

Input for Consideration Regarding Prospective Temporary Changes to the ICI Program

Submitted by Energy Storage Canada

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The Issue:

Energy Storage Canada understands the government is considering changes to the ICI program to respond to the impacts of COVID-19, specifically a mandatory freezing of the Peak Demand Factor (PDF) to rates being used for the current base period for 12 months starting in April 2021. This change is to respond to some Class A customer perspectives that they should not have to chase peaks to lower future electricity costs and sacrifice productivity while Ontario is trying to get businesses back to 100% capacity.

We echo significant concerns from the business community that this change would penalize previously committed innovative investments and severely impact investor's confidence in Ontario. Instead, we offer an alternative solution that would promote jobs, strengthen the economy and lower prices, and support the Government's priority to improve Ontario's reputation as the best place for investments.

Energy Storage Canada Position:

Energy Storage Canada is intimately familiar with the impact that the COVID-19 pandemic has had on businesses across the province. Our members have also been affected and are appreciative of the government's swift actions to-date to support a portfolio of relief to businesses in need.

However, we respectfully disagree with the perspective that all Class A customers are a homogenous group. First, many Class A customers have invested capital and upgraded their operations to be able to curtail demand from the electricity system, providing value to the grid, while not interrupting their productivity. A PDF holiday would significantly strand those investments and put a burden on companies who have made these capital upgrades.

In a survey of some of our members, we have identified dozens of Class A customers that have made significant investments over the last few years, including many planned for 2020. Companies such as Shell, Ford Motor Company, Arlanxeo, Husky Injection Molding, Kruger and Pilkington Glass have expressed serious concerns about the proposal to force ICI participants to use their 2019-2020 PDF, instead of allowing them to actively avoid peaks during the 2020-2021 baseline period.

Second, many Class A customers, such as those listed above, have already been responding to periods of high demand that have arisen in the past few weeks. They do this so that they have lower exposure to electricity costs while providing capacity support to the Independent Electricity System Operator (IESO). Impeding their ability to do this – in particular, while we are already in the adjustment period in question – is disruptive. It will result in some customers having higher electricity costs, particularly in 2021-2022, which impairs future business competitiveness.

Thirdly, given the hot summer weather we have and are experiencing, we believe the value to the system that the ICI program provides in flattening system peaks should be maintained to ensure reliability. While some may predict that the outlook for the system will have lower capacity needs than normal, these are just that – predictions, often which have been wrong in the past. Relying on such predictions could not only create harm for industrial customers, but also erode vital system reliability.

Our Recommendations

For these reasons, Energy Storage Canada respectfully believes the government should **reconsider instituting a PDF freeze**. Moving forward with this option will benefit a few Class A customers but would significantly harm others, such as those listed above.

Alternatively, if a "PDF freeze" is committed to, a solution should be included for Class A customers to lower their consumption during Global Adjustment (GA) peaks this summer to lower their electricity bills and remain competitive, and in particular for those that have expended capital to provide flexibility to the grid. We believe including this **optionality provision** will provide support to those Class A customers who would benefit most from a freezing of their PDFs and allow those Class A customers who have made significant investments to continue to innovate to lower their consumption this summer thereby continuing to provide benefits to the system.

The remainder of the memo focuses on optionality, but again ESC strongly believes that the Government should reconsider a PDF freeze entirely.

Why Optionality?

Businesses are Operating and Counting on their BTM Storage Installations

Class A customers are not a homogeneous group, and this is as true during the COVID-19 pandemic as it was before. We recognize that some Class A customers have had to shut down, and a "PDF freeze" may be the best solution for them. However, there are a large number of Class A customers that have continued to operate at "full tilt" and have been following price signals to remain competitive and productive.

A vast majority of Class A customers where our members have installed - or plan to install this year - BTM storage devices have continued to operate during the COVID-19 crisis, and are looking for the opportunity to utilize the investments they have made to lower their consumption this summer.

A "PDF freeze" and particularly one without optionality would harm these businesses. Companies that have made or will be making significant investments would be adversely impacted by any decision that would hinder their ability to make use of their BTM energy storage installations this summer.

For example, "the battery storage...being deployed at Kruger's packaging factory in Brampton, which makes containers for food, beverages, chemicals, textiles and numerous other products and sectors...during the current coronavirus crisis...is running at 110%, 24 hours a day, seven days a week, so energy storage is a huge benefit"." (https://www.energy-storage.news/news/huge-benefit-to-using-batteries-in-ontarios-industrial-peak-reduction-oppor)

As another example, one ESC member that has enabled more than half a dozen Class A customers across Southern Ontario with energy storage, estimates that a "PDF freeze" would cost those customers over \$1 Million each in lost savings, increasing their operating costs while they are still recovering from the crisis next year. In contrast, providing optionality does no harm to those customers that do elect the "freeze".

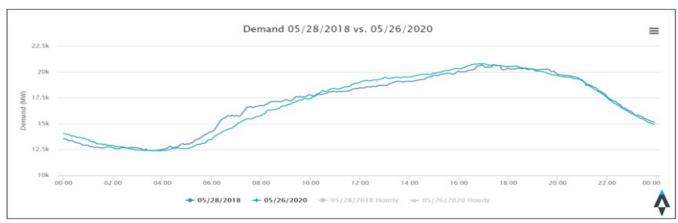
A further example, a couple of Class A customers in Southwest Ontario have counted on BTM storage installations to improve their 2020-21 PDF over previous years PDF in 2019-20. If these customers are not able to use these systems to improve the PDF for 2020-21, it would significantly drive up electricity costs beyond their allocated budgets outlined in their 2021-22 Business Plans.

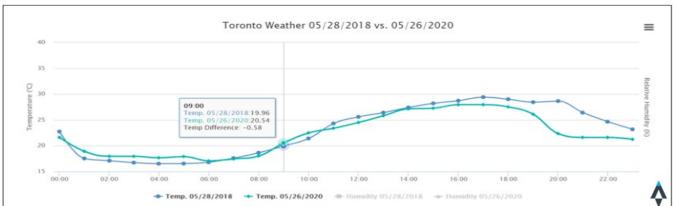
Despite unprecedent times, Peak Demand Management is likely required this summer

By the IESO's estimate, over 1.4GW of flexible load is now chasing the peak system days because of the effective pricing structure of the ICI program. In other words, it has led to confidence that 1.4 GW of load will not consume when the system is stressed, thereby reducing costs to all ratepayers, and providing relief to the electric distribution system. As the economy begins to ramp up, we believe we will face similar peaks this summer – in fact, we have already experienced a couple of days so far that have reached those levels.

According to an analysis done by Workbench Energy comparing May 26, 2020 vs May 28, 2018 shows the expected reduction due to the COVID-19 pandemic did not in fact materialize

According to the analysis, May 26, 2020, was a hot day across most of Ontario. Temperatures approached record levels in many areas of the province. At the start of the day, the IESO's forecasted peak demand was 19,600MW. By the end of the day, the actual peak had climbed to 20,600MW. As it turns out, May 26, 2020, was remarkably similar to May 28, 2018. The following two charts show the demand on May 26, 2020, vs. May 28, 2018, and also shows the temperatures in the GTA on each day:





Temperatures on May 28, 2018 were slightly warmer than this year on May 26, 2020. However, the demand in 2020 exceeded that of 2018. Additionally, the amount of ICI curtailment this year was significantly more than in 2018 since so many "Class A" customers were anticipating much lower peaks in 2020 vs. 2018. This means underlying demand was likely higher on a comparable basis.

Since May 26, 2020, we have seen additional hot days with temperatures at, or above, 30 degrees Celsius. According to Workbench Energy, in each case, demand in Ontario has approached levels in-line with what we would have seen in previous years. While too soon to say for sure the most likely explanation is increased residential consumption due to more people staying home as they continue to self-isolate in efforts to "flatten the curve". While residential load may have increased by only 1-9% on mild days, it seems likely the increase is significantly more on very hot days when the air conditioners are switched on and running at full capacity.

What could this all mean for the ICI Program this summer? Per the Workbench analysis:

"Initial evidence from this spring and early summer suggests that peak demands this year could reach or even exceed levels Ontario saw pre-COVID-19. While most forecasters still expect a peak reduction over the summer months, most would agree that it will be much less significant than originally thought. As discussed above, recent data points indicate there is now the possibility of COVID-19 increasing the Ontario peaks over the coming months. For Class A customers, this means they should expect to see a peak season this year which is much more similar to past years than many were initially expecting."

Optionality to Promote Investor Confidence in Ontario

It is also essential to recognize the chilling effect on investment in the power sector that any material adverse changes to the ICI could have, such as a mandatory freezing of PDFs or some form of ICI holiday, if some optionality is not provided.

Should Class A customers who have made significant investments in BTM energy storage have their expected returns jeopardized because of ex-post changes to the regulatory landscape, it could lead to a lack of confidence whether they should invest time and resources in being responsive going forward when the system will require peak demand management. If that is the case, as we emerge from the pandemic, we will have lost an important tool in ensuring the reliability of the grid and helping manage electricity costs for all customers.

Even further, an extreme policy change such as a PDF freeze without optionality would prevent significant private capital from investing in Ontario. Just one of ESC's members reports a project pipeline of over \$100 Million, an immediately available economic boost for the province if those investors feel policy certainty and stability of the ICI program. Those funds are already waiting on the sidelines, and a sudden policy change that adds considerable risk to the future value of such projects will drive those funds away from the province and likely out of Canada entirely.

As you know, businesses take time to plan capital and operational strategies to maximize their competitiveness and productivity overall, and at each site. For business operations, these decisions were made months if not years ago. The prospect of making last-minutes changes to a program vital to their business, and something that they had planned on being available (in setting out PDF for 2021-2022 this summer) would send a troubling signal.

By mandating that ICI participants use their PDF from the 2019-2020 base period, the government is in fact penalizing companies that have taken a proactive approach and invested substantially in managing their energy use and associated GA costs to remain competitive.

What Could Optionality Look Like?

Energy Storage Canada suggests the following:

- For ease of implementation, keep the regulation (O. Reg 429/04) as is and allow for Class A customers to "opt-out" by a certain date to "freeze" their PDF at 2019 levels.
- Alternatively, set a specific date for Class A customers to "opt-out" of the short-term mandatory regulatory changes the Ministry is considering.
- A benefit of either option is that the system operator will be able to gain some transparency in who has invested in BTM technologies or operational flexibility, whereas it has been an unknown to the Ministry and the IESO. This opportunity for data gathering would be lost if a mandatory application were to be implemented.
- A cut off date at the end of the summer would be preferred, but July 1st should also be manageable.

Conclusion

Energy Storage Canada is intimately familiar with the impact that the COVID-19 pandemic has had on businesses across the province. Our members have also been affected and are appreciative of the government's swift actions to date to support a portfolio of relief to businesses in need. Measures such as providing strategic and temporary optionality for small businesses and residential customers are well received and welcomed. In that same vein, we submit that a "one size fits all" approach with short term changes to the ICI program will not provide the requisite relief on a fair basis. Some Class A customers would benefit from a mandatory PDF freeze, whereas others would not.

Class A customers each have different needs, characters, and capacity to support Ontario's economic recovery from the devastating impacts of COVID-19. We understand that many of them will be reaching out to share their perspectives with you. Collectively, we should be looking to provide businesses with a portfolio of options to remain competitive and to continue to provide benefits to the system this summer which may be required.

Energy Storage Canada would be pleased to discuss further about our proposals. Thank you for the opportunity.