Response to Market Surveillance Panel Exemption Reconsideration Feedback

November 3, 2022

The IESO is in receipt of the letter from the Market Surveillance Panel (MSP) dated July 26, 2022 in relation to the IESO's recommendation to reconsider existing exemptions of four dispatchable loads (the "Submission").

The MSP's letter, while acknowledging understanding of the exemption reconsideration process, makes no statement with respect to the intended treatment of the letter within that process. The IESO therefore assumes the MSP is aiming to contribute constructively within the established, transparent and fair process outlined in the market rules and applicable market manuals. Accordingly, IESO staff has interpreted the Submission to be a late third party submission for each of the dispatchable load exemption reconsiderations.

The MSP notes that the intent of the Submission is to ensure that their views on the effectiveness of the reconsidered exemptions at addressing recommendation 3-1 from their May 2017 report discussing inaccessible operating reserve (the "recommendation") are timely, clear and transparent. It should be stated clearly that the IESO's response to this recommendation is through proposed market rule amendment MR-00467-R00, the inaccessible operating reserve settlement charge (the Charge) which automatically claws back payments for inaccessible operating reserve (OR). As a downstream effect of the new rule, the IESO is reconsidering the appropriate treatment of four existing exemptions for dispatchable loads.

IESO staff have taken a balanced approach to addressing the operations of the relevant dispatchable loads in the OR market. Specifically, IESO staff propose that, given the unique operating characteristics of dispatchable loads with an electric arc furnace (the "Exempt Loads"), in any given dispatch hour the relevant dispatchable loads will offer, and therefore be paid for, no more operating reserve than is on average available during the hour.

Given this operating reserve offering strategy, the Exempt Loads will be exempt from the Charge that is proposed in MR-00467-R00, Improving Accessibility of Operating Reserve, subject to the terms and conditions described in the proposed reconsidered exemptions. This approach is consistent with the terms and conditions of the current market rule exemption

(approved in 2002) that describes how one of the Exempt Loads (Ivaco Rolling Mills) should offer operating reserve into the IESO administered Markets.[1]

The Submission takes no position on the proposed exemption reconsiderations, but does make a number of observations with respect to the IESO staff recommendation. IESO staff address the observations made in the Submission in the following sections.

Existing Exemptions

The first observation in the Submission is that the IESO staff recommendations do not clearly explain why the existing exemptions are deficient or unworkable.

The change of circumstances, as approved by the Exemption Review Panel in August 2021, relate to the MSP recommendation and the proposed market rule amendments (MR-00467-R00), introduced in response to the recommendation. The 2017 MSP Report outlines issues related to compensation and scheduling of operating reserve which show that the status quo is deficient, and the MSP recommended the IESO take action to address such issues.

The lack of discussion in the IESO staff recommendation regarding the Exempt Loads' existing exemptions is intentional. The reconsidered exemptions are intended to be prospective in nature and to guide the conduct of the Exempt Loads within a new operating environment created by the proposed market rule amendments (MR-00467-R00) and to be responsive to the 2017 MSP Report. Wading into the direct applicability of two-decade old exemptions to a new operating environment can be a matter of interpretation and potentially dispute, and it is unnecessary to do so when establishing exemption parameters that apply on a go-forward basis. Rather, IESO staff took this opportunity to consider the participation of loads with electric arc furnaces from a fresh perspective, taking into account the 2017 MSP Report and the proposed introduction of the Charge. Harmonizing the terms and conditions of the market rule exemptions for the Exempt Loads – where some of the current exemptions are silent on how to offer operating reserve – seemed prudent both to ensure consistent treatment for energy market participation of such loads moving forward and to help ensure a solid foundation is established as electrification through new electric arc furnaces creates the possibility that new facilities with the same technology may seek to participate in the IESO-administered markets.

Comparison to Best Feasible Alternative

Another observation in the Submission is that, with the IESO departing from the status quo by making changes to the existing exemptions, IESO staff should have considered the scenario where the Exempt Loads are *ineligible* to be dispatchable loads as a more appropriate alternative to the reconsidered exemptions. In response to this the IESO provides the following explanation for why it is the IESO staff view that the Exempt Loads should be able to participate in the energy and operating reserve market as dispatchable loads, subject to the terms and conditions of the proposed reconsidered exemptions.

[1] The 2002 Ivaco exemption and rationale can be found at: https://www.ieso.ca/-/media/files/ieso/document-library/exemptions/ex_PanelDecision_011164_02Jun06.pdf

Combined, the Exempt Loads provide the IESO with approximately 200 MW of dispatchable supply that can be called upon in response to an unexpected issue on the IESO-controlled grid. For context, 200 MW of dispatchable supply can represent roughly 10% of quick-responding spare energy available to the IESO in real-time.

As is the case for many dispatchable supply resources, the dispatch characteristics of the Exempt Loads is unique to their particular technology, and enabling their participation in the operating reserve market means addressing these unique characteristics with regard to IESO tool capabilities. Due to the variable nature of the Exempt Loads' processes, they are not always at maximum consumption when they are asked to turn their scheduled operating reserve into energy by reducing their consumption. For approximately 15 minutes each hour the Exempt Loads are consuming 0 MW as they re-start their processes. When it is not consuming, an Exempt Load is not able to reduce its consumption in response to a system event. However, each facility will stay at 0 MW when directed to; this helps the IESO manage potentially difficult situations on the power system. The consumption pattern of the Exempt Loads is not modelled in the IESO's software – they are also not able to reflect this behaviour through real-time information submissions (de-rates) to the IESO.

In the long-term, the best 'feasible alternative' would be for the IESO to update its tools, which would allow the Exempt Loads to participate in the same manner as more traditional generation facilities. Historically, the issue with this alternative is that it is a costly endeavor which is difficult to justify in order to facilitate the participation of four facilities.

IESO staff views the reconsidered exemptions as a better alternative to rendering the Exempt Loads ineligible to participate as dispatchable loads. To summarize, if loads with electric arc furnaces were to become ineligible to participate in the IESO-administered markets as dispatchable loads:

- the Exempt Loads would be ineligible to participate in the OR market as a result of IESO tool limitations which do not exist for other market participant types. To not allow some accommodation, where such accommodation would be reasonable, would raise issues of fairness;
- costs to ratepayers would increase, all else being equal, due to the immediate reduction in OR offered and replacement with higher cost resources; and
- the IESO would lose the ability to direct the operation of the Exempt Loads (approximately 200 MW) during times of system need, reducing the ability of the IESO to balance supply and demand in response to unforeseen events on the IESO-controlled grid.

Competitive Advantage

The MSP Submission also observed that the proposed exemption reconsideration "*could* provide the Exempt Loads with an undue preference or a competitive advantage" (emphasis in the original).

Every exemption effectively provides a preference or advantage to the exemption applicant. That is the nature of exemptions – they provide a specialized treatment to certain participants which do not extend to all participants. The relevant question is whether such

preference is 'undue'. The IESO does not believe the preference is undue for the proposed reconsidered exemptions because it allows for Exempt Loads to participate in a manner which accounts for IESO tool limitations that impacts the participation of dispatchable loads. Consistent with the original exemption for Ivaco, these reconsidered exemptions will help ensure that the Exempt Loads are scheduled, and paid for, the amount of operating reserve that is, on average, available over a dispatch hour. It is worth noting that the IESO received no stakeholder feedback alleging or relating to issues of undue preference.

The IESO understands the MSP's observations regarding possible competitive benefits for the Exempt Loads. Since the proposed reconsidered exemption exempts the Exempt Loads from the Charge, it could be viewed that the exemption provides a competitive advantage for each Exempt Load compared to other market participants who are not exempt from the Charge. However, in order to reduce the amount of inaccessible operating reserve scheduled from each Exempt Load compared to what was highlighted in the 2017 MSP report, the terms and conditions of the proposed reconsidered exemptions defines the maximum amount of operating reserve that each Exempt Load may offer, which is approximately equal to its average hourly dispatchable consumption. The defined amount of operating reserve that can be offered by each Exempt Load results, on an hourly basis, in their being scheduled and compensated for the average amount of operating reserve that they could be scheduled for in a given hour, if the IESO's tools provided that ability to de-rate on a five-minute basis.

For an electric arc furnace that consumes 50 MW on average in a given hour, this provides equivalent operating reserve schedules and compensation compared to a traditional generator scheduled for 50 MW of operating reserve for an entire hour. There is just a different mechanism that applies to each market participant type; the Charge ensures this outcome for other market participants and the terms of the proposed reconsidered exemption ensures this outcome for the Exempt Loads.

The exemption from the Charge, subject to compliance with the proposed reconsidered exemptions, therefore maintains this equivalency and does not provide any undue preference to the Exempt Loads compared to other providers of operating reserve.

Conclusion

IESO staff has recommended the reconsideration of exemptions for the Exempt Loads given the change of circumstances that arose from proposed market rule amendments (MR-00467-R00) related to the 2017 MSP Report. As detailed in the IESO staff recommendation, IESO staff are recommending the proposed terms and conditions and evaluated such proposed terms based on the applicable criteria, outlined in the applicable market manual, that the IESO staff considered relevant to this matter.

IESO staff trusts it has adequately responded to the concerns raised by the MSP and emphasizes that the proposed reconsidered exemptions balance the interests of all parties involved and represents an appropriate step towards the best feasible alternative.