

The Way Forward: Commitment and Collaboration in the Energy Transition

OEA/APPrO: Ontario Energy Conference

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- Good morning, everyone!
- Thank you to APPrO and the OEA for inviting me to the stage once again, during a truly remarkable time for our sector.
- There are stories in the news every day about how jurisdictions around the world are evolving their electricity systems to meet increasing demand and clean energy goals.
- Every place is different, but our challenge is shared: we all need more infrastructure, more labour, and more investment.
- Here in Ontario, electricity demand is forecasted to rise steadily.
- The IESO will soon release a revised Annual Planning Outlook long-term demand forecast that will show even faster growth than previous years
- This reflects new industrial investments that continue to showcase Ontario as an economic powerhouse.
- It also reflects an emerging trend that is new for Ontario and other jurisdictions: companies searching to locate data centres.
- If there's one takeaway as we continue to reassess our forecasts, it's that we have to increase the pace.
- We have to build bigger, and we have to build faster.
- To that end, we are considering options to accelerate our long-term procurements.
- For the IESO, and Ontario's electricity sector at large, we are in a position of strength, with the proper tools and processes in place to grow our reliable, affordable and clean grid.
- We've also taken steps to secure thousands of megawatts of new capacity, which is an accomplishment that's shared by many of you in this room.

- And with so much new investment needed, we will continue to prioritize affordability for Ontarians through robust markets and competitive procurements.
- This means our province will be ready to:
 - enable economic growth, which includes energizing the industrial renaissance;
 - support population increase, which includes powering more homes;
 - activate new technologies, which is driving the influx of data centres in Ontario; and
 - continue the decarbonization that the broader economy that our future is relying on.
- With every single one of us: playing a part in the Big Build that underpins our energy transition.
- Everyone at the table — the sector, municipalities, and Indigenous communities — working together to meet Ontario’s needs and ensure that everyone prospers.
- Commitment; Collaboration; Building big at a faster pace: that’s the way forward.
- But before I look ahead, let me take a quick glance back on our past actions that have led us to where we are now.
- Today marks my fourth appearance before you as the CEO of the IESO. It seems like just yesterday.
- Top of mind when I made my first appearance here in 2021 was pandemic recovery, innovation, decarbonization — and most importantly — resource adequacy.
- We were facing what I called a “tsunami of change”, and we responded by implementing our Resource Adequacy Framework, while continuing to deftly balance the IESO’s trio of reliability, affordability, and sustainability.
- The Capacity Auction was completing its first cycle, and with your feedback, was enhanced to secure commitments for summer and winter peaks, which over the last three years have continued to increase.
- We were approaching our first Medium-Term Request for Proposals to allow existing resources to compete for five-year contracts starting in 2026; and we shared with you our commitment to looking at issuing longer term proposals in 2022.
- Now, here we are, with our first tranche of medium- and long-term RFPs complete, delivering benefits to the system and to the ratepayer.
- For the Medium-Term RFP we acquired more than 700 MW of capacity for the system from existing resources, ensuring ongoing value from previous investments in supply, at a lower cost.
- Our Expedited Long-Term RFP brought the first wave of battery energy storage to the grid, in operation as soon as 2025, this is further diversifying our supply mix.
- This was soon followed by the Long-Term 1 RFP, which concluded last May.
- Storage costs in those procurements dropped 25 per cent compared to only a year earlier, with strong municipal support and Indigenous participation and equity ownership in projects.

- I am pleased with the direction and results of the Resource Adequacy Framework to date.
- It is working as designed, it is building up the system, and much of it is thanks to the work of everyone in this room.
- So thank you. Your ongoing commitment to collaboration and partnerships has helped bring us to where we are today.
- And now here we are, greater opportunity than ever before, and more to come.
- Recently, the Minister of Energy and Electrification asked us to accelerate procurements, beginning with our Long-Term 2 RFP.
- In doing so, the IESO will continue to focus on:
 - keeping the lights on while supporting growth;
 - ensuring accessibility for electricity remains high for residents and businesses to thrive; and
 - continuing a pathway to a clean electricity system while enabling the decarbonization of the broader economy.
- At the same time, we will align with the Ministry to:
 - support the large-scale investments that rely on our grid;
 - create and maintain well-paying jobs across the province;
 - leverage the momentum and co-ordination with the many players in Ontario's electricity ecosystem; and, as requested,
 - expand eligibility to all types of resources — leaning into a technology-agnostic or all-of-the-above approach — to ensure that we safeguard the grid and the ratepayer.
- This consistent cadence of procurements for Ontario comes at a time when system operators and planners everywhere are grappling with a sudden rise in artificial intelligence and the potential that it offers.
- Technology is advancing at a breakneck pace, and it's a race to process more data in more places.
- Companies are making billion-dollar investments in data centres around globe.
- And according to EPRI, data centres could consume 9 percent of U.S. electricity generation by 2030; that's more than double the amount currently used.
- From what we've seen in Ontario alone, the demand growth is significant.
- The IESO has been asked to look at the system impact for data centres as large as 700 MW.
- To give you a sense of scale – that's higher than the peak demand of a city the size of London, Ontario.
- These data centres are a new reality that we must consider as we look to build supply, especially as we anticipate growth that you will soon see in our 2025 APO demand forecast.

- And this is happening in addition to the numerous manufacturing facilities currently under construction supported by the province.
- It's these types of massive projects and demands on the grid that:
 - influence our planning and forecasting;
 - demonstrate the tall task ahead of us all; and
 - signal that in charting the path forward, we must pick up the pace.
- It also shows value in
 - why we conduct annual forecasts, so we can pivot and respond to those changing conditions;
 - why we leverage different tools and technologies, so we can respond to evolving needs; and
 - why engagement in the sector and with communities is so critical.
- The implementation of our Resource Adequacy Framework also dovetails provincial policy and the *Powering Ontario's Growth* plan that signaled the beginning of:
 - long-lead time resources, most notably new nuclear and new hydroelectric;
 - expanding Ontario's overall transmission infrastructure; and
 - planning for more energy efficiency programs.
- In April we executed an agreement, as directed by the Ministry, to fund impact assessment work at Bruce Power for up to 4,800 MW of new generation.
- We continue to work with Bruce Power and Ontario Power Generation to assess the feasibility for 17,800 MW of new nuclear in the province – consistent with our *Pathways to Decarbonization* report; and we have made progress on transmission work with five new lines under construction as we speak.
- As part of our bulk studies, we are looking to support future generation connections and demand growth in southern and central Ontario, and specifically, the transmission requirements that will support all this new development in nuclear
- On the demand side, we are eager to put into action a proposal that is before government for a new framework that will:
 - optimize the value of demand-side management programs and their contribution to the reliability and affordability of our grid;
 - provide tools to residents and businesses to better manage costs and enable their participation in the energy transition, with new and enhanced incentives; and
 - increase collaboration with other utilities:
 - like working with Enbridge to offer an expanded selection of residential rebates; and with local distribution companies to support customers in accessing local and provincial programs.
- Once in place, Ontario will continue to lead the way in energy-efficiency programming in North America:

- with programs that support economic growth;
- a strategic focus on reducing demand on the grid; and
- broadening the types of incentives to meet changing customer needs.
- So clearly, 2024 has been active.
- Looking ahead to 2025 and beyond, I'll start with the anticipated launch of the Market Renewal Program mid-next-year.
- It's the first major update in more than 20 years, and we are modernizing Ontario's electricity markets to enable more efficient use of the existing resources.,
- While at the same time, creating that foundation needed to integrate emerging resource types well into the future.
- This will allow us to effectively operate diverse technologies, secure best value for ratepayers, and provide a foundation for future innovation as more hybrids and more Distributed Energy Resources connect to the grid.
- I want to thank all of our market participants for their readiness efforts as we get closer and closer to launch.
- As we look beyond 2025, we know that market renewal will enable further change, which can open up the market for a more diverse range of participants and lower the barriers for entry.
- This becomes even more important as we evaluate our procurement timelines and look to site more infrastructure, especially in the north.
- Which is something we are covering with our Bulk and Regional Planning processes that are taking place at the moment, all around the province.
- As demand increases and new supply connects to the grid, regular assessments are needed to consider reliability implications — both regionally and provincially — given the integrated nature of the electricity system.
- This includes transmission infrastructure is in place to allow electricity to get to where it's needed.
- Over the foreseeable future, engagements with municipalities and Indigenous communities will be a priority for us.
- We have to understand their needs, garner their support and participation, and uncover solutions to meet growing demand through regional planning.
- It is anticipated that these planning activities will recommend the development of new transmission infrastructure in the southwest, north, the Greater Toronto Area, and Ottawa.
- That extremely large footprint is also a strong reminder that relationship-building must continue to be developed and nurtured.
- Our collective work and the energy transition takes place within communities for the benefit of communities.

- And the communities where we live and work are counting on us to get things done efficiently, and reflect their input and needs.
- That is a big reason why the IESO is refreshing our External Relations Engagement Framework, built on a series of key principles that will guide outreach and interactions with sector participants, Indigenous communities, and municipalities.
- It will be published soon.
- We are ensuring that diverse and unique perspectives are considered in our decision-making processes while recognizing that one size does not fit all when it comes to engagement.
- Relationships must be nurtured and strengthened over time: trust and credibility can take years to build and only moments to break.
- This is just one step in our journey: as we continue to gather insights, we're committed to refining the way we engage so that participation in the energy transition can involve enduring partnerships.
- Responding to this need for broad collaboration, we have also established an Associations' Liaison Group to provide a forum for representative stakeholder and community organizations to identify opportunities to support initiatives related to their sector transformation.
- Comprising Indigenous, municipal and sector organizations — including the OEA and APPrO — the group's aim is to explore opportunities for greater collaboration between associations that are supporting their memberships in advancing Ontario's energy transition.
- The IESO's aim is to engage with purpose, so we can understand everyone's energy needs and interests, while we plan for a future state that is decarbonized and modernized, while remaining reliable and affordable.
- To wrap things up, once again, it truly is a remarkable time in Ontario.
- Our demand forecast continues to anticipate unprecedented growth in the amount of electricity required to meet future needs.
- I hope I have provided a sense of the tremendous amount of work that's been accomplished to date: by the IESO; by the sector at large; and by the communities and ratepayers that we both serve and count ourselves part of.
- Every one of us is playing a critically important role.
- I also hope I have offered a sense of the tremendous amount of work that lies ahead:
 - picking up the pace;
 - building bigger, building faster;
 - ensuring the system stays ready to support economic and social needs; and
 - maintaining reliability, affordability and sustainability over the coming decades.
- The IESO's processes are working, the sector has the capability, and we continue to need to accelerate our efforts.

- The energy transition opportunity is happening all around us.
- The question is: how will we grasp this opportunity?
- In my view, the best and the only way forward is through shared commitment and collaboration.
- We must keep in mind the greater good: because every person connected to the grid is connected to its future, and that's a future that we must build together.
- Thank you for your attention.