

Driving Efficiencies and Enabling Competition in a Reliable Electricity System

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Revised Forecast of System Need

- IESO has updated its analysis from the 2019 Annual Planning Outlook* (APO) to consider the impacts of the COVID-19 pandemic
- The updated demand, capacity and energy adequacy assessment considers pandemic impacts under two scenarios for the 2021 – 2026 period:
 - **Scenario 1 (Faster Recovery)**: shallow recession, fast recovery, energy demand lower by about 5% in 2021 recovering to about 4% in 2026**
 - **Scenario 2 (Slower Recovery)**: deep recession, slow recovery, energy demand lower by about 7% in 2021 recovering to about 5% in 2026**

* Released January 2020

** Difference relative to the 2019 APO demand forecast

Adequacy and Energy Outlook

- The updated outlook is similar to the 2019 APO with a summer capacity need emerging in the early to mid-2020s that can be met by obtaining capacity commitments from existing and available resources:
 - Decrease in demand is offset by reductions in available supply
 - Continue to see limited need for capacity in the winter until the middle of the decade
- Ontario is expected to remain energy adequate over the course of the planning outlook:
 - Decreases in demand are offset by reduced gas fleet production
 - Shortfalls may emerge if a number of resources exit the market

Note: for more information on the IESO's revised outlook, please see the [Forecasting and Planning webinar](#) from July 22, 2020

Ensuring Cost-Effective Reliability – in Real-Time

- Ensuring real-time power system operation that meets reliability standards and reflects utility best practises in a cost-effective and risk-adjusted manner is core to our mandate. To support this, priorities in the coming year include:
 - **Market Renewal - Energy project**
 - The coming year will focus on preparing for implementation in 2023 including delivering the future market's governing documents, process documentation and the IT solutions to support operation of the market
 - Stakeholder engagement in this phase will be ongoing and essential to ensure the IESO and market participants are prepared for go-live
 - **Enhancing key reliability tools** to improve situational awareness, assess the potential for critical elements in neighbouring systems to impact Ontario reliability, and increase the effectiveness of the Ontario transmission system

Ensuring Cost-Effective Reliability – Long-Term

- Enhance mid- and long-term demand forecasting and energy **modelling tools** to support a transparent and consistent approach to forecasts and planning products, and benefit the market by providing greater insights to inform investment decisions
- Enhance and formalize the **bulk and regional planning processes** by completing our ongoing reviews, working with stakeholders, which will provide a more flexible approach to addressing needs as they arise, given our current dynamic environment
- Resource adequacy related **reliability standards review**:
 - As we examine our future capacity needs, there is an opportunity to challenge our own thinking related to our adequacy assessment methodologies to ensure that we apply appropriate assumptions while considering ratepayer value
 - We expect to engage stakeholders this month on this initiative that will complement the Resource Adequacy Engagement, as we continue to ensure cost-effective reliability

Enabling Competition - Capacity

- Launch the **Resource Adequacy** engagement:
 - engage stakeholders on the development of a strategy for the competitive acquisition of resources to meet short, medium, and long-term electricity system capacity needs that effectively balances cost-effectiveness and risk
- Following from the outcomes of the Resource Adequacy engagement, we expect to:
 - Advance the **Capacity Auction** to better enable other resources to participate
 - Develop other capacity acquisition tools

Enabling Competition - Energy

- The IESO will continue to look at **what's next following the Market Renewal – Energy project** ... specifically to enable resources to deliver capacity into the real-time energy market
 - Over the past year the IESO has taken the first steps in a scoping and assessment exercise to identify potential market development projects that Expand Participation in Operating Reserve and Energy
 - The IESO will build on that work with a goal of improving the participation of several resources types such as storage, hybrid facilities, Demand Response, Distributed Energy Resources and inertia transactions