

BRIEFING NOTE

POTENTIAL MODIFICATIONS TO ICI FOR SMALLER CLASS A CONSUMERS

ISSUE: Are there any “common sense” modifications to the Industrial Conservation Initiative (ICI) that could help smaller Class A consumers benefit under the program?

KEY INFORMATION:

- Generally, smaller Class A consumers find it more costly and/or challenging to participate in ICI compared to larger Class A consumers due to a lack of resources and/or electricity sector knowledge.
 - Smaller Class A facilities also tend to have relatively peaky consumption and may lack load-shedding flexibility, making it challenging to achieve the full benefits of ICI.
- Any modification to ICI that increases participation in ICI or helps current Class A consumers reduce costs further will contribute to increased costs for Class B consumers.

An increase to Class B GA costs would increase the amount of borrowing necessary under Ontario’s Fair Hydro Plan.

- In a recent LTEP submission, ASW Steel – a steel manufacturer located in Welland – suggested modifications to ICI that would help new and existing smaller Class A consumers, particularly those without load-shedding flexibility:
 1. Allowing participants a “**mulligan**”; for example, permitting Class A consumers to calculate their GA share based on their best 5 of 7 system demand peaks.

ENERGY staff do not recommend this policy, as it would result in higher costs for Class B consumers without system benefit.
 2. **Educational outreach** to smaller Class A consumers.

This would likely result in a small additional peak demand reduction. ENERGY staff note that educational outreach is already underway with the Ontario Chamber of Commerce (OCC) with additional outreach expected to be provided by the Canadian Manufacturers and Exporters (CME).
These efforts are in addition to normal IESO/LDC outreach activities.
 3. Cease to identify the five peak hours under ICI using the **Allocated Quantity of Energy Withdrawn** (AQEW), or publish AQEW figures in real time.

IESO currently publishes Ontario Demand estimates as part of its Peak Tracker for Class A consumers, as forecasts and in real time. AQEW figures are used to confirm the five peak hours, and are published after a 20-day verification period.

There is potential for discrepancies between the Ontario Demand figures and the AQEW figures. ASW cites concern that this makes it more difficult for ICI participants to predict peak hours.

ENERGY staff do not recommend changing the criteria for selecting the five peak hours.

- AQEW is a precise, verified value, and any change in criteria could make Class A consumers better or worse off.
- The removal of AQEW from ICI calculations would be unlikely to significantly impact the overall amount of GA participants pay (note: see Background for ENERGY analysis).
- As stated by the IESO, Ontario Demand is the best available indicator of peak hours in the short term. AQEW is calculated as part of a verification process and is not available in real time.

BACKGROUND:

“Mulligan” concept

- Currently Class A consumers’ GA share is based on their consumption during the 5 highest system demand peaks.
- Revising the GA to allow Class A consumers to calculate their GA share based on their best 4 of 5 system demand peaks – or 5 of 7 as ASW Steel has proposed – would lower costs for Class A consumers and shift these costs to Class B consumers. The system benefit would also be reduced as the incentive to reduce consumption in the highest hours would be muted.
- ENERGY staff estimate that a “best 4 of 5” system would result in a reduction of about \$2/MWh for an average Class A consumer and a cost increase of about \$0.50/month for a typical residential consumer. These estimates are based on aggregate Class A consumption data and as such likely underestimate the impact.
- This approach would require amendments to O. Reg. 429/04 and would also require amendments to LDC and IESO billing systems. The earliest this amendment could be effective would be July 2018.

Educational Outreach

- On April 17, 2017, the amendments to the ICI program to extend eligibility to electricity consumers in the manufacturing and greenhouse sectors with average monthly peak demand greater than 500 kW and less than 1 MW.
- ENERGY has been approached by OCC and the CME regarding raising awareness and expertise across the province in relation to provincial programs and initiatives such as ICI.
- ENERGY and OCC reached an agreement with OCC to provide business consumer outreach and education in April 2017 – OCC is currently engaged with this work.
- CME have provided a proposal to ENERGY to consider regarding outreach to their members.
- Such outreach initiatives may result in increased participation in ICI which would contribute to lower levels of peak demand in the province. Note: Increased ICI participation would also result in a cost shift to Class B consumers.

AQEW and Peak Prediction

- In its LTEP submission, ASW Steel notes that the use of AQEW to confirm the five peak hours can result in a change to forecasted and preliminary rankings, which are based on Ontario Demand. AQEW is based on metered data and is reported with a lag of 20 business days after the date. There is typically a difference of several hundred megawatts between Ontario Demand and AQEW.
- ASW asserts that the discrepancy between rankings compromises the reliability of IESO data, creates uncertainty for participants and results in a requirement to curtail operations for longer periods of time.
- If AQEW was not used to confirm the five peak hours and ICI calculations were based on real time Ontario Demand data, there would likely be few instances of different peak hours being used to determine participants' share of GA.
- Based on ENERGY calculations, over the five-year period from May 2012-April 2017, of the 25 hours included in the preliminary list of five peak hours based on Ontario Demand, 3 were removed from the final list following verification using AQEW.
 - Based on these calculations, the use of AQEW has had a relatively minor impact on the accuracy of preliminary lists based on Ontario Demand.

- Given that ICI participants rely on forecasts to inform their behaviour and must target a range of hours in order to hit peaks, and that discrepancies between the preliminary and verified peak hours have been relatively infrequent and minor, the removal of AQEW from ICI calculations would be unlikely to significantly impact the overall amount of GA participants pay.

Other ASW Steel comments

- In its LTEP submission, ASW also notes that the hourly peaks are difficult to predict because ICI itself results in a plateau rather than a peak.
 - ENERGY staff note that this is how the ICI is intended to function, as it is this plateau effect that contributes to the reduction in peak demand that helps to reduce the need for additional peaking generation in the longer term.
- ASW envisions an amended role for the IESO with respect to the peak demand forecasting it provides in connection with ICI. For example, ASW suggests that:
 - IESO should estimate a peak range of hours instead of a peak hour, allowing participating companies to better plan their shutdowns.
 - If IESO's forecasts of peak demand are inaccurate, the five peak hours should be selected on the basis of those IESO forecasts and not the actuals.
 - IESO must ensure reliability and accuracy of its online data.
- ENERGY staff are not supportive of such changes. Projections convey useful information to participants with which to make decisions. Class A consumers have the option of using third party services to further assist them in energy management.

Energy Supply Policy Division

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