

Independent Electricity System Operator 1600-120 Adelaide Street West Toronto, ON

July 25, 2025

Re: Options Screening - July 10, 2025

The Atmospheric Fund (TAF) appreciates the opportunity to continue participating in the IESO's Integrated Regional Resource Plan (IRRP) for Toronto engagement process. As a regional climate agency working across the Greater Toronto and Hamilton Area (GTHA), we support comprehensive electricity grid planning that prioritizes reliability, resilience and decarbonization. We welcome the IESO's ongoing efforts to evaluate a broad range of options and offer the following comments in response to the latest phase of engagement.

1: Gas-Fired Generation and the Future of PEC

TAF strongly supports the IESO's decision to screen out new gas-fired generation options from this IRRP. This is a critical step toward aligning regional electricity planning with the City of Toronto's climate commitments, including its goal of achieving net-zero greenhouse gas (GHG) emissions by 2040. This action also aligns with provincial and federal climate targets, while mitigating the significant supply chain risks associated with new gas-fired generation.

Equally important is the need to ramp down fossil fuel-based generation at the Portlands Energy Centre (PEC). In June 2024, Toronto City Council <u>passed a resolution</u> requesting that the IESO align the IRRP with its net-zero target, including a commitment to transition away from gas-fired electricity generation at PEC by 2035, with the exception of emergency situations. TAF strongly supports this direction, recognizing the risks that rising emissions pose to the city's climate goals. Notably, PEC is the city's single largest source of both GHG emissions and nitrogen oxides (NOx), a key contributor to smog and respiratory illness.

As the IESO considers long-term capacity and reliability needs alongside PEC's reduced role, we understand that new infrastructure, including a third transmission line into downtown Toronto, is being considered. These decisions carry long-lasting implications and must be transparent, evidence-based, and evaluated alongside all viable alternatives – including non-wires solutions (NWS) and distributed energy resources (DERs). We are agnostic as to whether a third line will be built, but are concerned that the decision to proceed was made before the completion of the IRRP and without any public review of the cost-benefit analysis supporting the decision.

2: Non-Wires Solutions (NWS)

TAF is encouraged that integrated NWS have been screened in for consideration in this IRRP. These tools are critical to delivering reliability and managing peak demand, while advancing low-carbon outcomes.

2.1: Distributed Energy Resources (DERs): Greater transparency and clarity are needed on the extent to which DERs are screened in. While high-level plans for their inclusion have been made,

limited detail has been shared on which types of DERs are being considered, how they will be evaluated, and what scale of contribution is assumed in meeting Toronto's reliability and capacity needs.

Clear pathways will be necessary to encourage and scale up local, non-emitting generation. This includes further clarity on compensation, participation frameworks, and addressing existing policy and market barriers. Without proactive enabling conditions, there is a risk that viable and cost-effective local solutions will be underutilized.

The forthcoming local achievable potential study (L-APS) should immediately be followed by prioritization and investment in all cost-effective and targeted NWS that can meet local peak demand needs and address local constraints. Given the expected rapid pace of electrification and uncertainty on both supply and demand, there is a pressing need to de-risk the deployment of proven solutions. By urgently ramping up programs and deployment of viable and cost-effective solutions supported by the L-APS, the IESO and Toronto Hydro can both maintain energy affordability and flexibility in meeting emerging reliability needs.

2.2: Battery Energy Storage Systems (BESS): While utility-scale BESS have been screened out in Eastern and Northern Toronto, they have remained within scope in Western Toronto. The rationale for this differentiation is unclear. BESS siting decisions should consider resilience and local grid support in high-growth, transmission-constrained areas, not solely land availability. Additionally, there is an opportunity to better leverage existing large-scale, consumer-sited BESS installations that are currently underutilized outside of Global Adjustment (GA) cost mitigation. Unlocking their full grid value, including reducing peak demand strain and supporting local reliability, will require updated market mechanisms, compensation models, and planning integration.

3: Offshore Wind

TAF understands that offshore wind is currently subject to a provincial moratorium. However, this pause should not preclude its consideration in long-term planning exercises, such as IRRPs. Offshore wind economics and deployment potential have changed dramatically since the moratorium was first introduced 14 years ago, when electricity demand was flat and costs were significantly higher.

Irrespective of the moratorium, we urge the IESO to study and report on the potential contribution of offshore wind to meeting Toronto's growing electricity needs. The IRRP process presents a valuable opportunity to test whether offshore wind could play a role, and if so, to provide this evidence to the provincial government. Insights from this analysis could help inform future policy direction as conditions evolve, ensuring that planning remains responsive to changing system needs.

4: Data Accessibility and Transparency

As in our previous comments on the IRRP for Toronto, we reiterate the importance of full transparency throughout this process. The IRRP should be grounded in publicly accessible data, clear assumptions, and evaluation criteria that allow stakeholders to understand how decisions are made and how options are compared. This is particularly important in a context where public

confidence in electricity decision-making will be critical to the success of decarbonization and electrification efforts.

TAF thanks the IESO for continued engagement on this file and looks forward to reviewing the final IRRP options and APS as they become available. TAF remains committed to collaborating with the IESO and electricity sector stakeholders to advance resilient, low-carbon, and community-focused energy solutions in Toronto and beyond.

Sincerely,

Bryan Purcell

VP of Policy & Programs

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The Atmospheric Fund

About the Atmospheric Fund

The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies and running programs. We're particularly interested in ideas that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.