APRIL 21, 2026

2027 Annual Planning Outlook: Demand Forecast Scenarios

Independent Electricity System Operator

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Purpose of Today's Discussion

- Provide an overview of the demand forecast scenarios to be developed for the 2027 Annual Planning Outlook (APO), and the narratives and variables considered for each scenario.
- Present the revised scenario design and key demand drivers.
- The IESO is continuing with the scenario planning approach introduced during 2026 APO development:
  - Expanding input into scenario design and uncertainty
  - Tracking how feedback influences outcomes
  - Better aligning engagement with internal planning milestones

Background

- The APO identifies system needs, describes factors that could influence needs and presents planned actions to address reliability needs. The 2027 APO is anticipated to be published in Q1 2027
- Similar to the 2026 APO, the 2027 APO will present multiple demand forecast scenarios to better reflect the range of uncertainties in factors such as electrification, economic development and government policy and their impact on electricity demand
- In November 2025, initial scenario design was presented to stakeholders publicly, and feedback was sought
- Feedback from November engagement was reviewed and used to refine the 2027 APO scenarios

2027 APO Demand Forecast Scenarios

Forecast Scenarios: Narratives

The IESO is developing three electricity planning scenarios for the 2027 APO that present faster or slower demand growth compared to the reference

- **Reference Scenario**: Represents high-confidence policy, government announcements and continuing trends
- **High Demand Scenario**: Represents a future featuring economic acceleration and stronger policy and consumer-driven electrification trends
- **Low Demand Scenario**: Represents a future featuring slower economic activity and weaker consumer and policy-driven electrification trends

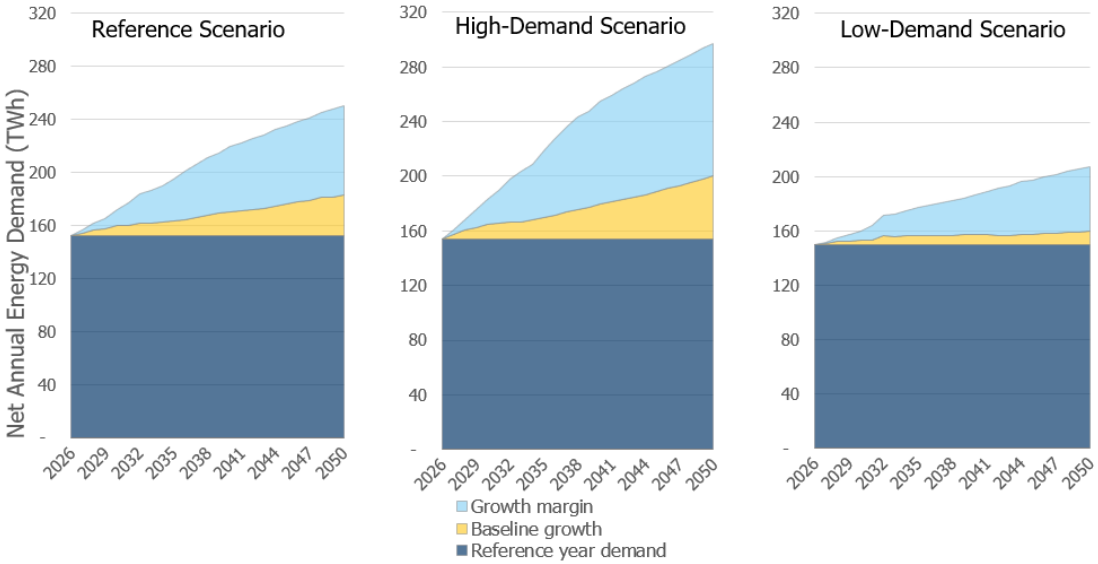
The treatment of select macro-level, demand drivers under each scenario is discussed on the following slides

Forecast Components - Reference Year

Reference year is the forecasted annual energy demand for the year 2027 (representing year 0 of the outlook period) and the basis of demand forecast assumption projections and future levels of electricity demand reported over the 2028–2050 period.

Reference year demand is informed by the medium-term demand forecast in the IESO's latest Reliability Outlook, available during the development period of the 2027 APO.

APO 2026 Demand Forecast by Scenario and Component

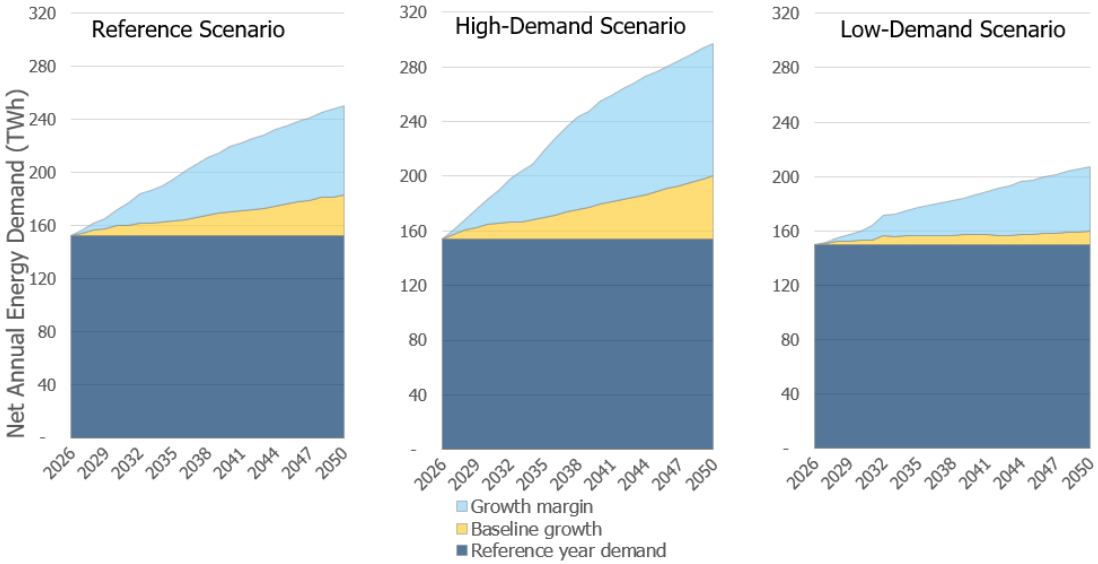


Forecast Components - Baseline Growth

Baseline growth represents forecasted future changes in electricity demand modelled in the residential, commercial, industrial, agricultural and other sectors independently that have underpinned past demand forecasts.

It is based on relatively steady and readily available assumptions and projections such as population, household, commercial floorspace, economic output, income and employment, fuel-rate levels and other demand forecast influencers such as trends in consumer preferences, sector structures, economic and policy trends, and the IESO's regional planning process.

APO 2026 Demand Forecast by Scenario and Component



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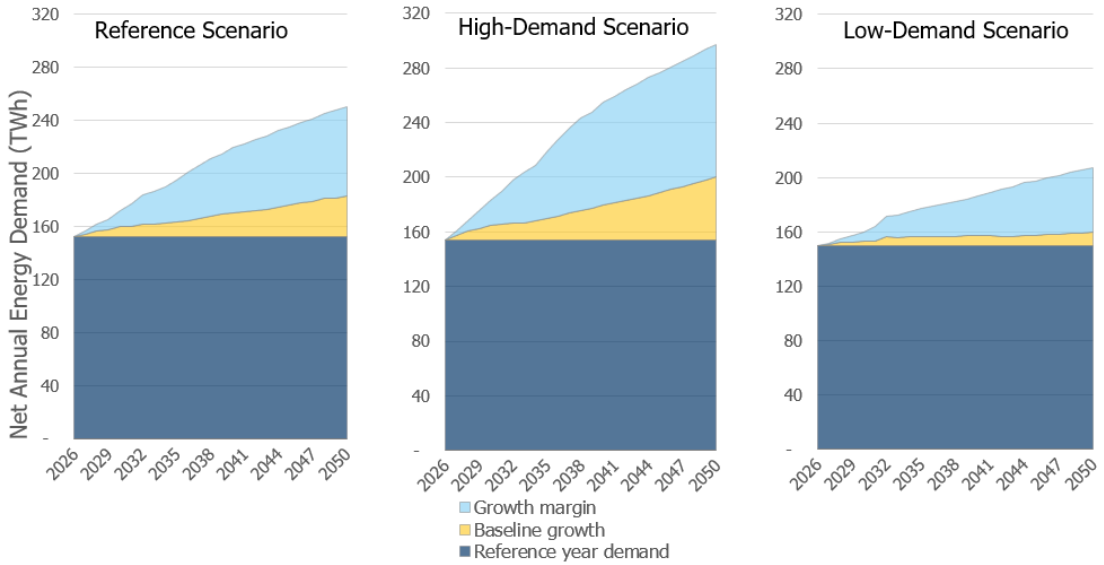
Forecast Components - Growth Margin

Growth margin represents forecasted future changes in electricity demand based on volatile assumptions and projections in terms of trends and planned projects, and is categorized as:

- Economic development
  - commercial data centres
  - industrial mineral extraction and processing
  - industrial automobile and transportation machinery manufacturing,
  - industrial chemical production
  - other industrial manufacturing
- Societal electrification
  - building decarbonization
  - industrial decarbonization
  - transportation sector decarbonization

APO 2026 Demand Forecast by Scenario and Component



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Demand Forecast Factors (1)

Variable	Reference Scenario	High Demand Scenario	Low Demand Scenario
Building Electrification Policy	No building permit or building performance standard requirements	All new residential building space heating, water heating post 2040 being heat pumps, and all cooking and clothes drying being electric Building performance standard requirements for existing buildings in latter half of the forecast	No building permit or building performance standard requirements
Beneficial Electrification	Continued IESO-Enbridge Gas-Natural Resources Canada (NRCan) programs incenting heating electrification over forecast period with annual participation consistent with current near-term plans/targets	Continued IESO-Enbridge Gas-NRCan programs incenting heating electrification over forecast period, with annual participation increasing from near-term plans/targets after current framework, mandate, or budget allocation	IESO-Enbridge Gas-NRCan programs incenting heating electrification conclude after current framework, mandate, or budget allocation

Demand Forecast Factors (2)

Variable	Reference Scenario	High Demand Scenario	Low Demand Scenario
Transportation Electrification	Continued considerable growth in electric vehicle (EV) adoption based on federal strategy targets announced in February 2026 with adjustments to reflect Ontario vs national EV sales trends Rail projects, including Confederation Light Rail Transit (LRT) in Ottawa, phase one and two; ION LRT in Waterloo, phase one and two; Eglinton Crosstown, phase one and two; Finch West LRT; Hazel McCallion line LRT; Hamilton LRT; Ontario Line new subway; Yonge subway extension; Waterfront east LRT GO Rail system electrification See Alto high speed rail project on next slide	Strong growth in EV adoption consistent with new federal EV strategy targets announced in February 2026. Rail projects same as reference	Moderate continued growth in EV adoption based on extrapolating historical sales trends Rail projects same as reference. In service dates are adjusted reflecting complexity and uncertainty of these projects and past delays of similar projects.

Demand Forecast Factors (3)

Variable	Reference Scenario	High Demand Scenario	Low Demand Scenario
Auto/steel sectors	Continued growth of sectors, including announced and confirmed large step load projects	Continued growth of sectors, including higher percentage of potential large step load projects	Slowdown in sector growth
Nation-building and priority projects	Alto high-speed rail	Critical minerals and 1P1P driving higher mining Alto high-speed rail Increased housing	
Mining	Growth based on known projects, including Ring of Fire, with moderate adjustment for project uncertainty, some mining electrification, and continued mining growth	Higher growth rate and accelerated development timelines due to potential impacts of renewed focus on critical minerals	Lower growth based on known and unknown projects, lower overall growth rates, and lower mining electrification

Demand Forecast Factors (4)

Variable	Reference Scenario	High Demand Scenario	Low Demand Scenario
Electricity Demand Side Management (eDSM)	Initially aligned with 2025–2027 eDSM program plan then higher long-term savings levels reflecting planned continued growth of eDSM targets and budgets and load growth. It is assumed that new savings each year represent 1% of the gross demand forecasted for the year.	Same approach as (noting that higher gross demand forecast results in higher eDSM savings than Reference Scenario)	Initially aligned with 2025–2027 eDSM program plan, long-term savings levels consistent with current program plan levels adjusted for load growth. It is assumed that new savings each year represent 0.9% of the gross demand forecasted for the year.
Data centre development	Growth based on known projects and growth rate consistent with identified project pipeline	Growth based on known projects and higher growth rate	Growth based on known projects with a lower growth rate

Next Steps

- Anticipated future engagement on the 2027 APO will include:
  - A public session later this year (Q4) to present final demand forecasts; and
  - A public session following publication of the APO in 2027 to provide an overview of key findings
- The IESO plans to continue holding ongoing scenario planning sessions that inform subsequent APOs; sessions will run in parallel with the APO engagements to support long-term planning.

Thank You

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