Feedback Form

Regional Electricity Planning in Toronto – April 16, 2024

Feedback Provided by:

Name: Dr. Gene Thurtry

Title: Principal

Organization: Cerebral Energy Advisors

Email: [redacted]

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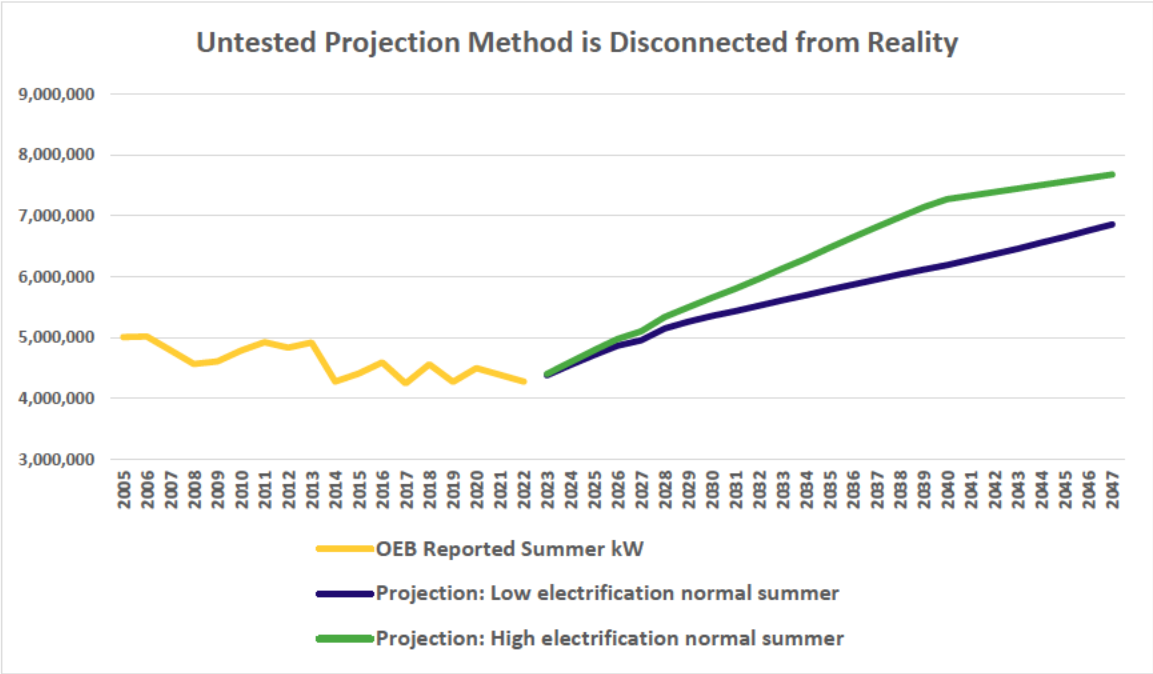
To promote transparency, feedback submitted will be posted on the Toronto region engagement webpage unless otherwise requested by the sender.

Following the Toronto Region electricity planning engagement webinar held on April 16, 2024, the Independent Electricity System Operator (IESO) is seeking feedback on the draft electricity demand forecast scenarios and Engagement Plan. A copy of the presentation as well as a recording of the session can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by **May 7, 2024.**

Topic	Feedback
What additional information, if any, should be incorporated in the proposed electricity demand scenarios? What are some of your key developments, projects or initiatives that should be considered in developing an electricity demand forecast for the Toronto region?	A major missing component of the demand scenarios is the projected cost to consumers, both the direct cost of grid investment required to support that scenario and the estimated cost to consumers to adopt said technology at the level which underpins that scenario. E.g. Conservatively we can expect the purchase of EVs alone to be in the hundreds of $Billions, what is the cost of the heat pumps? And what will the future price of electricity be under each of the low/med/high scenarios?
What local issues and concerns should be considered in the electricity planning?	If significant fixed grid investments are made based on these wild projections and the load doesn't materialize, who pays for them? The current electric grid of Ontario is significantly subsidized by taxpayers (approx. $6Billion per year). We can not expect the government to simply backstop the cost of any irrational investments made based on faulty projection methodologies.
What information is important to provide to participants throughout this engagement?	Data that is driving the projections, not just the aggregate demand forecast but all layers of variables that underpin the demand forecast. The variables should be open to rigorous examination & debate and be modeled in a probabilistic manner ensure the most robust set of projections are based on actual likely trends, not hopeful wishes.
Does the proposed Engagement Plan provide sufficient scope and opportunities for input?	No. Parts of the current engagement plan, particularly the April 16th webinar, have been dominated by special interest parties whose input is tantamount to virtue signaling and forcing ideology. Some contributors have demonstrated a startling lack of fundamental understanding of the technical requirements and limitations of an electric grid. Some of these same contributors have also recently been publicly singled out after willfully spreading misinformation on energy systems in Ontario, namely after a recent natural gas hearing. More opportunities need to be provided for energy experts of all types to openly question, debate on, and propose alternative means of projecting the expected future grid load. Engagements should also give more time to hear those with input grounded in facts & numbers than generalities like "why aren't we supplying more power with renewables".

General Comments/Feedback



No backtesting of the forecast methodology has been performed on historical data to establish the accuracy of the method despite data available to do so. No forecast method can be trusted until calibrating and proving its accuracy with historical data.

Exponential growth in adoption of new technologies (DERs, EVs, heat pumps, etc.) since 2017 has had negligible impact on Toronto load since that time. Despite this, the current projections are showing a load growth of nearly 90MW per year. Why?

It's not apparent how government programs which largely drove the adoption rates seen in previous years has been factored into the projections. Many government subsidies to encourage adoption have either been significantly curtailed or eliminated entirely, resulting in dramatic slowdowns in adoption rates which are becoming evident now and generating significant media headlines.

How the adoption rates in Section 3 of the forecasting methodology were determined is entirely opaque. Either they are randomly generated numbers, or the method behind their determination needs to be fully transparent. To illustrate their inaccuracy, from Ontario data there are roughly 160,000 BEVs & PHEVs out of almost 9 million light-duty vehicles in the province. This puts 2024 EV penetration at 1.8% or less, while section 3.1 starts 2024 at 4% and only increases from there. No source for Toronto specific data is listed or made available.

Related to and further impacting point #3 above is the general issue of affordability in Canada, which Toronto is at the heart of. These wildly optimistic projections have no consideration of the total cost that would need to be borne by consumers (conservatively, 100's of $Billions) to enable these adoption rates; those estimated costs should be highlighted as a sanity check for the projections.

Further, there is no consideration of how confounding variables may impact the projections themselves. Two major examples immediately come to mind:

- Major transit projects outlined in 3.4 will be completed in the near future. How will those impact car ownership rates in Toronto and thus the load from EVs?
- Building an electric grid to supply an anticipated 60% more power will dramatically increase the cost of electricity even if existing taxpayer subsidization stays in place. How will the higher cost change the economics of heat pumps and EVs and what will that do to the resulting adoption rates?

Much of the projected increase in electrification is predicated upon policies and mandates within the purview of the federal government, some of which have not even come into force yet, including:

- The carbon tax to artificially increase the cost of energy for home heating, despite which, natural gas is still far cheaper than electricity for many in Ontario
- A mandate for some or all of new vehicle sales to be EVs

Given current polling numbers in Canada, what is the likelihood that these factors remain in place beyond 2025 and how would that change the projections?