

Stakeholder Feedback and IESO Response

Interruptible Rate Pilot: Initial Design Elements – October, 2022

Following the October, 2022 focused consultation sessions with potential pilot participants, the Independent Electricity System Operator (IESO) received feedback from participants on a number of questions related to initial design elements of the Interruptible Rate Pilot (IRP).

The IESO received public feedback submissions from:

- [Carlsun Energy](#)
- [IAMGOLD – Cote Gold](#)
- [Ivaco Rolling Mills](#)
- [Next Hydrogen Solutions](#)
- [Siemens Canada](#)
- [Workbench Energy](#)

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.

Draft Eligibility Criteria

All stakeholder feedback submissions included feedback on the draft eligibility criteria. These points are summarized in the table below.

Feedback	IESO Response
<p>Request for the IESO to clarify the term 'existing as of May 2022' to include facilities that currently exist but may not be a market participant/registered facilities as of May 2022.</p>	<p>It is proposed that all load facilities must be connected and operational as of May 2022, except loads in the hydrogen stream, which are expected to be able to participate as prospective facilities. Load facilities would not be required to be registered facilities in the IESO-Administered Markets as of May 2022, but would need to be so prior to starting in the pilot. Load facilities in the hydrogen stream that are smaller than 1 MW will not be required to register in the IESO-Administered Markets.</p>

Feedback	IESO Response
<p>Having capability to interrupt 20 – 50% of peak demand is very high. Can this curtailment potentially be done by installing a BESS for the 4 hour period?</p>	<p>Yes. The participants may install a battery energy storage system (BESS) to support their load reduction plans to be able to participate in the Interruptible Rate Pilot.</p>

Feedback	IESO Response
<p>Would there be a minimum size for hydrogen producers?</p>	<p>Yes. Based on the feedback received, the IESO is proposing a minimum peak demand size of 100 kW for hydrogen production loads.</p>
<p>Having a maximum curtailable demand makes sense for the pilot, but perhaps not for the permanent program. Will there be a maximum curtailable demand in the permanent program?</p>	<p>For the purpose of the pilot, a maximum interruptible demand of 50 MW is a proposed eligibility requirement intended to ensure that there are multiple participants in the pilot (given the 200 MW overall target in the pilot). Plans for a potential permanent program are unknown at this time.</p>

Feedback	IESO Response
<p>Hydrogen production facilities would be uniquely able to provide contract demands in the range of 5% of total load. Will there be a minimum contract demand as part of the pilot or permanent interruptible rate programs?</p>	<p>Thank you for the information. It is proposed that there would not be a minimum contract demand in the pilot. The contract demand may even be 0 MW.</p>
<p>A change in the eligibility criteria to also include market participant distribution (Dx) connected customers or small class A loads that are not market participants would increase the participation in the test program.</p>	<p>The IESO is proposing to expand eligibility for distribution-connected loads that have the peak demand of 1 MW or larger and are registered in the IESO-Administered Markets.</p>

Interruption Process

Five stakeholder feedback submissions included feedback on the interruption process. Reactions were mixed on the draft design criteria, with many stakeholders expressing support for the proposed criteria, and others suggesting the proposed criteria may be too high. These points are summarized in the table below.

Feedback	IESO Response
<p>General points:</p> <ul style="list-style-type: none"> • Setting these hours/events at no more than half the numbers is recommended. The number of interruption hours per event, e.g., 2-3 hours would be friendly for most industrial operations. • More than 40 hours and more than 10 events are excessive. • 4 hours per event will be OK, but not for 10-25 events • We agree with option for committing to short-notice interruptions, providing interruptions do not exceed 1-2 hours <p>Additional points:</p> <ul style="list-style-type: none"> • We are not impacted by the number of interruption events. Hours of interruption equate to lost productivity. In general, we would prefer more interruption events of shorter duration. • Number of interruption events seems reasonable. Hydrogen production projects could likely offer more interruption events/duration than conventional larger users if it were to mean better rates. 	<p>Thank you for the feedback. Balancing a number of considerations, it is proposed that participants will be subject to a maximum of 60 interruption hours and 15 events per pilot year. An interruption event could last up to 4 hours.</p> <p>It is proposed that participants who opt for short notice events would be subject to a maximum of 20 hours and 5 events with short notice, which would count towards the proposed total of 60 hours and 15 events.</p>
<p>Feedback from existing ICI participants:</p> <ul style="list-style-type: none"> • We experience an average 60-200 hours of downtime for “chasing” peaks • Majority of respondents use third-party services for peak forecasting • About half are able to respond to short-notice interruptions with no or minimal financial impact and about one third prefer day-ahead notice. 	<p>Noted. Thank you for the feedback.</p>

Contract Demand Dead-Band

Five stakeholder feedback submissions included feedback on the contract demand dead-band. All submissions indicated support for making use of the dead-band. These points are summarized in the table below.

Feedback	IESO Response
<p>Actual reductions may be harder to achieve because equipment may not be scheduled to run at the time an interruption event is called. That said we can be certain that loads will not be connected when the call is made. If our demand drop exceeds the contracted demand, we would like to better understand how this would be a problem for the operator.</p>	<p>The IESO is developing a detailed approach for non-performance (for when demand during interruption events exceeds the contract demand) and incentives rates (for when demand during interruption events is below the contract demand). The details will be communicated to stakeholders in the upcoming webinar planned for January, 2023.</p>
<p>The incentives would need to be quantified beforehand. In a similar way, it's our understanding that if the participant doesn't meet the contracted demand during the events, the participant will be penalized. It's important to know beforehand what those penalties or rates are if this happens.</p>	<p>Details of non-performance and incentive rates will be presented in the upcoming webinar planned for January, 2023.</p>

Interruption Conditions and Rate Design Options

Five stakeholder feedback submissions included feedback on interruption conditions and rate design options. These points are summarized in the table below.

Feedback	IESO Response
<p>On Slide 12, Demand of 21,000 MW is too low. Also, HOEP of \$100/MWH is too low.</p>	<p>Thank you for the feedback. The IESO will finalize and post the pre-defined conditions for the interruption events to the pilot webpage prior to the July 1, 2023 start.</p> <p>Additionally, please note that the conditions would not be defining periods when the IESO <i>will</i> call an event. The conditions define when the IESO <i>may</i> call an event.</p>
<p>Hydrogen production facilities would be able to provide contract demands in the range of 5% of total load. Volumetric approaches are not preferred as they offer little benefit to electricity users who consume primarily during off-peak hours and does not allow large consumers to benefit from lower HOEP prices during off-peak timeframes.</p>	<p>Noted. Thank you for the response.</p>

Feedback	IESO Response
<p>The “floating” settlement maximizes the chances that the pilot is close to real world constraints. It gives us greater control over costs. We won’t be surprised by “true up” mechanism at the end of the year.</p>	<p>Noted. Thank you for the feedback.</p>
<p>Will the pricing mechanism be the same for hydrogen projects as for other consumers?</p>	<p>Hydrogen producers have a dedicated stream in the pilot. Additional details will be available in the January webinar.</p>
<p>When is IESO releasing the minimum price bid for the rate structure?</p>	<p>Details regarding the price bid will be available in the upcoming webinar planned for January, 2023.</p>

Proposed Method of Exiting the Pilot

Four stakeholder feedback submissions included feedback on the proposed method of exiting the pilot. Three submissions noted support for the proposed method, and one submission included recommendations for consideration. These points are summarized in the table below.

Feedback	IESO Response
<p>We suggest tabulating the pdf of each participant during the program and using not the one prior from entering the program, but the minimum pdf between what the participant had and what was achieved during the 3-year program. In this way, if the participant is investing in GA reduction, they will see the benefits of it.</p>	<p>Thank you for the suggestion. The change is reflected in the proposed pilot design, for loads that enter and exit as Class A, the better of demand during the 5 system peak hours prior to the pilot and in the last year of participation in pilot events, is proposed for use.</p>
<p>Proposed method is reasonable for existing customers. It is not clear how new hydrogen projects would exit the pilot – especially those hydrogen projects that would qualify for the pilot but not for ICI.</p>	<p>An approach was proposed for loads that enter and exit the pilot as Class A – thank you for the feedback that it was reasonable.</p> <p>Generally, the IESO is proposing that the pilot participant may change the load’s Class A/B designation during the pilot.</p> <p>However, unlike the proposed approach for loads that enter and exit as Class A, the pilot agreement will end on June 30 of the pilot exit year for all other participants.</p>

Feedback	IESO Response
Our test facility doesn't qualify as a Class A today. We would be seeking to extend the program as long as possible and then shift to ICI (expecting our total demand to grow over Pilot period with expansion of enterprise)	Should a load facility grow during the pilot years such that it could meet the eligibility for Class A, it can participate in the Industrial Conservation Initiative (ICI) program upon exit from the pilot.
What happens in May and June given the July start? Is there still an obligation or requirement to curtail to avoid system peaks as part of ICI?	Pilot participants are not required to curtail demand during system peaks in May and June prior to starting the pilot on July 1 st from a pilot perspective

Project Timelines

All six stakeholder feedback submissions included feedback on the project timelines. Four submissions expressed support for the proposed project timelines, while two suggested they will not work. These points are summarized in the table below.

Feedback	IESO Response
Since a facility with a Capacity Auction obligation is unable to participate in the pilot and the design details of the pilot won't be available until after the Capacity Auction, potential pilot participants will have to decide to risk losing Capacity Auction revenue before knowing the potential of the IRP.	If a load facility is successful in the capacity auction, it is proposed that it will have the option to participate in the pilot with a delayed start date of either July 1 st 2024 or July 1 st 2025. However, it must apply and be selected for the pilot during the application process in 2023.
IAMGOLD encourages the IESO to consider running the pilot with staggered load limits, thereby allowing facilities to increase their commitment after year 1.	It is expected that facilities' increase/growth in peak demand levels will be facilitated in the pilot design. Details will be available in the January webinar.
Yes, the deadlines will work but IESO needs to clarify when is IESO releasing the minimum price bid for the rate structure, so the participants can do their estimates and prepare a structure price bid by the deadlines suggested.	Thank you for the feedback. Details regarding the price bid will be available in the January webinar. For now, please refer to the IESO's proposal for the rate design on slide 4.

General Comments/Feedback

Four stakeholder feedback submissions included general comments and questions for consideration, which are summarized in the table below.

Feedback	IESO Response
<p>How will the IESO account for the risk of the maximum number of curtailment days being reached by IRP participants? An extended heatwave or a hot summer followed by a very cold winter could lead to the IRP pool reaching its maximum curtailment days ahead of a day of need. How does the IESO plan on factoring this into its system planning process?</p>	<p>The IESO will strategize internally on how to allocate and use the available interruption hours/events. The pilot will be used as an opportunity to test and adjust the strategies. The improved certainty of demand reductions will be accounted in system planning, if the pilot size and impact are deemed to be sufficiently material.</p>
<p>Non-performance penalties are critical to determining the reliability of the IRP pool. If penalties are set too low, it is unlikely the IESO will receive consistent performance. However, if penalties are too high, participation in the pilot will be unattractive. We recommend the IESO complete more extensive stakeholdering on the penalty design prior to reporting back to the Ministry to ensure the right balance is reached.</p>	<p>IESO is considering non-performance (i.e. for demand above the contract demand) and incentive rates (i.e. for demand below the contract demand) as part of pilot implementation. The details will be communicated to stakeholders in the upcoming webinar planned for January 2023.</p>
<p>We would suggest that a dedicated interruptible rate stream for hydrogen projects be developed to recognize the ability of the hydrogen sector to provide value to the grid system where conventional loads are limited (growing the off-peak customer base, decarbonizing difficult-to-electrify industries, providing load flexibility, etc.).</p>	<p>Thank you for the feedback. A dedicated hydrogen stream is proposed to be made available in the proposed pilot design.</p>
<p>This is an opportunity for our equipment to operate in the manner in which it was intended and will provide operating experience for future commercial plants. The savings for us will be significant.</p>	<p>Noted. Thank you for the feedback.</p>
<p>Will the eligible load facilities be allowed to offer into operating reserve (OR) market while participating in the pilot?</p>	<p>Thank you for this feedback. Details will be shared in the upcoming webinar planned for January, 2023.</p>
<p>How will the IESO handle load growth and reductions during the pilot period?</p>	<p>Thank you for this question. Details will be available in the upcoming webinar planned for January, 2023.</p>

Feedback	IESO Response
<p>The current proposed IRP options do little to address the increasingly expensive and fluctuating Ontario electricity market exposure for industrial customers, leaving unmitigated exposure to HOEP driven by an externally influenced natural gas market.</p>	<p>The intent of the interruptible rate pilot (IRP) is not to provide a discount to Hourly Ontario Energy Price (HOEP).</p>