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Interruptible Rate Pilot

Stakeholder Consultation Summary & Rate Proposal for Quick Feedback

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Context & Today's Purpose

- The August 29, 2022 Minister's letter asks the IESO to report back to the Minister on a detailed Interruptible Rate (IR) Pilot design by December 9, 2022
- Pricing design options are being considered that enable peak demand reduction (i.e., system benefits) and benefits pilot participants, while minimizing cost transfers to other customers and ensuring straightforward financial settlement
- The IESO conducted focused stakeholder consultations on initial design considerations and pilot rate design option throughout October 2022
  - 6 public and 9 confidential submissions from 12 organizations were received
- Today, a summary of the feedback received and IESO responses will be presented
  - Pilot design is subject to approval of the report-back to the Minister and direction
  - IESO seeking quick feedback on the rate design proposal

Stakeholder Feedback Question

- Do you have any feedback on the rate design proposal (slide 10)?

Please use the feedback form found on the Interruptible Rate Pilot engagement webpage to provide feedback and send to engagement@ieso.ca by **November 28, 2022** with the subject line: "Interruptible Rate Pilot".

Recap - Pilot Rate Design Options

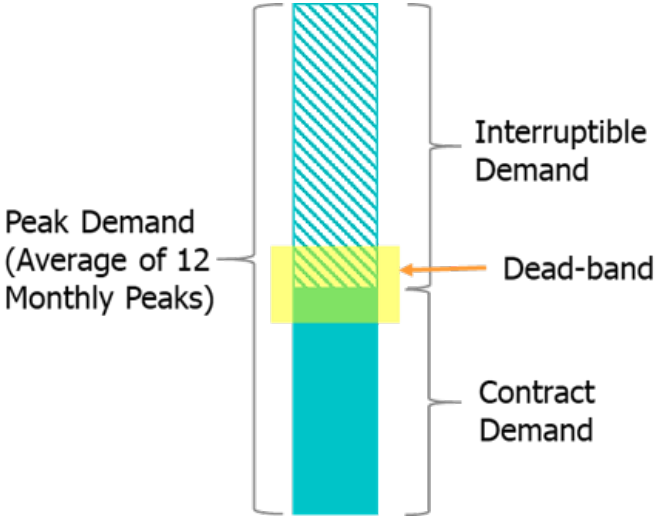
- As per the Minister's letter, stakeholder input was sought on three rate design options:
    1. HOEP* + a demand charge;
    2. HOEP + a volumetric charge + a demand charge; and
    3. A volumetric all-in commodity charge
- Stakeholder input was also sought on two additional options:
    4. HOEP + fixed charge + demand charge; and
    5. HOEP + two-part demand charge
- Participants compete to participate in the program based on a price bid, i.e., the amount of additional GA they are willing to pay, among other prioritization criteria
- Under each option, participants will commit to contract demand (i.e., a maximum level of demand during IESO identified events), and non-performance rates will apply if the commitments are not met

* Hourly Ontario Energy Price

Recap - Pilot Contract Demand

The pilot rate structure is intended to facilitate the application of a rate to recover costs, while providing IESO with greater planning/operational certainty.

- *Contract demand*: pilot participants are required to reduce their demand to contract demand levels during interruption events. There is no minimum contract demand in the pilot - it could even be 0 MW.
- *Dead-band*: Non-performance/incentive rates apply if the demand is outside the dead-band* during interruptions.
- *Eligibility*: Peak demand and interruptible demand are assessed for eligibility.



* i.e., if actual demand is within a certain range (e.g. ±5%) around the contract demand, then non-performance/incentive rates do not apply

Design Options – Feedback & Proposals Summary

Option	Initial Proposal	Feedback	Amended Proposal	IESO Comments
Eligibility	Have peak demand of at least [5] MW	Supportive (1); Too high (1)	100 kW for hydrogen stream and 1 MW for general stream	Proposed to also limit total pilot participants to max. 15
Eligibility	Capable of interrupting at least [20-50%] of its peak demand for 4 hours	Supportive (3); Too high (1)	Capable of interrupting at least 25% of peak demand	Material capability of load interruption is expected in the pilot
Eligibility	Have maximum of [20-50] MW of interruptible demand	Supportive (3)	Max. 50 MW of interruptible demand	To ensure there are multiple participants in the pilot
Interruptions	Subject to a maximum of [40-100] interruption hours and [10-25] events per year	Supportive (3); Too high (2)	Max. 60 interruption hours and 15 events	Feedback indicated 60 – 200 hours of "peak chasing" in ICI currently
Dead-band	a [±5%] dead-band around the contract demand	Supportive (4)	Make use of a dead-band of ±5%	Details will be available in the January webinar.

Design Options – Feedback & Proposals Summary (Cont'd)

Option	Initial Proposal	Feedback	Amended Proposal	IESO Comments
Rate Design	Choose the most preferred rate out of five options	Option 1 (5); Opt. 4 (1)	Option 1 (HOEP + demand charge)	Selected Option 1 for the pilot design. Additionally, proposing to use a fixed monthly charge ($/month) for competitive selection of applicants.
Rate Design	Choose "fixed" or "floating" approach	Floating (5)	Floating approach, where the demand charge is pegged to the monthly GA published by the IESO	Mirrors the approach in ICI. Reduces risk and administrative burden.
Exiting the Pilot	Proposed method of exiting the pilot	Supportive (3); NA (1)	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.	Feedback provided has been captured in the proposed approach.
Pilot Timelines	Proposed timelines	Supportive (4); Don't work (2)	Participants can opt for start date of July 1 in any of the 2023-2025 pilot years	Provides pilot participants flexibility, e.g., to participate in the IESO's Capacity Auction prior to starting in the pilot.

Key Proposed Pilot Features

Participants will be charged for electricity at the pilot rate in exchange for consuming at/below a contract demand level during system/local events as identified by the IESO

Pilot size	200 MW of total interruptible demand
Streams	A general stream and a hydrogen stream
Participant selection	Prioritization based on price bid, opt-in to short-notice events, load reduction plans, diversity in location and sector as well as being in the hydrogen stream
Operational start	Participants can opt for start date of July 1 in any of the 2023-2025 pilot years
Length	Up to 3 years (events end Apr. 2026), informing potential permanent program
Max. participants	15 pilot participants
Agreement type	"Contract for differences" between underlying status quo and pilot settlement
Interruption hours	Up to a 60 hours and 15 interruption events in each pilot year
Advance notice	Day-ahead and opt-in to near real-time (e.g. 2-3 hours ahead)

Proposed Features – General and Hydrogen Stream

Some of the key features in the pilot depend on whether the participating load is a hydrogen production load or load in a general category

Feature	General Stream	Hydrogen (H2) Stream	Rationale
Size eligibility	≥ 1 MW peak demand (dx- or tx-connected*)	≥ 100 kW peak demand (dx- or tx-connected)	Provide broader eligibility, in support of province's hydrogen (H2) strategy
Prioritization criteria	Have benefit of 4 prioritization criteria	Benefit of an extra H2 stream prioritization criterion	Provide additional priority, in support of the H2 strategy
Market participation	Must register load facility in IESO-Administered Markets	If load is smaller than 1 MW, registration is not required	Loads < 1 MW are ineligible to register in IESO-Administered Markets
Existing / prospective	Must have been existing as of May 1, 2022	Can participate with a prospective (i.e. not existing, but planned) load	Limited existing H2 load facilities in ON, but several prospective facilities
Minimum Price Bid	Set to ensure higher recovery, on average, versus ICI, as per Minister's letter	Proposed to be set lower than general stream	Provide opportunity for lower rate to support the H2 strategy

* distribution (dx) and transmission (tx)

Rate Design Proposal

Conceptually, the monthly payment for electricity commodity in the pilot is proposed to be:

HOEP or MCP + Demand Charge + Fixed Price Bid + Non-Performance or Incentive Rate

Component	Description
HOEP or MCP	Pilot participants would continue to pay the hourly Ontario energy price (HOEP) and market clearing prices (MCP) for energy consumed.
Demand Charge	Total monthly demand charge would be calculated as *contract demand (MW) x "floating" demand charge* ($/MW-month). The demand charge would be consistent with the value of ICI and "float", changing from month-to-month as per provincial GA cost published by the IESO.
Fixed Price Bid	Pilot applicants would submit a fixed price bid ($/month). A minimum fixed price bid would be established, and applicants would have the option to offer a higher value bid to receive priority in the participant selection.
Non-Performance or Incentive Rates	Detailed non-performance rate for exceeding the contract demand and incentive rates for reducing beyond the contract demand will be presenting in the January webinar.

Rate Design Proposal Rationale

Component	Rationale
HOEP or MCP	- Exposure to HOEP or MCP (as applicable) reduces risk on IESO and pilot participants (vs a fixed 'all-in volumetric' rate for the duration of the pilot) - Similar to ICI design (where loads are exposed to HOEP/MCP)
Demand Charge	- Demand charge is the preferred option in most potential participants' feedback - Similar to ICI design (understandable to participants and preserves HOEP price signal) - A "floating" charge reduces risk on IESO and pilot participants (vs a fixed demand charge for duration of pilot)
Fixed Price Bid	- A $/month fixed price bid is the simplest price bid format - A lower minimum fixed price bid could be used to support the pilot's hydrogen stream - Fixed price bid addresses ask in Minister's letter that the pilot price/charges be set higher than the anticipated average Class A price
Non-Performance or Incentive Rates	- Performance incentives ensure that participants provide accurate contract demand, adhere to the contract demand, and perform beyond the contract demand if possible

Tentative Pilot Milestones

Milestone	Planned Completion Date
Focused consultation sessions	Oct 11-27, 2022
Follow-up session – responses to feedback	Nov 23, 2022
Report-back to ENERGY deadline	Dec 9, 2022
Draft pilot rules & agreement posted	Jan 2023
Webinar re: draft documents	Jan 2023
Final rules, application & agreement posted	Feb 2023
Application window	Feb - Mar 2023
Application review	Apr - May 2023
Agreement execution	May - Jun 2023
Successful applicants announced	May - Jun 2023
Pilot launch	Jul 1, 2023

Stakeholder Feedback Question

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Thank You

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