Feedback Form

2023 Annual Acquisition Report (AAR) – February 23, 2023

Feedback Provided by:

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Following the February 23, 2023 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by **March 9**. If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Questions Directed at All Resource Type

Topic	Feedback
Do you agree with the IESO recognizing market exit as an uncertainty and its intention to consider that some facilities exit the market in its analysis?	Of course, it is prudent to plan for some facilities to exit the market, but that should be reasonably easy to resolve through a comprehensive review of past market trends and exits, along with an annual survey of current market participants' intentions.
Do you expect your facility to participate in the next 5-10 years? What are some considerations that may impact participation?	Hydroelectric facilities can take 5 to 10 years to put into operation, depending on the size and scale. By that time, with the intense innovation in clean technologies happening right now, there will be new and authentic clean, green, non-emitting and environmentally sustainable electricity generation resources available. IESO's prediction regarding electric vehicles creating such a huge surge in electricity demand also seems overly optimistic. Green hydrogen innovation is making huge technological inroads into the clean energy discussion. Hydrogen-fueled cars are already being developed by several manufacturers and will be much more suitable for long-distance travelling and colder temperatures in northern Ontario. Also, there are currently three pumped storage projects going through the planning and approvals process, that would add approximately 2,000 MW of electricity to the grid. Developing that same Installed Capacity from small hydroelectric projects would involve 200 - 10 MW proposals that would cause untold environmental damage to dozens of Ontario rivers. It is imperative that the province does not rush or over-reach its targets and develop new electricity projects unnecessarily.

Topic	Feedback
Facilities require regular maintenance and operational activities throughout their lifecycle. At what year of life would your facility require significant capital investments to extend its usable life? How long of a commitment would you expect to pay-off significant capital investments?	Healthy and free-flowing rivers are carbon sinks that need no maintenance or attendance from man. There are numerous independent third-party studies reporting that hydroelectric facilities emit significant amounts of carbon dioxide, methane and nitrous oxide and we will be stuck with these dams for 100 years or more as proponents are quick to point out. There are also no up-front decommissioning fees to take these dams out when the rivers start to dry up, and the truth is finally acknowledged that they are methane factories.
How can existing assets be maximized? What is needed for these facilities to stay and continue operation?	Upgrades can improve efficiencies, and operating strategies can be adjusted; however, when it comes to hydroelectric, it is extremely important that any upgrades or operational adjustments are done in an environmentally responsible and sustainable manner. It is also imperative that we acknowledge the ecosystem services that healthy free-flowing rivers provide. We must build resiliency into Ontario riverine ecosystems to meet the extreme challenges of climate change, both now and into the next 100 years of the dam's useful life expectancy.
Is repowering your facility(ies) with a renewable fuel an option for future participation, and if so, what would be the earliest timeline for this?	Hydroelectric must be recognized for the significant and ongoing negative impacts that result from these impoundments, diversions, and cycling and peaking operations. The collateral environmental damage caused by hydroelectric has been well documented for decades, including the loss and serious decline in migratory fish species, declining biodiversity, and impaired water quality, including elevation of mercury concentrations in fish tissue, and are key threats to imperiled aquatic species. For these reasons ORA does not consider hydroelectric to be a clean or renewable resource.

Questions Directed at Natural Gas Facilities

Topic	Feedback
How do you interpret the expected Clean Electricity Regulations (CER) in terms of the impact on the future operation of your facilities, including for emergency use purposes?	Not applicable.
What impact will the rising federal carbon price have on the operation of your facilities in 2030 and beyond?	ORA does not operate a facility; however, as federal carbon prices rise, the public will cut back as much as possible on energy use because the cost of living will be very challenging, climate change will have intensified, and the world could be in a state of chaos.

Other

Topic	Feedback
Has the IESO missed any considerations in terms of the future participation of existing resources?	According to a recent Lakehead university study, "researchers surveyed 1,000 people ages 16 to 25 across the country on their feelings around climate change and the future. Almost eight in 10 reported that climate change has had an impact on their overall mental health, 37 percent said that their feelings about climate change have a negative impact on their daily functioning and 56 percent reported feeling afraid sad, anxious and powerless. No generation has faced an existential crisis of this scale, said Lindsay Galway, associate professor of Health Sciences at Lakehead University in Thunder Bay and one of the paper's co-authors." What they want, "according to Galway's research, is a legitimate stake in the action, the opportunity to not only have their voices heard, but to take action toward mitigating the problem." (Toronto Star, by Steve McKinley, 7 May 2023). We have to get real and make decisions based on young people's future prospects of survival on this planet. Decision makers are not just deciding on just our electricity future, but they are making decisions that will impact our children's future with water and their ability to thrive. Water is life.

General Comments/Feedback

As was thoroughly covered in ORA's 8 February 2023 submission to Minister Todd Smith, Ken Hartwick, OPG, and Julia McNally, IESO, there are three decades of independent third-party studies reporting that hydroelectric facilities and their reservoirs are a consequential source of greenhouse gas emissions in boreal, temperate and tropical regions. In fact, the associated reservoirs are a significant and ongoing source of biogenic GHGs, including methane which persists for the life of the dam, and can reach the same emission rate as a gas-fired facility, and studies report are responsible for between 5 to 7% of world GHG emissions.

ORA has asked OPG to use sensitive drone-based GHGMap NASA technology for existing hydropower facilities to detect, measure and publicly report in real-time, all GHG emission (CH2, CH4 and N2O) data on their website. OPG already has drones, and with 66 hydroelectric facilities in Canada and 84 in the US, OPG bears an urgent responsibility to obtain this efficient autonomous equipment to measure all GHG emissions coming from their facilities. Accurate detection, measurement and real-time reporting of GHG emissions must be a basic but crucial tenet of any Clean Electricity Regulations.

The Canadian Security Intelligence Service recently issued a warning to the federal government that climate change will result in rising sea levels and flooding, increasing extreme weather events, drought, shrinking freshwater resources, undermining critical infrastructure, threatening public health and safety and opening the door to international conflicts. Hydroelectric facilities are highly susceptible to failure from extreme weather events, floods, drought, shrinking freshwater resources, and international conflicts.

Just because Ontario has the potential for 5,000 MW of new hydroelectric power doesn't mean it's a good idea to actually take advantage of it. We are in a climate crisis, rivers and lakes are drying up around the globe; therefore, our future with fresh water is uncertain.

It would be a good idea to provide funding to remove some of the thousands of old and unsafe dams peppered across the province and to restore riverine ecosystems back to good health. This would build resilience into Ontario rivers to help withstand the extremes of a warming climate.

Unfortunately, this current government has bowed to the Ontario Waterpower Association's lobbying efforts which have resulted in environmental policy, legislation and processes being gutted. This has caused a serious erosion of the public's confidence in the Class EA process and the ability to have the assurance of meaningful consultation in a new or upgraded dam proposal when we are left with a joke of a screening process, that is conducted by the proponent to determines whether a project is low-risk and exempted from public consultation.

By the way, there is no such thing as a low-risk hydroelectric project – it was an industry-serving fabricated category meant to streamline approvals and keep the public out of the process. There are a whole host of uncertainties in this vague and uncertain Class EA for Waterpower process, which has multiple conditions and limitations regarding public consultation.

For all of the above reasons, ORA is strongly opposed to any new hydroelectric development in Ontario. We request that Minister Smith and the IESO exclude new waterpower proposals from its acquisition of renewable energy.

Also, if OPG is going to continue selling Clean Energy Credits for its existing facilities, it must show leadership in the industry by using the drone-based GHGMap technology, as described above, at all of its facilities to back up its guarantee that each megawatt of hydroelectricity is clean and non-emitting.

Respectfully,

Linda Heron
Chair, Ontario Rivers Alliance
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