

Stakeholder Feedback and IESO Response

Grid Innovation Fund 2024, Electrification and Demand Management – April 23, 2024 Webinar

Following the [April 23, 2024](#) Grid Innovation Fund (GIF) engagement webinar, the IESO invited stakeholders to provide comments and feedback on the materials presented by May 7, 2024.

The presentation materials and stakeholder feedback submissions have been posted on the IESO stakeholder engagement webpage for this engagement.

The IESO appreciates the feedback received from stakeholders. Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

Formal written feedback was received from the following organizations:

- SPRYTLY Consulting
- Enbridge Gas Inc.
- Alectra Utilities
- The Electricity Distributors Association (EDA)
- EnerStrat Canada

Proposal Guideline - Project Stream 1

Stakeholder Feedback	IESO Response
Do you have any comments or feedback on Stream 1 objectives including the minimum project size targets for sub-streams 1A and 1B? Stakeholders recommended lowering the target V2G discharge capacity to 100-250 kW for stream 1A.	Thank you for the feedback. Please note that Stream 1 includes guidance on the minimum fleet/aggregation size that applicants should aim for. These are not minimum requirements and projects that do not meet these sizes will still be eligible for funding.

Stakeholders also recommended fleets should be permitted to aggregate across multiple transmission nodes. For stream 1B, it was recommended to scale the vehicle count by size class of vehicle.	<p>In response to stakeholder feedback, the suggested minimum aggregation size for Stream 1A has been revised to:</p> <ol style="list-style-type: none"> 1. Lower the capacity to 250 kW 2. Remove the minimum vehicle requirement. <p>Please note projects under 250 kW are still eligible to receive funding.</p> <p>Additionally, clarity was provided to the description of Stream 1A indicating the 250 kW target can be achieved from a fleet (single location) or aggregation (multiple locations across multiple transmission nodes).</p> <p>Lastly, in response to stakeholder feedback, the minimum vehicle requirement has been removed for Stream 1B, leaving only the minimum 100 kW capacity target.</p>
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Proposal Guideline - Project Stream 2

Stakeholder Feedback	IESO Response
<p>Do you have any comments or feedback on Stream 2 objectives including the minimum project size targets for sub-streams 2 and 2B?</p> <p>Several stakeholders requested clarifications and definitions of several types of heating system that can be integrated with heat pumps, including: thermal storage, dual fuel, hybrid heating systems (including retrofits), and supplementary generation assets.</p> <p>Stakeholders also asked if the 100kW load reduction targeted for Stream 2A is on a per site basis or the total aggregate.</p> <p>Lastly, stakeholders sought clarification on the minimum amount of funding that must be requested from the IESO for Stream 2 projects.</p>	<p>"Thermal storage" in the context of the 2024 GIF call thermal storage is defined as: the storage of sensible, latent or thermo-chemical heat in a medium that is available on-demand.</p> <p>Also, retrofitting existing hybrid heating systems or adding a heat pump to an existing heating system with controls would qualify under Stream 2A. Note that the project would need to demonstrate a net reduction in Scope 1 GHG emissions and meet the minimum 100kW load reduction for 60 min.</p> <p>Supplementary generation is not an eligible expense; however, it may be included as part of a project, and may be counted as part of the total project value if purchased by the project applicant or partner, as long as there is a demonstrated net reduction in Scope 1 GHG emissions. In addition, the project must meet the minimum load reductions and duration for 2A & 2B.</p>

Also, Stream 2A projects, may include installations of different types of equipment at several sites as long as the aggregation of sites meets the minimum load reductions and durations specified in Streams 2A & 2B and results in a net reduction in Scope 1 GHG emissions. That being said, new installations of equipment in Stream 2A must include thermal storage. Note that the project would still need to meet the minimum 100kW load reduction for 60 min and result in a net reduction in Scope 1 GHG emissions.

For clarity, aggregation of residential homes and Multi-unit Residential Building (MURBs) that meet the minimum load reduction in stream 2A would qualify. In addition to the requirement to achieve minimum load reduction over 60 minutes, the IESO is interested in faster responding services over shorter durations (e.g. 15-30 mins) especially if this can support the distribution utility in relieving their network during times of local peak demand.

The 100kW load reduction targeted for Stream 2A can be either on a per site basis or the total aggregate, as long as the project provides a total of 100kW load reduction. In addition to the requirement to achieve minimum load reduction over 60 minutes, the IESO is interested in faster responding services over shorter durations (e.g. 15-30 mins) especially if this can support the distribution utility in relieving their network during times of local peak demand.

There is no minimum funding request amount for Stream 2 projects.

Proposal Guideline - Key Performance Indicators

Stakeholder Feedback	IESO Response
Are the Key Performance Indicators clear? Stakeholders sought clarification on flexibility in meeting individual aspects of KPIs. Stakeholders also sought clarification on the Ontario-specific load profiles that the IESO is seeking.	<p>The intent of the KPIs is to provide a standardized way to quantify the project's ability to meet the objectives of the call. The goal is for the assessment of each KPI to be standardized across all projects, however, we recognize that there may be instances where this is not achievable. In these cases, the IESO will work with the proponent on a suitable and fair path forward.</p> <p>The IESO is seeking end-use technology specific profiles, including EV load archetypes (e.g. EV transit fleet vs. EV delivery van fleet), to inform planning activities. The IESO is not seeking a disaggregation of loads.</p> <p>Load profile data should be captured using direct measurement/metering of an end-use measure and cannot be created via disaggregation of loads.</p> <p>End-use load profiles refer to measures operation over 8,760hr. A customer specific load profile would take into account customer specific impacts to a measure's operation that changes how and/or when a measure operates, such as: business operating hours or multi-unit residential vs. single detached dwelling, or type of vehicles being charged. Load profiles with and without the application of a control strategy will be required (i.e. base case vs. efficiency case).</p>

Proposal Guideline - Evaluation Criteria

Stakeholder Feedback	IESO Response
<p>Are the Evaluation Criteria clear?</p> <p>Stakeholders sought clarification on the Grid Flexibility requirement and expressed concern regarding the need to identify specific transformer stations/feeders that will be impacted by the project due to lack of certainty around where potential project participants would be located.</p> <p>Stakeholders also inquired about how a new technology demonstration project without a corresponding program will be evaluated and scored in the the "Demand-Side Program Design" evaluation category.</p>	<p>The purpose of the 2024 Call is to demonstrate how innovative demand-side solutions can help address Ontario's growing electricity needs while maintaining reliability and affordability. Key objectives include demonstrating flexibility and novel programmatic approaches/participation models.</p> <p>The IESO recommends first identifying an existing or emerging need that is related asset (e.g. substation) and then acquiring customers that are connected to that asset. This approach supports the pilots transitioning into a full-scale program post-project completion.</p> <p>The identification of specific assets with existing/emerging needs will be evaluated based on the "Grid Flexibility" evaluation criteria.</p> <p>To earn points for the "Demand-Side Program Design" criterion, a proposal is expected to demonstrate an innovative program / participation model.</p> <p>The expectation is that technological innovation is demonstrated through various flexibility services or related components which should be structured by a flexibility program or participation model of some sort.</p> <p>Technological innovation does not have its own evaluation criteria category, but is likely to have an impact throughout various other categories.</p>

Proposal Template Part A

Stakeholder Feedback	IESO Response
<p>Do you have any comments or feedback on the Proposal Template Part A or Part B?</p> <p>Stakeholder sought clarification on how to address proposal falls under multiple streams.</p> <p>Stakeholders also requested some clarifications on specific sections of the Proposal Part A, (e.g., sections 1.6.2, 1.7, 1.8 and Part 3) around program cost details, evaluation of the technical assessment of the proposal, and reference requirements.</p> <p>Stakeholders asked if sections without allocated evaluation points are optional to fill out.</p>	<p>Projects spanning multiple streams or sub-streams are welcomed to be submitted as one application. There is an option to select relevant streams in the Proposal Template Part A, Section 1.2. Multiple streams may be selected.</p> <p>Program details, including cost, in section 1.6.2 of Project Proposal Part A are specific to the project demonstration period.</p> <p>Section 1.8 of the Project Proposal Part A is where the proponent can provide details on the specific technology or equipment used in the project to provide the IESO with a deeper understanding of the physical equipment/technology. Technical innovation is important; however, the broader objective of the Call is to leverage the innovation to enable flexibility on the grid.</p> <p>Where the applicant is unable to obtain 3 references to speak to the project itself due to competitive interests, they can provide references from organizations who have previously worked with the applicant on other projects that can speak to the character of the applicant/project team.</p> <p>All sections within the project proposal are required to be completed, regardless of whether there are evaluation points assigned to the question.</p>

Other Stakeholder Feedback on the Proposal Guideline (not listed on the Feedback Form) – Project Funding

Stakeholder Feedback	IESO Response
There were several clarifications requested around project funding requirements and eligible expenses outlined in the draft Proposal Guideline, including the 15% cash requirement from the applicant and the requirement around IESO funding not exceeding 50% of total project value.	<p>The 15% cash requirement from the applicant has been reduced to 10%. This is in place to ensure the applicant, who is expected to be the primary beneficiary of the pilot project, has a financial interest in the project, is committed to the success of the project, and that project risk is allocated appropriately. This approach supports the pilots transitioning into a full-scale program post-project completion.</p> <p>Please note, the overall combined cash requirement from the applicant and project partners remains at 35%.</p> <p>Staff salaries are not permitted to be counted towards a cash contribution as the hours that staff put into the project fall under the definition of in-kind services (i.e. contribution of goods and services).</p> <p>The IESO will fund eligible project costs up to 50% of the total project value, where the total project value includes both eligible and ineligible costs incurred by the project.</p>

General Comments/Feedback

Stakeholder Feedback	IESO Response
Stakeholders recommended existing program designs to be permitted as a basis for project programs as long as new capabilities are being explored.	Thank you for the feedback. For projects that plan to leverage existing program designs, it is recommended to contact gridinnovationfund@ieso.ca to discuss the details of the proposed project and its eligibility prior to submitting the proposal.
Stakeholders sought clarification on how the absence of Indigenous participation in the proposal will impact the project evaluation.	<p>The IESO highly encourages and supports Indigenous participation, engagement and involvement in proposed projects, where possible. Lack of Indigenous participation will not impact the evaluation score or restrict the project's eligibility.</p> <p>Note the IESO administers an Indigenous Energy Support Program (IESP) which currently open for applications (April 19 – Aug 30, 2024). The IESP is a \$15M grant program, administered by the IESO and dedicated to First Nation and Metis communities and organizations.</p>

Stakeholder Feedback	IESO Response
<p>Stakeholders provided recommendations on potential future Grid Innovation Fund call themes and a proposed requirement for projects to provide a plan for transitioning the pilot to a full-scale program.</p>	<p>The IESO thanks the stakeholders these recommendations.</p> <p>The IESO has set aside 5 evaluation points for projects that describe how post-project activities will help the solution to scale up/become more broadly adopted (Section 1.8.2 in the Project Proposal Template Part A).</p> <p>Additional approaches are in place that support the pilots transitioning into a full-scale program, including the 10% cash requirement from the applicant who is expected to be the primary beneficiary of the project, and the identification of assets that have actual existing/emerging needs. Note that the IESO is collaborating with the OEB to provide successful project proponents with regulatory guidance tailored to each project which can help increase the chances of broader uptake of the project solution. This collaboration is intended to inform regulatory activities that may support pilots in transitioning to full-scale pilots, where appropriate.</p> <p>The IESO will also consider these recommendations when designing future GIF Calls.</p>