step. It structurally biases the system in favour of further hydropower and mining expansion before the public, Indigenous Nations, and regulators have had a genuine opportunity to consider lower-impact, climate-resilient alternatives such as solar, wind, distributed renewables, storage, and demand-side measures.

Climate change will only amplify the risks. Recent assessments warn that Canadian hydropower reservoir output is already being hit by severe drought, forcing major producers to draw down reservoirs and even import power from the United States after decades as net exporters. For instance, after 2021, volumes in Hydro-Québec reservoirs have decreased to below-average levels, and reservoirs at the La Grande power stations in the James Bay region were at about 44 percent capacity.<sup>15</sup> As warming accelerates, the frequency and severity of hydrological droughts and extreme rainfall events are projected to increase, creating deeper swings between low-water deficits and flood-risk events.<sup>16</sup>

Designing a major transmission expansion around an **energy-limited resource with a dependable capacity of 15–30% of installed capacity poses a structural reliability risk**, not a solution—especially when those assets are expected to operate for 50 to 100 years or more in a rapidly warming climate.



#### 4. Hydropower and Its Reservoirs Drive Climate Change:

The Ministry of Energy's report, **Energy for Generations**, engages in **major misinformation**, falsely portraying hydropower as a 'clean' and 'non-emitting' resource, even though reservoir-based hydropower is a well-documented source of methane that can rival that of a gas-fired facility. Yet, claims it will help keep Ontario's grid among the "*cleanest in the world*."<sup>17</sup>

A Global synthesis of hydropower reservoir greenhouse-gas (GHG) emissions found that reservoir water surfaces emit about 0.8 Pg CO<sub>2</sub>-e per year, with "*the majority of this forcing due to CH<sub>4</sub>*," and concluded that "*hydropower reservoirs are a **non-trivial global methane source***". Warming trends are also expected to increase methane fluxes from shallow, organic-rich reservoirs.<sup>18</sup> These are precisely the conditions present in northern Ontario, so any claim that hydropower will support a 'clean' and 'non-emitting' grid or help Ontario achieve climate goals is scientifically untenable. Methane will continue to be generated for the dam's full life cycle and will continue until the dam is removed.

Subsequent studies have shown that:

- A single flushing operation can release CH<sub>4</sub> equivalent to 7–14% of an entire year's methane emissions from a hydropower reservoir, underscoring how peaking and sediment-management practices can create large, pulsed emissions events.<sup>19</sup>
- Methane emissions from reservoirs arise through multiple pathways—diffusion, ebullition (bubbling), plant-mediated transport, and degassing during turbination and reservoir flushing—and reservoirs contribute roughly 10 % of global methane emissions from inland waters.<sup>20</sup>
- A Swiss run-of-river hydropower reservoir study documented methane fluxes exceeding 150 mg CH<sub>4</sub> m<sup>2</sup> d<sup>-1</sup>, "the highest ever documented for a mid-latitude reservoir," and strongly temperature-dependent—meaning emissions increase as water warms.<sup>21</sup>

The **2019 IPCC Refinement to the 2006 Guidelines** has already updated national inventory guidance to require reporting of CO<sub>2</sub> and CH<sub>4</sub> emissions from flooded land, including hydropower reservoirs.<sup>22</sup> In other words, the international climate-science community now treats hydropower reservoirs as a managed, emitting land-use category rather than a zero-emissions technology.

For northern Ontario's shallow, drawdown-prone reservoirs and run-of-river systems with peaking operations, this has direct implications. Frequent wetting and drying of the littoral zone, warm summer temperatures, wastewater effluent, and sediment-laden inflows from logging, mining, and road building all fuel high methane production and release, which accelerates climate change.

The more the province leans on peaking hydropower to follow mining and industrial loads along the Red Lake line, the higher these emissions are likely to be. Expanding transmission to unlock more energy-limited hydro is therefore **not** a climate solution; it risks fuelling additional methane emissions precisely when Canada must be driving them down.

#### 5. The Trouble with Small Hydropower—under 20 MW:

Small hydro is often thought to be clean with fewer impacts. This is generally understood to mean that it does no harm to the environment and does not emit GHGs. However, "*With the 'clean' reputation of large hydroelectric dams already in question, scientists are reporting that millions of*



*smaller dams on rivers around the world make an important contribution to the greenhouse gases linked to global climate change. Their study shows that more methane than previously believed bubbles out of the water behind small dams.”* They describe the methane released from water impounded behind six small dams on a European River.<sup>23</sup>

With smaller dams, storage becomes increasingly important. Reservoir silting up or becoming overloaded with nutrients are common problems. They are at least as serious where shallower bodies of water are created – the shallower a water body, the more easily eutrophic it can become. Likewise, methane generation occurs largely where water and sediment meet. This means that a shallower water body is likely to release more methane per unit area than a deeper water body. Shallow reservoirs are not unlike paddy fields, and biomass generation, which are known to contribute substantially to methane emissions.<sup>24</sup>

It is also important to consider that creating a hydroelectric reservoir on a previously untamed riverine ecosystem can transform a healthy ecosystem from a GHG sink into a relatively large source of emissions.<sup>25</sup>

New reservoir flooding also accelerates the bioaccumulation of methylmercury in fish tissue, and these effects can persist for as long as the dam is in place.<sup>26,27</sup> This can remove fish as a primary food source for Indigenous and other stakeholder communities.

The hydropower industry has intensified its lobbying for a new renaissance in hydropower because hydropower capacity additions have been declining since 2013. This is due not only to the falling costs of competing technologies but also to a broader set of challenges, including high-profile cancellations, growing hydrological risks, cost and schedule overruns, water availability and technical challenges, and increasing social resistance.

The daily, seasonal, and annual variations of small hydro operations are intermittent and unreliable. This is because generation peaks during the high flows of spring, when power demand is low, and produces at its lowest during the hot summer months, when consumption and demand are at their peak. During the low-flow season in summer or during drought conditions, many true run-of-river and even some peaking (storage) facilities, especially on smaller rivers, cannot operate efficiently and must be shut down.

Northern Ontario’s small hydro reservoirs share these characteristics — shallow, organic-rich basins with fluctuating flows — making them particularly vulnerable to high methane production.

## **6. Cumulative Effects on Freshwater and Aquatic Ecosystems:**

The Northwest Ontario Scoping Assessment Outcome Report confirms that the Red Lake transmission reinforcement is being accelerated primarily to meet the timelines of critical minerals development and the Province’s economic expansion agenda<sup>28</sup>. Yet neither the ERO posting nor supporting documents provides any cumulative-effects assessment addressing watershed changes, fish habitat impacts, hydrologic alterations, reservoir emissions, or dam-safety risks emerging from climate change. OCCIA stresses the requirement for regional-scale, integrated watershed analysis as a prerequisite for infrastructure decisions in climate-vulnerable regions. Failing to do so is inconsistent with best practice and federal freshwater science guidance.



Federal science is increasingly clear that **cumulative effects**, not just individual project footprints, are the critical threat to Canada’s freshwater ecosystems. The Department of Fisheries and Oceans’ (DFO) 2020 review of cumulative-effects research stresses that the key challenge is managing multiple interacting stressors—hydrologic alteration, habitat fragmentation, contaminants, thermal pollution, and climate change—on fish and aquatic habitats over space and time, and calls for **habitat- and region-based cumulative-effects frameworks** rather than project-by-project approvals.<sup>29</sup> A companion 2022 DFO research document outlines how cumulative-effects considerations must be embedded in **integrated planning**, not treated as an after-the-fact add-on.<sup>30</sup>

Environment and Climate Change Canada’s 2024 **Synthesis of Freshwater Science in Canada** highlights accelerating pressures on water quality, aquatic biodiversity, and hydrologic regimes, and explicitly calls for science-based prioritization of freshwater protection in the face of climate change and expanding resource development.<sup>31</sup>

Against this backdrop, the Red Lake Transmission Project would:

- Facilitate **large new mining loads** with associated tailings, effluent, and land-disturbance impacts in river systems that are already subject to hydropower regulation.
- Enable at least **200 MW of new generation projects**, which in practice are likely to be additional hydroelectric reservoir-related facilities in a region already dominated by hydro and subject to rapid climate-driven hydrologic change.
- Layer new transmission corridors, access roads, and construction footprints across multiple Treaty territories, affecting wetlands, headwater streams, and culturally important landscapes.

Yet neither the ERO notice nor the referenced planning materials provides any **transparent cumulative-effects analysis** of what this combined hydropower-plus-mining-plus-transmission build-out will mean for river temperature regimes, baseflows, fish passage, methylmercury risks, or methane emissions from existing and potential new reservoirs. Proceeding with a “priority” designation and pre-determined need in the absence of that analysis is inconsistent with best practice and with federal science guidance.

## **7. Indigenous Rights, Consultation, and Risk Transfer:**

The North of Dryden sub-region lies within the Traditional and Treaty territories of Treaty 3, Treaty 5, Treaty 9 and the Robinson-Superior Treaty area.<sup>32</sup>

The Northwest Scoping Assessment Outcome Report lists a long roster of First Nations and Tribal Councils, to be “notified and invited to participate,” underscoring the breadth of communities whose rights and interests are at stake.

At the same time, **Energy for Generations** and the ERO emphasize Indigenous equity participation in transmission and hydropower projects—Hydro One’s 50-50 First Nation equity partnership model for large transmission lines, and expectations that Ontario Power Generation (OPG) and others “explore commercial partnership and procurement opportunities” on new greenfield generation and refurbishments.

Equity participation, however, is not a substitute for:



- **Meaningful, early, and ongoing consultation and consent** regarding project need, routing, alternatives, and cumulative effects.
- Transparent assessment of the **long-term liabilities** associated with hydropower reservoirs (methane emissions, sediment management, dam safety, decommissioning).
- Ensuring that Indigenous communities are not left carrying the financial, environmental, and reputational burdens of assets whose performance will be increasingly stressed by climate-driven droughts and floods.<sup>33</sup>

Delegating “procedural aspects of Crown consultation” to the transmitter and other regulators, as the ERO contemplates, while simultaneously pre-determining need through a priority declaration, is fundamentally at odds with the honour of the Crown and with reconciliation commitments. It constrains the ability of Indigenous Nations to challenge whether this transmission-and-hydro pathway is acceptable at all and reduces engagement to route-tweaking and mitigation around a foregone conclusion.

## 8. Better Pathways for Reliability, Mining Loads, and Indigenous Participation:

ORA recognizes the need to ensure reliable electricity for existing customers, remote communities, and any responsibly approved mining operations. But that does not require doubling down on an energy-limited, climate-vulnerable hydropower expansion strategy. A more responsible pathway would include:

- **Maximizing non-wires and distributed solutions** (efficiency, demand response, behind-the-meter storage, and community-scale renewables) to meet local and regional needs where possible, reducing the scale of new transmission.
- **Prioritizing wind, solar, and battery storage**, which Ontario’s own planning documents acknowledge are growing, cost-competitive resources, with nearly 3,000 MW of storage being added to enable intermittent renewables to play a more reliable role.
- Restricting any new generation enabled by this line to **non-reservoir, low-impact technologies** (e.g., run-of-river kinetic devices without impoundment (no dams), carefully sited wind and solar, and storage), subject to rigorous cumulative-effects assessment.
- Ensuring Indigenous communities can invest in **diversified, low-impact assets**—such as storage, distributed renewables, and transmission equity that is not tied to new dams—so they are not locked into long-term exposure to hydropower risks.

Until these alternatives are properly evaluated and until climate and cumulative-effects risks are fully integrated into planning, the proposed priority designation is premature.

## 9. Recommendations:

Given the concerns outlined above, ORA recommends that the Ministry of Energy and Mines and the Government of Ontario:

### 1. **Reject the proposed “priority project” designation under s.96.1 of the *Ontario Energy Board Act*.**

A political directive pre-determining “need” is inappropriate when the underlying evidence is incomplete and when climate-vulnerable hydropower is being relied upon to support major new mining loads.



**2. Ensure the Ontario Energy Board (OEB) retains its full authority to determine need, alternatives, and public interest.**

The OEB must be permitted to evaluate all relevant evidence, including climate, hydrologic, and cumulative-effects risks, before determining whether this project is necessary or prudent. Any directive that forces the OEB to “accept that the line is needed” undermines independent oversight.

**3. Reject political “Energy Superpower” scenarios and require the OEB to base need solely on demonstrated demand, climate limits, cumulative-effects constraints, and ratepayer protection.**

Ontario’s electricity system exists to serve Ontarians—not to pursue political branding exercises or export-oriented expansion. The OEB must explicitly reject any planning scenario premised on positioning Ontario as an “energy superpower,” as this narrative has no grounding in IESO demand forecasts, climate-resilience science, ecological carrying capacity, or statutory obligations. The determination of need must be anchored exclusively in evidence: real electricity demand, watershed and climate constraints, Indigenous rights, ecosystem-services impacts, and the protection of households and businesses from unnecessary system-expansion costs.

**4. Require a full climate-resilience and cumulative-effects assessment before any further transmission approvals are considered.**

Ontario must not advance new transmission infrastructure in the North-of-Dryden/Red Lake sub-region without a comprehensive, transparent assessment of climate-resilience, watershed capacity, cumulative effects, and ecosystem services impacts. This work should be carried out in partnership with Indigenous Nations and, where necessary, with federal science agencies (DFO, ECCC) whose mandates and expertise remain intact. Findings must be publicly released and evaluated by the OEB as part of its determination of need.

**5. Request federal designation review under s.9 of the Impact Assessment Act.**

Given the significant risks to Treaty rights, fish habitat, watershed integrity, methane emissions, and cumulative regional impacts outlined in this submission, all areas of clear federal jurisdiction, the Red Lake Transmission Project meet the criteria for a federal designation under s.9 of the Impact Assessment Act. ORA recommends that the Crown engage with affected Indigenous Nations to determine whether they support requesting such a designation, and that no further provincial approvals proceed until climate-resilience, cumulative-effects, and ecosystem-services assessments consistent with federal science guidance (DFO, ECCC) have been completed and publicly released.

**6. Place a moratorium on the use of new or expanded dam-based hydropower as a justification for transmission expansion in northwestern Ontario.**

Reservoir-based hydropower results in numerous negative environmental effects, is a significant methane emitter and increasingly unreliable under climate change. Ontario should cease treating new hydropower as “non-emitting” and recognize it as a managed, emitting land-use category under the 2019 IPCC Refinement.

**7. Restrict any new generation enabled by the Red Lake Transmission Project to low-impact, dam-free technologies.**



This includes run-of-river kinetic devices without impoundment, community-scale wind and solar, behind-the-meter storage, and distributed energy resources—all subject to transparent cumulative-effects assessment and Indigenous consent.

**8. Embed federal cumulative-effects frameworks directly into regional electricity planning and environmental approvals.**

Ontario must adopt:

- a. DFO's 2020 and 2022 cumulative-effects research frameworks; and
- b. ECCO's Synthesis of Freshwater Science in Canada

These tools provide essential safeguards for freshwater ecosystems under climate stress.

**9. Strengthen, not delegate, Crown-led consultation and consent processes with Indigenous Nations.**

For a project of this scale and in such a complex Treaty landscape, the Crown must:

- a. Engage early, directly, and transparently.
- b. Assess climate, hydrologic, and reservoir-related risks before consultation.
- c. Avoid downloading procedural consultation onto transmitters or proponents after the need is pre-determined.
- d. Respect Indigenous rights to withhold consent for hydropower-driven regional development

**10. Ensure Indigenous equity opportunities are decoupled from high-risk hydropower expansion.**

Partnership models must not concentrate Indigenous investment in climate-vulnerable reservoirs, which carry long-term environmental, financial, and reputational risks. Indigenous communities should be supported in investing in diversified, low-risk portfolios that include storage, distributed renewables, and non-wires alternatives.

**11. Re-frame “affordable, secure, reliable, and clean” electricity planning around genuinely low-carbon, climate-resilient technologies.**

Ontario must acknowledge the extensive scientific evidence on hydropower variability and reservoir methane emissions and pivot toward wind, solar, battery storage, energy efficiency, and demand response resources—the true foundation of a resilient and modern electricity system.

**12. Require upfront decommissioning funds in a protected Reserve Account to ensure long-term financial assurance.**

Ontario must require all new or expanded hydropower and transmission-related projects enabled by this corridor to establish upfront, fully funded decommissioning reserves. These funds must be placed in a legally protected, interest-bearing Reserve Account, separate from proponent operating budgets, and sized to cover full end-of-life dismantling, site rehabilitation, sediment and contamination management, and long-term monitoring obligations. No project should advance without secured financial assurance sufficient to prevent the transfer of decommissioning liabilities onto Indigenous Nations, local communities, or ratepayers when facilities can no longer meet IESO performance standards or climate-driven hydrologic changes render them uneconomic or unsafe.



## Conclusion:

ORA submits that proceeding on the current basis is **not** in the public or Indigenous community's interests. It locks Ontarians into a path that:

- Ignores the rapidly evolving science that hydropower reservoirs are a **significant methane source**, not clean or non-emitting assets.
- Fails to address cumulative effects on rivers, lakes, and fish habitat that federal science now flags as a core risk for Canadian freshwater systems.
- Uses Indigenous partnership rhetoric to justify projects that will disproportionately expose Indigenous lands, waters, and rights to climate and environmental risk while shifting financial and reputational risk away from the Crown and proponents.

What Ontario needs are power sources that will work regardless of weather conditions, can be scaled up quickly, and won't put too much financial strain on utilities or ratepayers.

These risks are compounded by the cumulative effects already overwhelming Ontario's watersheds. Urban expansion, agricultural runoff, wastewater discharges, industrial effluents, stormwater surges, and sediment loading have pushed many river systems to the brink. Adding new hydroelectric development, with its reservoir methane emissions, altered flows, degraded habitat, and thermal impacts, layers yet another high-pressure stressor onto ecosystems that are already functioning at or beyond their resilience limits. In a warming climate marked by lower summer flows, higher temperatures, and intensifying storm events, the intersection of hydropower impacts with municipal, agricultural, and industrial pressures creates cascading and irreversible harm. These cumulative effects must be acknowledged and assessed before any further development is pursued; to ignore them is to accelerate the collapse of freshwater integrity in Ontario.

ORA, therefore, **cannot support ERO-025-1212 as proposed and urges the Ministry and the Ontario Energy Board to reject the proposed "priority" and designation orders until a full, climate-aligned, and cumulative-effects-based analysis is completed, with explicit alternatives that do *not* rely on new reservoir hydropower.**

If Ontario proceeds down this path, the damage to our rivers, our communities, and our climate resilience will be irreversible, and this Ministry will bear full responsibility for choosing development over survival.

Thank you for this opportunity to comment!

Respectfully,

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