## Ministry of Energy

Office of the Minister

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## Ministère de l'Énergie

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January 9, 2024

Ms Lesley Gallinger President and Chief Executive Officer Independent Electricity System Operator 1600—120 Adelaide Street West Toronto ON M5H 1P1

## Dear Ms Gallinger:

I would like to thank you and your team at the Independent Electricity System Operator (IESO) for your continued efforts on key policy initiatives that have been identified by our government as part of the *Powering Ontario's Growth* plan to meet the province's growing demand for electricity in the 2030s and beyond while transitioning to a clean electricity system.

As illustrated in the IESO's *Pathways to Decarbonization* study, Ontario's electricity system could need to double in capacity by 2050, in order to move the province towards a net-zero electricity grid. Long-duration energy storage could play an important role in meeting electricity system needs, including enabling greater integration of intermittent renewable generation and complementing future nuclear generation.

I would like to thank the IESO for your initial report back, dated September 29, 2023, containing an analysis of the two Pumped Storage (PS) proposals, namely, TC Energy and the Saugeen Ojibway Nation's (SON) Ontario PS project and Ontario Power Generation (OPG) and Northland Power's Marmora PS project, and the addendum dated November 30, 2023, containing an updated analysis for the Ontario PS Project based on revised information provided by the project's proponent.

In the report back, the IESO has noted that under currently proposed cost structures, the PS projects do not compare favourably to currently available alternatives, including battery storage or a portfolio of other non-emitting resources, and therefore neither PS project is able to provide net benefits to Ontario's electricity system or ratepayers. At the same time, the IESO acknowledged the potential benefit of these projects in enhancing the diversity of Ontario's supply mix, if completed in a timeline that would provide value to the system.

As noted in the report back, the IESO's assessment did not include a valuation of other broader societal and economic benefits from these projects. There are also potential value and risk mitigation opportunities provided by domestically sourced and constructed projects, particularly in light of current geopolitical issues and ongoing supply chain uncertainties that may be associated with other energy storage technologies. To ensure a balanced valuation of these projects, I have asked my Ministry to work with proponents and other ministries as required to assess the broader societal and economic benefits of these PS projects.

I have also received a request from OPG and Northland Power for additional time to provide updated information for the IESO to conduct a revised analysis on the Marmora project. I would ask that the IESO continue engaging with the proponents until updated information is submitted to the IESO and the IESO is able to revise its analysis accordingly.

As a result, I am not prepared to make a final determination at this time on either project.

One area that I believe needs additional clarification with respect to the Ontario PS project is a better understanding of the wide range in capital costs presented in the current project estimates. While this is understandable given the early stage of predevelopment on the project, I believe that it would be worthwhile for TCE to continue making progress on pre-development and further refine the cost estimate for the project.

With this in mind, I ask that TCE report back to the IESO and myself with a breakdown of the estimated costs of associated pre-development work on the project (e.g., a Class 3 estimate of capital costs prepared in accordance with AACE International standards, Impact Assessment process, additional engineering work, etc.) and a project schedule of this work.

In developing its cost estimates, I would ask that TCE further engage the Government of Canada on additional assistance that may be available to support pre-development work on the project to further reduce the cost. I anticipate that my Cabinet colleagues will expect significant federal involvement in cost sharing of pre-development costs associated with for the project.

Once these estimates and project schedule have been submitted, ENERGY and the IESO will conduct an assessment of the proposed costs and provide a recommendation to proceed with pre-development within 45 days of submission.

Following this review, I would ask that the IESO negotiate with TCE a commercial agreement to enable TCE to recover eligible, prudently incurred expenses associated with the completion of pre-development work on the project. I ask that the IESO report back to me on the outcome of those discussions within 60 days of the submission of the estimates. A final decision to fund pre-development costs associated with the project would be subject to a Cabinet approval and a future Ministerial directive to the IESO to execute the agreement with TCE.

With respect to the appropriate revenue framework for these projects longer term, I am currently not prepared to make a final determination on this matter. In the meantime, I have asked Ministry officials to work with the Ontario Energy Board (OEB) and proponents on project cost recovery mechanisms for my consideration, with a report back by July 31, 2024.

I understand that the IESO is initiating a "Southern and Central Ontario" transmission planning study that will review the capability of the transmission system to support future generation connections and demand growth throughout the southwest to enable a decarbonized system. I would ask that the IESO also consider in its study how Ontario PS could be integrated into the transmission system, to ensure that recommendations are optimized and that the transmission plans developed not only enable the expansion of the Bruce Nuclear Generating Station, but also a wide variety of possible supply and demand outlooks for southern Ontario.

Finally, as I stated in my letter to the IESO on July 10, 2023, should the IESO identify a need for additional long-duration storage, I will consider launching a new competitive procurement for evaluating and possibly acquiring additional long-duration storage projects. I ask that the IESO continue consulting with long-duration storage proponents on a potential procurement for resources with long-lead times and lifespans.

I would like to thank the IESO and the proponents in advance for all the work required on this initiative and I look forward to receiving further information from all parties as requested.

Sincerely,

Todd Smith Minister

c: François Poirier, President and Chief Executive Officer, TC Energy Annesley Wallace, Executive Vice-President, Strategy and Corporate Development and President, Power and Energy Solutions, TC Energy Chief Conrad Ritchie, Chippewas of Saugeen First Nation Chief Gregory Nadjiwon, Chippewas of Nawash Unceded First Nation Ken Hartwick, President and Chief Executive Officer, Ontario Power Generation Mike Crawley, President and Chief Executive Officer, Northland Power Susanna Zagar, Chief Executive Officer, Ontario Energy Board Jason Fitzsimmons, Deputy Minister of Energy