

Stakeholder Feedback and IESO Response

Interruptible Rate Pilot: Proposed Rate Design and Criteria – November, 2022

Following the November 23rd, 2022 stakeholder engagement session, the Independent Electricity System Operator (IESO) received feedback from participants on proposed rate design of the Interruptible Rate Pilot.

The IESO received public feedback submissions from:

- [Carlsun Energy](#)
- [Red Jar Digital Infrastructure](#)
- [Siemens Canada](#)
- [StormFisher Hydrogen](#)

The presentation materials and stakeholder feedback submissions have been posted on the [Interruptible Rate Pilot engagement page](#). Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

Notes on Feedback Summary

The IESO appreciates the feedback received from stakeholders. The IESO has provided a summary below, which outlines specific feedback or questions for which an IESO response was required at this time.

Rate Design Proposal

Four stakeholder feedback submissions included feedback on the proposed rate design for Interruptible Rate Pilot (IRP). Reactions were mixed on the proposed rate design criteria, with some stakeholders expressing support for the proposed criteria, and others, especially hydrogen producers, suggesting a dedicated and separate rate design suitable for them considering their unique abilities. These points are summarized in the table below:

Feedback	IESO Response
<p>It will be a good approach. However, it is much more transparent if the "Fixed Price Bid" is reflected by a % of the facility's current peak demand, which translates into a \$/MW value, rather than a "Fixed Dollar Value"</p>	<p>Thank you for the feedback. For the purposes of selecting successful applications, each applicant's fixed price bid will be normalized by dividing the applicable fixed price bid by the load facility's peak demand.</p>
<p>The economics of this pilot are likely to be a fair bit worse than the Industrial Conservation Initiative (ICI) for flexible loads. This is because there is to be a minimum additional payment (Fixed Price Bid), but in addition the inability to participate in the capacity auction could represent a fairly significant revenue loss for participants of the pilot</p>	<p>In contrast to the ICI, when participating in the pilot, facilities do not need to predict and "chase" top five peak hours. Additionally, the pilot provides certainty and predictability to participants by: (i) establishing a maximum number of hours and events for interruptions, (b) providing advance notices for interruptions, and (c) ensuring interruption events have a maximum duration. The pilot represents an opportunity to lower Global Adjustment costs for facilities that miss identifying or are unable to react quickly enough to respond to top five peak hours in the ICI</p>
<p>If a significant number of ICI resources do participate in the capacity auction, the approach of electing a following year start date may mean that there is a relatively small amount of load that participates in 2023. This is because the option to participate in an established Capacity Auction opportunity will occur in advance of the pilot finalization. Pilot participants are unlikely to forgo participation in the capacity auction when there is still no certainty around program design, eligibility, or likelihood of success.</p>	<p>Facilities participating in the pilot must not be subject of a capacity obligation during the pilot period. Any facilities that were successful in the 2022 Capacity Auction and are interested in participating in the pilot have the option to (i) start in the Pilot on either July 1, 2024 or July 1, 2025, or (ii) buy out of the capacity obligation pursuant to Section 7 of Market Manual 12 if successful in the pilot's application process.</p>

Feedback	IESO Response
<p>We will want to clearly understand what will happen if:</p> <ol style="list-style-type: none"> 1) Overall load increases, contract demand stays the same (IESO may have suggested that this would be fine during the last information session) 2) Overall load increases, contract demand increases – say proportionately (This should be ok, in our view) 3) Overall load decreases, contract demand stays the same 4) Overall load decreases, contract demand also decreases 5) Also understanding bonuses for reducing load beyond contract demand and the proposed penalties will be important to determine overall economics. 	<p>The participant may, prior to the start of a pilot year, request an amendment to the contract demand and peak demand for such pilot year, subject to IESO approval. See additional details in Section 2.2(c) of the draft pilot contract.</p> <p>Additionally, the pilot includes incentives for reducing demand below the committed-to contract demand. More details about non-performance and over-performance adjustments are given in Section 7 of pilot rules document and Exhibit F of the pilot contract.</p>
<p>The lower minimum fixed price bid for hydrogen projects is a good provision as the hydrogen projects will likely be pilot-scale and not in a position to compete with large incumbent customers for participation in the pilot.</p>	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>
<p>The 100kW minimum project size for hydrogen projects is higher than the 50kW size posited in the proposed regulation ERO 019-5381.</p>	<p>Thank you for the feedback. Please note that the 50 kW size in the posting referenced ICI, not the Interruptible Rate Pilot.</p>
<p>The draft rate pilot is designed to set electricity prices higher than anticipated average Class A rates for both the main and hydrogen streams. Unfortunately, this feature ensures that the interruptible rate will have limited effect on the development of a significant hydrogen sector in Ontario.</p>	<p>Please refer to the February 7, 2023 webinar deck for an update on respect to hydrogen production loads.</p>

Feedback	IESO Response
<p>A dedicated hydrogen rate should be designed to develop the full potential of the hydrogen sector. The following features are suggested:</p> <ol style="list-style-type: none"> 1) Encourage building of new hydrogen production projects in Ontario by providing off-peak electricity price predictability, preferably for a term of 20 years or more. 2) Pricing should be offered below rates being paid currently by conventional transmission-connected loads recognizing the flexible load and decarbonization attributes of hydrogen production. 	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>
<p>The rate is too high relative to the status quo. Given that electrolyzers can be turned down to minimize current global adjustment charges, it would not make sense for an electrolysis operation to participate in the interruptible rate as proposed</p>	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>
<p>The level of interruption is relatively low. Electrolysis operations can handle much more than 60 interruption hours and 15 events.</p>	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>
<p>Medium- and long-term price certainty is low. Given that the rate includes HOEP and a 'floating' demand charge, it will be challenging to predict the interruptible rate in the medium- and long-term. Since electricity makes up the majority of hydrogen cost, this price uncertainty will extend to the product hydrogen. This makes it challenging to finance a new hydrogen project, which requires a 10+ year business plan.</p>	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>

Feedback	IESO Response
<p>A separate interruptible rate design is recommended for hydrogen producers. Hydrogen producers are significantly different from other prospective users of the interruptible rate pilot. In nearly all cases, hydrogen producers are looking to develop and build new electrolysis facilities, which require significant capital investment. They will need more price certainty to make these investments in Ontario. When built, these electrolysis facilities can offer substantial value to the electricity system in Ontario, including more interruption time with less advanced notice.</p>	<p>Please refer to the February 7, 2023 webinar deck for an update with respect to hydrogen production loads.</p>