Ministry of Energy

Office of the Minister

77 Grenville Street, 10th Floor
Toronto ON M7A 2C1
Tel.: 416-327-6758

Ministère de l'Énergie

Bureau du ministre

77, rue Grenville, 10e étage
Toronto ON M7A 2C1
Tél. : 416-327-6758

Ontario

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November 10, 2021

Ms Lesley Gallinger
President and Chief Executive Officer
Independent Electricity System Operator
1600—120 Adelaide Street West
Toronto ON M5H 1T1

Dear Ms Gallinger:

The Independent Electricity System Operator (IESO) has forecasted an emerging capacity need following the closure of the Pickering Nuclear Generating Station that grows through the latter part of the decade. Fulfilling this forecasted capacity need will require IESO to procure both existing and new resources. As demand continues to grow in response to electrification, ensuring we have a framework in place to secure capacity is critical. While this letter sets out next steps for IESO, I also aim to provide a degree of certainty to those in the sector who are deciding on the future of their assets and are preparing to participate in the procurement processes outlined below.

Under the Resource Adequacy framework, IESO has proposed a multi-pronged approach to acquire electricity resources. This approach consists of competitive procurement mechanisms, including the Capacity Auction, the Medium-term Request for Proposals (MT RFP) and the Long-term Request for Proposals (LT RFP), as well as bilateral contracts with resources that are essential to meeting reliability needs and resources that are important to other government policies.

The government supports IESO's resource acquisition plans. My predecessor, Minister Greg Rickford, wrote a letter to IESO in this regard on May 31, 2021. The mechanisms that form the Resource Adequacy framework ensure that resources are contracted in a way that provides value to ratepayers, maintains reliability and balances risk appropriately between ratepayers and generators.

The government is also supportive of procurement targets under various mechanisms as detailed in IESO's Annual Acquisition Report (AAR), published in July 2021. The AAR explains how IESO plans to meet Ontario's future electricity needs cost-effectively and helps provide transparency to stakeholders on future resource acquisition plans.

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To ensure reliability needs are met and resources that are important to other government policies remain in service, I would ask IESO to report back to the Ministry of Energy (ENERGY) on the following initiatives (see Appendix for additional detail):

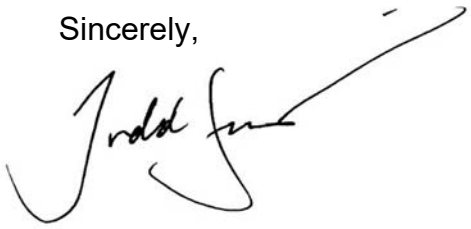
- Future Competitive Procurement Mechanisms;
- Ensuring Short-Term System Reliability;
- Approach for Re-contracting Biomass Generation Facilities;
- Program for Re-contracting Small Hydroelectric Facilities;
- Update to 2016 Study on Energy Storage in Ontario;
- Gate 2 Review for Marmora, Meaford and Schreiber Pumped Storage Projects; and
- Gate 3 Contract Negotiations on the Oneida Energy Storage Project and Lake Erie Connector Transmission Project.

In IESO's recent *Gas Phase-Out Impact Assessment* study, you highlighted the significant challenges involved in decarbonizing Ontario's electricity system. Further to my letter on the study dated October 7, 2021, I encourage IESO to consider how the above initiatives impact work on the decarbonization of the electricity system.

Upon receiving IESO's report backs on these initiatives, the government will determine the most appropriate next steps, including whether to issue Minister's Directives to direct IESO to implement the next steps.

I want to thank IESO in advance for all the work required on these initiatives and I look forward to IESO's detailed assessment and analysis.

Sincerely,



Todd Smith
Minister

c: Hon. Joe Oliver, P.C., Board Chair, IESO
David Donovan, Chief of Staff to the Minister of Energy
Stephen Rhodes, Deputy Minister of Energy
Susanna Zagar, CEO, Ontario Energy Board

APPENDIX

Future Competitive Procurement Mechanisms

Starting August 2021, the Independent Electricity System Operator (IESO) has actively engaged with stakeholders on the procurement design and potential timelines for the Medium-term (MT) Request for Proposals (RFP) and Long-term (LT) RFP. I understand that stakeholders have provided feedback on certain elements of the design and timelines. I encourage IESO to continue engaging with stakeholders to identify their concerns and solutions.

Final Design of the Medium-term Request for Proposals

In terms of next steps, I ask that IESO conclude its discussions with stakeholders on the design and timelines for the MT RFP and report back to me on stakeholder feedback and a draft proposal for the design of the procurement. I am supportive of the design elements provided by IESO so far in its latest stakeholder engagement materials, including:

- Providing successful participants a contract term of 3 years starting May 1, 2026, with an option to extend the contract for a term of 2 years at the end of the original 3-year term, with this option being at the sole discretion of the participant.

- Providing a pathway for facilities participating in the MT RFP to make investments in major upgrades or installing a new energy storage facility along with an existing renewable non-dispatchable facility through the LT RFP.

I am also supportive of IESO's proposal to run subsequent MT RFPs with 3- to 5-year commitment periods and their alignment with the expiry of existing supply contracts.

I look forward to receiving the report back on the draft MT RFP, stakeholder engagement feedback and IESO's proposed changes to address the feedback by **December 17, 2021**.

Initiate Stakeholder Engagement on Long-term Request for Proposals

On the LT RFP, I am asking IESO to formally initiate stakeholder engagement on the design and timelines of this procurement. I understand that IESO plans to include a Request For Qualification (RFQ) process and an RFP process (collectively the LT RFP) as part of this procurement.

I understand that the LT RFP is primarily meant to incentivize the development of new electricity resources and investment into major upgrades for existing resources, for the purpose of satisfying electricity system needs identified in IESO's Annual Planning Outlook (APO).

With this in mind, I encourage IESO to consider designing the LT RFP to be technology-agnostic and allowing all technologies, including energy storage, to participate in the procurement, as long as the proposed new-build facilities can provide the required services to the electricity system. I also encourage IESO to consider engaging local communities through the LT RFP engagement process.

In addition, given that new-build projects require significant lead time for their development, I encourage IESO to expedite the stakeholder engagement on the LT RFP.

I am asking IESO to report back to ENERGY on the engagement and planned timelines for the launch of the LT RFP by **December 17, 2021.**

Ensuring Short-term System Reliability

As noted by IESO in the Annual Acquisition Report (AAR), certain resources, such as Brighton Beach Generating Station (GS), play a critical role in maintaining local and bulk system reliability for Ontario. I understand that in cases where local reliability concerns, specific system conditions or lack of competing resources do not allow for a competitive mechanism to be utilized, bilateral contracts may be used to secure certain resources.

A bilateral contract provides a practical solution to keeping costs low for Ontario electricity consumers and ensuring reliability until other resources that can deliver similar services are available to compete.

In light of these considerations, I am asking IESO to enter into preliminary discussions with Atura Power on potential terms for re-contracting Brighton Beach GS and report back on those discussions by **February 28, 2022**.

Approach for Re-contracting Biomass Generation Facilities

The government recognizes the importance of the forestry sector in northern Ontario and supports a longer-term transition plan to find alternative uses for waste biomass, however, this transition plan will take time to implement. At the same time, we remain committed to procuring resources in a cost-effective manner that ensures long-term system viability.

As some biomass generation facilities in northern Ontario reach the end of their current power purchase agreements (PPAs) this year, the government is supportive of offering new short-term contracts (up to 5 years) to these facilities. These short-term contracts balance the need of investment certainty for generators and forestry companies, while maintaining flexibility as alternative waste solutions develop.

PPAs for two biomass facilities, Calstock Generating Station (GS) and Chapleau Generating Station (GS) are expiring on December 16, 2021 and December 31, 2021, respectively.

With respect to the remaining northern Ontario-based biomass facilities at Thunder Bay Resolute, Hornepayne and Atikokan, ENERGY will continue engaging with IESO on the details of contract negotiations related to these facilities. I encourage IESO to engage with the proponents of these facilities in chronological order based on contract expiry.

Contract Re-negotiations between IESO and Atlantic Power on Calstock GS

I want to thank IESO for entering into preliminary discussions with Atlantic Power (AP) on the Calstock GS and providing an assessment and analysis of options for a new 5-year contract for this facility.

In light of the considerations above and IESO's assessment of potential options to re-contract this facility, I am asking IESO to enter into contract discussions with AP and proceed to report back with a term sheet, based on an annual biomass consumption of up to **90,000** Green Metric-Tonnes (GMTs) for consideration. In consultation with AP, I would also ask that IESO identify what AP's transition plans are with respect to the new contract. AP's transition plans are with respect to the new contract.

These discussions should continue to consider the value to the electricity system while also considering AP's revenue requirements and impacts on the forestry sector.

I am asking IESO to report back to ENERGY on the draft term sheet by **December 17, 2021**.

Preliminary Negotiations between IESO and Green First Inc. on Chapleau GS

Similarly, in light of the considerations above, I am also asking IESO to enter into preliminary discussions with Green First Inc. (GreenFirst) on the continued operation of Chapleau GS beyond its current contract end date and report back to ENERGY.

These discussions should consider the system value while considering GreenFirst's revenue requirements. The IESO should, as part of its report back, also consider the impact of reducing the generator output where feasible as well as the impacts on demand for waste biomass from local forestry operations.

I understand that IESO has the authority to extend the current contract in relation to Chapleau GS pursuant to IESO's authority under paragraph 1 of the previously issued Direction, entitled "100 Percent Biomass Non-Utility Generator Projects", issued to it on December 16, 2013. That paragraph states, "1. A contract length of no more than ten years from the term commencement date".

To allow IESO sufficient time for discussions with GreenFirst, I am asking IESO to consider extending the existing PPA between GreenFirst and IESO by 12 months under the existing authority provided to IESO through the December 2013 ministerial direction.

I am asking IESO to report back to ENERGY on potential options for re-contracting this facility by **July 1, 2022**.

Program for Re-contracting Small Hydroelectric Facilities

The IESO's Resource Adequacy Framework contemplates the development of programs as a mechanism to sustain investments in assets, resources and businesses that can meet both electricity and non-electricity objectives. Small hydroelectric facilities play an important role in meeting Ontario's capacity and energy needs, generate zero-emissions renewable electricity and provide multiple societal benefits such as regulating water flow for flood control, navigation and tourism.

To explore ways to allow small hydroelectric facilities to continue operating beyond the expiry of their existing PPAs, I am asking IESO to report back on the design of a program that would help ensure the capacity from these facilities continues to contribute to Ontario's resource adequacy. The program parameters should consider:

- An appropriate eligibility threshold that defines small hydroelectric facility for the purpose of this program;

- An appropriate contract term length that balances ratepayer interests, system needs and facility revenue certainty; and

- An appropriate cut-off date for participation in the program, based on the expiry date of the small hydro facilities' existing PPAs.

I am asking IESO to report back to ENERGY on the key program parameters and engagement plan for the potential program by **December 17, 2021**.

Update to 2016 Study on Energy Storage in Ontario

In 2016, IESO published the *Energy Storage Report* that identified the potential for energy storage technologies to address system needs. Furthermore, in September 2020, IESO published the *Long-Term Design Vision Document* under the Energy Storage Design Project. This document outlined a vision for how energy storage resources would participate in IESO's administered markets over the long term.

To help inform future decisions on energy storage technologies, I am asking IESO to work with ENERGY and the Ontario Energy Board (OEB) to provide an update on the implementation status of solutions for the barriers to storage identified in the Report. Where barriers continue to exist, I am asking IESO to provide an overview of how these barriers are being addressed.

IESO's recent *Gas Phase-Out Impact Assessment* study has highlighted the significant challenges toward decarbonizing Ontario's electricity system. Further to my letter on the study dated October 7, 2021, I encourage IESO, as part of its further work on the decarbonization of the electricity system, to include an analysis of the economics of different energy storage technologies and the role they can play.

I am asking IESO to report back to ENERGY on updates and next steps on solutions for addressing barriers to energy storage in Ontario by **March 31, 2022**.

Gate 2 Review for Marmora, Meaford and Schreiber Pumped Storage (PS) Projects

As part of the work done under the Unsolicited Project Proposal framework, I want to thank IESO for your preliminary review and analysis (i.e., Gate 1) of Ontario Power Generation (OPG) and Northland Power's Marmora PS project, TC Energy's Meaford PS project and Oxford Power's Schreiber PS project.

I am asking IESO to move these three PS projects to the second stage (i.e., Gate 2) of the Unsolicited Project Proposals framework.

I am aware, based on the analysis provided by IESO, that the three PS projects are not forecast to provide sufficient value to Ontario's electricity consumers. Should the proponents of these projects make significant improvements to the ratepayer value of the projects including through improved financing, I will consider moving them beyond Gate 2.

On October 7, 2021, I wrote a letter asking IESO to develop a pathway to phase out natural gas generation and achieve zero emissions in the electricity sector; this included considering the role of technologies such as pumped storage among others that could help with the transition.

With this in mind, I am asking IESO's report back to ENERGY on its Gate 2 analysis of the three PS projects by **January 31, 2023**, allowing time for IESO to consider the results of the natural gas phase-out study in its analysis.

Gate 3 Contract Negotiations on the Oneida Energy Storage Project (Oneida) and Lake Erie Connector (LEC) Transmission Project

I also want to thank IESO for undertaking contract negotiations with NRStor Inc. and Six Nations of the Grand River Development Corp. on the Oneida Energy Storage Project (Oneida) and ITC Holdings Inc. on the Lake Erie Connector Transmission Project (LEC).

As stated in letters sent to IESO previously on Oneida and LEC, I look forward to hearing from IESO by **November 30, 2021** and **December 31, 2021**, respectively.