Edgecom Energy

pTrack® Seasonal Outlook

May 2024

Prepared By

Edgecom Energy

Season Highlights

Top 5 Peaks

22,500 MW - 23,200 MW

We expect the top 5 peaks this summer to end up between 22,500 and 23,200 MW

Peak Timing

High Peak Chance in June, July, and August

We expect a high chance of peaks in the months of June, July, and August, and lower chance of peaks compared to previous Septembers.

Weather

Wet summer with unpredictable storms.

Weather forecasts are predicting a wetter summer season compared to previous summers. With storms being more difficult to predict, double curtailment calls are likely this summer.

pTrack® Model

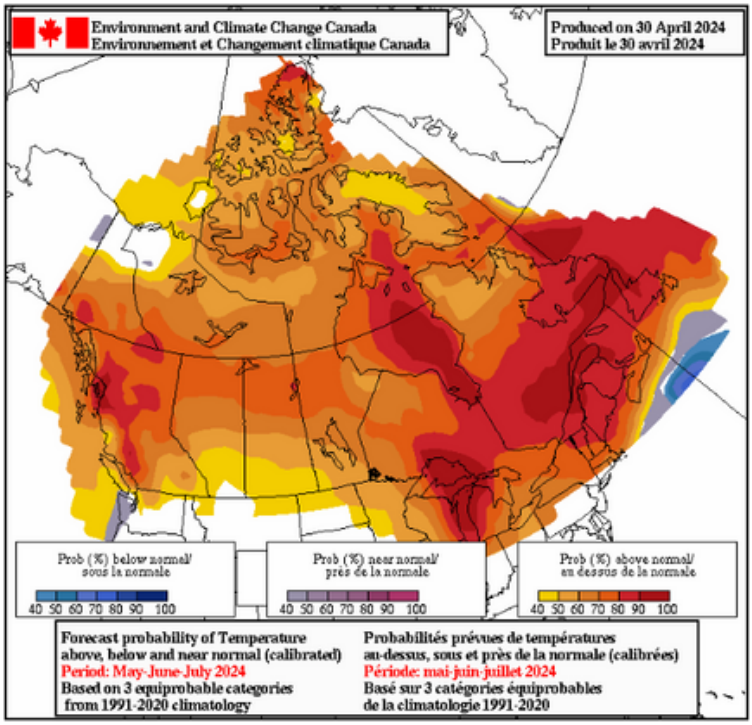
pTrack® model updated with more weather data.

We've updated the pTrack® model to include more weather parameters and to make hourly predictions more accurate - the previous model was focussed on 2, 3, and 4 hour curtailment windows, while the new model predicts each hour individually.

Performance Overview

Month	Project Maximum Number of Peak Curtailment Hours	Ontario Demand Forecast Peak (MW)
May	0	20,700
June	10	22,500
July	10	23,200
August	5	22,800
September	5	21,500

Factors Driving Electricity Demand Up



Temperature projections from Environment Canada

Weather sensitivity of peak events is continuing to increase as work from home has persisted, meaning both offices and residential spaces are being cooled during the summer. Energy demand is projected to increase by 1.1% in 2024 and accelerate into 2025, due to a growing economy combined with the addition of large industrial loads and increased electrification from fuel switching.

After a period of slow electricity demand growth. Macro trends are putting upward pressure on Electricity Demand in the province. Some of the reasons for this are:

- **Residential Sector:** Residential electricity demand is projected to grow steadily due to supportive housing policies, immigration, persistent work-from-home trends, and the adoption of new technologies like heat pumps and EVs.
- **Commercial Sector:** Commercial sector electricity demand will see slow, steady growth influenced by the digital economy and hybrid work models, reaching 62 TWh by 2050.

- **Industrial Sector:** Industrial electricity demand will grow significantly due to developments in the EV supply chain, hydrogen production, and mineral extraction.
- **Agricultural Sector:** Agricultural electricity demand will increase primarily due to greenhouse expansion and artificial lighting.
- **Transportation Sector:** Transportation electricity demand will surge, driven by EV adoption and rail electrification.

Factors Reducing Electricity Demand

- Residential demand response expected to reduce summer peak demand by 125MW or less.
- Improved ICI curtailment by Class A participants through better peak prediction, more aggressive curtailment, battery and hvac system optimization, increasing the saving by about 1%. Projected effect of ICI this summer is a demand reduction of 1,750MW.

Contact Us

Phone	416-640-2401
Email	info@edgecom.ai
Website	www.edgecom.ai
Address	5775 Yonge Street, Suite 1902, Toronto