# Feedback Form - Public

## Hydrogen Interruptible Rate Pilot – July, 2023

#### Feedback Provided by:

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Following the focused consultation sessions with potential pilot participants, the IESO is seeking feedback on a number of questions related to initial design elements of the Hydrogen Interruptible Rate Pilot.

Please provide feedback by August 4, 2023 to <u>engagement@ieso.ca</u>. Please use subject header: *Hydrogen Interruptible Rate Pilot*.

To promote transparency, your responses in this public feedback form will be posted on the <u>Hydrogen Interruptible Rate Pilot webpage</u>, unless otherwise requested by the sender. If you would like to submit feedback confidentially, please use the additional feedback form labeled as 'Confidential'.

The IESO will consider and work to incorporate comments, as appropriate, and provide responses at a follow-up session with potential pilot participants in August 2023. Thank you for your valuable contribution to the consultation process.



### Public Feedback: Specific Questions

Please note: Responses in this section will be posted on the Hydrogen Interruptible Rate Pilot engagement

#### webpage.

Торіс	Feedback
How likely are you to participate in an H2 IRP and why?	Kinectrics is highly interested in participating in the H2 IRP because, in addition to unlocking demand-side flexibility and optimizing electricity usage, Kinectrics is planning to develop hydrogen-related facilities on the Kipling Site and potentially other facilities. This presents an excellent opportunity for Kinectrics to align its operations with its hydrogen initiatives and actively contribute to a more sustainable and integrated energy approach.

Торіс	Feedback
Which design features on slide 6 are most likely to impact your decision to participate? Do the options provided make sense for H2 producers?	In general, Kinectrics finds the options provided by IESO to be sensible and well-aligned with its interests. The following design features hold particular significance in impacting the decision to participate: Duration: The option to provide a long-term duration of 10 to 20 years is more suitable for H2 producers, allowing them to plan and invest for the long term. New Build Eligibility: Allowing for new build H2 facilities is essential for H2 producers, as it supports the growth and development of the hydrogen industry. Minimum Size Eligibility: 1 MW IESO market participant. Number of Events: around 50 events is advantageous for H2 producers. GA charge amount: H2 facilities should not pay more. Project Selection: Kinectrics prioritizes factors such as previous contracts with IESO, synergies with other energy technologies, integration to the grid (smart grid), technological feasibility, and environmental impact, alongside regional benefits, and alignment with government policies.

Торіс	Feedback
<ul> <li>With respect to the other support options on slide 7:</li> <li>a) Which of the other presented support options (e.g., CECs, RET), if any, would be valuable to include in/alongside an H2 IRP and why?</li> <li>b) Are there particular approaches to the deployment of these options that would make the pilot more beneficial for participants and other ratepayers?</li> </ul>	Enhanced Green Hydrogen Certification: Provide robust support for the certification efforts of participating companies through a labeling program specifically designed for green hydrogen produced using low carbon methods. Carbon Pricing Incentives: Implement carbon pricing mechanisms that reward hydrogen producers for reducing carbon emissions during production. Production Tax Credits (PTCs): PTCs are provided to renewable energy producers, offering a per-kilowatt-hour credit for electricity generated from eligible renewable sources. Energy Storage Incentives: Incentives are provided to encourage the adoption of energy storage systems, which can store excess energy and provide flexibility to the grid.

Торіс	Feedback
Are there any other design options the IESO should consider and why?	Renewable Heat Integration. This can further promote the uptake of renewable heating technologies, such as biomass boilers, heat pumps, and nuclear thermal systems. This can encourage businesses and households to transition to sustainable heating options, reducing carbon emissions and advancing the adoption of renewable energy in the heating sector. Energy Storage. It can incentivize the deployment of hydrogen energy storage systems, offering a solution to store excess energy and enhance grid flexibility. Energy storage incentives facilitate grid stability and enable efficient utilization of renewable energy, contributing to a more reliable and resilient energy system. Supporting Smart Grid Initiatives through incentives can foster the seamless integration of renewable energy sources, energy management, and demand response capabilities. Supporting demonstration projects for innovative hydrogen technologies can provide valuable insights and data for decision-making, reducing investment risks for future large-scale projects. Hydrogen Cluster Development: Promoting the development of hydrogen clusters, where multiple hydrogen-related activities and industries co-locate, can create synergies, reduce costs, and foster collaboration.

Торіс	Feedback
Please provide any comments you may have on the potential activities and timelines on slide 10. Are the timelines realistic and achievable?	Application Period for H2 Facility Developers: Extended to 6 months to allow developers ample time to prepare competitive proposals. Maximum Timeframe for Facility Development and Commissioning: Adjusted to 3 to 5 years to account for the complexity of hydrogen projects and ensure successful implementation. The other timelines seem realistic and achievable.

Торіс	Feedback
Do you have any further feedback for consideration in the development of an H2 IRP?	Allow flexibility in the IRP to accommodate emerging hydrogen production technologies. Consider incentivizing circular economy approaches in hydrogen production, such as utilizing waste streams, to promote a sustainable and resource-efficient hydrogen value chain. Align the H2 IRP with international hydrogen standards and certifications to facilitate potential cross-border trade and promote the compatibility of hydrogen technologies on a global scale.

#### General Comments/Feedback

1. Prioritize projects funded by IESO or with past collaborations with IESO. 2. Consider and prioritize facilities capable of producing and storing hydrogen for energy generation using fuel cells during peak hours. 3. Define a carbon emission limit for the projects, covering both hydrogen production and energy generation. 4. Specify tax credit definitions and applicable incentives for project participants. 5. Support emerging technologies like SOEC (Solid Oxide Electrolyzer Cells) and SOFC (Solid Oxide Fuel Cells) for improved efficiency. 6. Establish guidelines for the types of electrolyzers allowed in the project.