

Electricity System Impacts of COVID-19

Webinar, May 20, 2020

IESO responses to questions not answered during April 23 webinar

On April 23rd, the IESO presented an overview of COVID-19 impacts on electricity system operations. In the table below, the IESO has provided responses to questions asked during the webinar that the IESO did not have a chance to provide a response to. This document will be updated with additional questions and responses when they are available. Some questions were edited to remain concise.

Stakeholder questions and IESO responses

Planning

Question: Can we expect that there will be a series of 'engagements' regarding scenarios and other input factors through Q3 in order to finalize the Q4 APO?

IESO Response: IESO will engage with stakeholders on the development of the next APO. As details around the engagement are available, they will be communicated to stakeholders.

Question: In regions where power constraints are an issue and demand remains stable - as in the Windsor-Essex region - are the new transmission projects moving forward as planned to support the on-going growth of the greenhouse sector?

IESO Response: The IESO works closely with Hydro One and the local distribution companies in the area. Hydro One confirmed that growth activities have not slowed in the region. The system expansions identified by the IESO to provide increased capability to supply the significant near-term demand growth associated with greenhouse expansions in the Windsor- Essex Region continue.

The IESO continues to carry-out planning studies to determine the longer term needs in the region and the broader needs of the West of London network. Those studies will consider the impact of COVID-19 on the longer term growth.

Other Ontario regions have their own needs and associated projects and it would be difficult to generalize on the impact of recent events. We will be reviewing them on a case-by-case basis.

Question: As the restrictions are relaxed and the economy is allowed to open in stages, is there a specific plan on how to maintain the surge that will occur also in stages?

Answer: IESO continues to develop its demand forecast models and will account for the expected increase in demand in those forecasts as more information on the plan to reopen the economy becomes known.

Question: Can the IESO please incorporate a forecast of marginal emission factors with future outlooks so that all businesses can make better decisions?

Answer: IESO makes available as part of the materials accompanying the APO, a projection of avoided emissions.

Question: Do you believe that the suspension of time of use rates has had much impact on consumer behavior ?

Answer: Due to the province's state of emergency and various measures in place to combat COVID-19, we know that residents are spending more time at home, which has caused an average increase of 2% in the residential customer base.

Question: I've been following the IESO's recent posts regarding the COVID-19 impacts on our Ontario demand through LinkedIn. I can see that a lot of the updates are geared toward the residential sector but would you be able to provide any information surrounding the commercial and industrial sectors? While we've seen increases and changes in the load profiles in the residential sector due to COVID-19, I'm curious to know whether or not the IESO has observed any changes or decreases in the demand & load profiles in certain areas of the small commercial, manufacturing and/or industrial sectors.

Answer: Currently the IESO has been able to isolate impacts by four customer groups: residential, small commercial, distribution connected commercial and industrial and IESO-connected wholesale customers. When further granularity is available the IESO will release those outcomes.

Question: Typically, in the past we see Ontario power demand as low as 10,100 or 10,200 in May and June, what lower bound of load are you projecting as the weather warms up the next couple of months?

Answer: The interim update to the Q1 Reliability Outlook, to be released in May, will provide an updated demand projection for the forecast period. The Q2 Reliability Outlook will also reflect an updated system projection.

Question: Following the '07-'08 economic downturn, was the long term reduction of load primarily driven in the Industrial sector, and secondly, how different are the load reductions during this pandemic from '07-08?

Answer: The reduction of load in 2007/8 economic downturn was driven primarily by reductions in the industrial sector. At this time, most of the load reductions are being experienced in the commercial sector given the required closure of non-essential businesses

Question: It can be difficult finding similar days based on weather especially considering weather patterns leading into 'similar day'. I am surprised you have found similar [embedded generation] EG on these similar weather days, since it is such a wide variable impact across the province. Is it possible to post the hourly EG on similar day vs actual day so that we can see that accurate similar comparisons are being made?

Answer: Since embedded generation is settled by the local distribution companies (LDCs), the generation assumptions in the presentation are estimates made by the IESO. The IESO is unable to provide the data requested. Weather is just one of the factors considered when the IESO prepares its demand forecasts.

Question: What is the approximate MW peak for the small commercial and distribution connected commercial under normal operation (i.e.. what is the baseline the reduction is being measured from)?

Answer: Since small commercial and distribution connected commercial load are settled by LDCs, the IESO does not have an approximate MW peak for these loads.

Question: The IESO presented hourly demand data for residential, small commercial, larger Dx-connected commercial/industrial and grid-connected market participant customers. Can/will this customer breakdown of hourly Ontario demand be available publicly? Can/will it be made available for other public energy agencies?

Answer: The IESO does not publish hourly demand data for residential, small commercial, larger Dx-connected commercial/industrial loads since these are settled by LDCs. On a monthly basis, the IESO publishes the Industrial Load by Sector report which includes hourly data for grid-connected market participant loads: <http://reports.ieso.ca/public/IndustrLoadBySector/>.

Market Operations

Question: With the potential for a staggered opening of the economy, what challenges are faced during an extreme weather event for unexpected load increases by not knowing how many business will open up on any given day (time period) and the impacts of the neighboring markets opening up at different times?

Answer: The IESO continues to develop its demand forecast models and will account for the expected increase in demand in those forecasts as more information on the plan to reopen the economy becomes known. We will continue to monitor system conditions in Ontario and with our interconnected neighbours. Currently, we are operating the grid in a cautious manner, ensuring we have enough supply available to meet our needs under a variety of risk scenarios and that includes working with our Canadian and U.S. neighbours to maintain reliability of the interconnected North American power grid.

Question: Has it been considered to lower the floor price on export purchases to help increase exports to markets which also have depressed market prices?

Answer: There is no consideration to changing any rules to help manage surplus. The current market mechanisms such as exports, dispatch of variable, hydro-electric and nuclear resources will continue functioning to manage surplus.

Question: Why bring the nuclear units back on line late spring if that would exacerbate SBG?

Answer: It is very important to have nuclear units go on outage in the spring to prepare for summer operation which is the peak demand period of the year. Having the units return in June may exacerbate SBG but is manageable with the current market mechanisms in place today such as exports, dispatching variable, hydro-electric and nuclear resources. Conditions in June may exist where a nuclear unit may need to shut down due to SBG but those instances are short lived and manageable.

Question: What is the status of the IESO's Settlement activities, i.e., is the IESO collecting revenue from distributors and paying transmitters and generators?

Answer: At this time, all IESO-Administered Markets processes related to market participant invoices and payment schedules remain unchanged.

Question: Has the reduction in demand resulted in improvement of the amount of renewable power being generated to further improve air quality?

Answer: Generally, there is a higher proportion of nuclear power generating in April 2020 due to the combined effects of lower demand and increased nuclear capability between April 2019 and April 2020. There has also been a reduced amount gas generation output in April 2020 compared to April 2019.

Question: How is the IESO dealing with the observed increase in Cyber Security threats?

Answer: We recognize that the pandemic may introduce additional cybersecurity risks that will need to be mitigated. The IESO is in regular contact with sector partners in Ontario and with our counterparts in Canada and across North America, to maintain robust information sharing on cybersecurity threat intelligence and risk mitigation tactics and strategies.

LDC Liquidity

Question: Will there be any relief or extensions planned for LDCs who may be in cash crunches as a result of customers not paying their bills. If our bills are due two days after IESO bill is released, we may experience cash shortages if this pandemic gets worse or extends.

Answer: The IESO has been meeting with a number of LDCs over the past few weeks to gain a better understanding of the impacts that LDCs are dealing with as a result of COVID-19, in particular issues associated with the inability of customers to pay their electricity bills, and is working with the Ontario Energy Board and the Ministry of Energy, Northern Development and Mines to determine how to address these issues.

Demand Response

Question: How would demand response resources respond if they are not operating/consuming?

Answer: The IESO understands that some Demand Response Market Participants (DRMPs) may find it difficult to meet the obligations arising from their participation in the Demand Response Auction due to the continuing impact of the novel coronavirus (COVID-19). If COVID-19 is adversely affecting a DRMPs performance and their ability to meet their obligations, the DRMP can provide the IESO with a Notice of Force Majeure (FM Notice) in order to apply for temporary relief from these obligations. Details on providing a FM Notice are outlined in Chapter 1, section 13.3 of the Market Rules. The IESO understands that some DRMPs have not been impacted by COVID-19 to date and we expect these resources will continue to comply with their full obligations under the Market Rules. For more information, please contact customer.relations@ieso.ca.

Policy and Regulation

Question: Have there been any discussions with government about labelling the energy/electricity sector 'critical' instead of just 'essential' to give the sector more flexibility and priority? To date I think the label has only been applied to the health care field.

Answer: In response to the pandemic, the IESO has activated the Crisis Management Support Team (CMST) with the purpose of identifying potential risks to the reliable operation of the Ontario electricity system, sharing information and coordinating crisis management activities, and informing Ontario's response and recovery strategy. The CMST is made up of key representatives from Ontario's electricity industry including members of the Ministry of Energy, Northern Development and Mines. The CMST will continue to be used as a forum to discuss the needs of Ontario electricity sector through the pandemic.

Electricity Rates

Question: What are your expectations on Time of Use going forward?

Answer: Time of Use rates are determined by OEB. The Government of Ontario issued an Emergency Order under the Emergency Management and Civil Protection Act such that starting on March 24, 2020, residential and small business customers on time-of-use (TOU) pricing will pay 10.1 ¢/kWh no matter what time of day the electricity is consumed. This means that TOU customers will be paying the off-peak price throughout the day as long as the Emergency Order remains in place. The Government has indicated that it intends to keep the 10.1 ¢/kWh pricing in place for 45 days (through May 7). On April 14, the OEB said it would move back to 2019 winter rates, not setting a new summertime electricity price due to the pandemic.

Questions:

- Good afternoon. Do you anticipate any revisions to the current ICI/Class A program as we move into the next period?
- Can IESO comment at all at this point on how the drop in Class A demand associated with COVID will be accounted for in the ICI program? We expect ICI to continue? (Maybe this is more of a question for the Ministry of Energy, but would love to get IESO thoughts)
- Sorry if I missed it, can you comment on what the IESO is anticipating for ICI impacts this upcoming season?
- Would higher Global Adjustment costs in excess of \$ 600,000/MW due to lower volume consumed would bring to rethink to restructure the costs between class A and B?

Answer: The IESO knows that managing electricity costs is important to consumers and we've heard concerns from some large consumers about the implications of lower energy use on their participation in the Industrial Conservation Initiative (ICI). This is a focus of ongoing conversations in the sector, and we understand the government is monitoring the situation and looking at options.

The Global Adjustment (GA) calculations, and participation and ICI eligibility requirements are written in Ontario Regulation 429/04 and so any changes to these will require regulation change by the Ministry of Energy, Northern Development and Mines (MENDM).

Changes being introduced for the next base period are:

- The IESO will post total system-wide consumption volumes for the top 5 peaks May 1 rather than May 15. This gives Local Distribution Companies (LDCs) more time to review and to provide their eligible customers with their respective PDFs.
- Peak Tracker enhancements will go live on the IESO's website on May 1. These enhancements include two additional data points to help Class A participants make business decisions earlier.

Question: Great explanation How the lower cost of generation will effect ICI and GA values? in the long run and for current Adjustment and base period?

Answer: The IESO continues to manage and dispatch lowest cost resources to ensure reliable, cost-effective, energy is available when needed. As discussed in the webinar, it is too early to assess impacts on system costs due to COVID-19 as further data is available and we are continuing to monitor this and the impact on Global Adjustment (GA).

Questions:

- How do you expect decreases in demand and consumption will affect Global Adjustment for Class B customers vs Class A customers?
- What are the short and longer term financial effects on global adjustment for Class A and Class B customers as a result of the pandemic's impacts on the system?
- Can IESO provide forecasts (to the best extent possible) on Class A and Class B rates with various COVID-19 scenarios (e.g., full shutdown, partial shutdown, etc.) ?

Answer: The global adjustment varies from month to month, and generally, when the Hourly Ontario Energy Price (HOEP) is lower, the global adjustment is higher in order to cover the costs of regulated and contracted generation. There has been an increase in GA associated with decreased demand due to the impact of COVID-19. This is a focus of ongoing conversations in the sector, and we understand the government is monitoring the situation and looking at options. The IESO will continue publishing estimated GA three times per month.

Note

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