

# Feedback Form

## Small Hydro Program Workshop, May 19, 2022

### Feedback Provided by:

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Date: June 2, 2022

To promote transparency, feedback submitted will be posted on the IESO webpage unless otherwise requested by the sender.

Following the (Thursday, May 19, 2022) Small Hydro Program Design Outreach Session, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the following discussed items. Background information related to these feedback requests can be found in the presentation, which can be accessed from the [engagement web page](#).

**Please submit feedback to [engagement@ieso.ca](mailto:engagement@ieso.ca) by Thursday, June 2<sup>nd</sup>.** To promote transparency, feedback provided will be posted on the engagement webpage.

## Small Hydro Program – Capacity Payments

	<b>Topic</b>	<b>Feedback</b>
1.1	What feedback do you have on the payment structure as it relates to a capacity payment plus an energy payment with a floor and a ceiling?	<p>The proposed structure of a capacity payment and energy payment seems overly complex. This has the potential to add significant complexity for the generator and the Program administrator. A straight energy payment for small producers particularly those under 1 megawatt is preferred. Similar to the existing HCI payment structure and terms. Several existing hydro facilities like the facilities GRCA operates have little operational flexibility with respect to hydro production due to water management limitations. There is a need for base load energy going forward, existing small hydro facilities can help fill the need for base load energy. Bundled energy contracts remain the simplest structure for these facilities. Existing HCI contract rates are reasonable providing an adequate revenue stream to justify continued investment in existing infrastructure while striking a balance of providing good value to the IESO and the electricity consumer. Certainly appreciate IESO acknowledging the need to find the correct balance and proposing a compensation framework that would provide similar revenue and certainty as existing HCI contracts.</p>
1.2	What feedback do you have on the assumptions for the reference case used in developing the payment structure? Specifically, what feedback do have on the reference case regarding: an appropriate split between the capacity payment revenue verses the energy payment revenue; the assumed capacity factor; the energy floor price?	<p>Using nameplate capacity appears to under estimate the revenue needed to maintain a similar revenue stream as received under existing HCI contracts. Suggestion would be to consider using nameplate plus service factor capacity or developing a capacity compensation model that is based on capacity factor. Both the energy floor price (\$20) and ceiling (\$45) seem appropriate assuming the average energy price is \$32.50 and adjusted over time for inflation. The relative split between capacity and energy revenues (70%/30%) using the energy floor price as the basis for the calculation seems appropriate. The IESO is encouraged to use real world data from a range of producers at the time of final design of a capacity payment/energy market model to refine exact rates and so expected and desired outcomes are achieved for both parties, the producer and the IESO.</p>

	<b>Topic</b>	<b>Feedback</b>
1.3	What feedback to you have regarding setting the fleet wide capacity factor benchmark at 40%? (Below this capacity factor, capacity payments will be reduced)	The RCF should be based on annual capacity factor as hydrology varies over the year and between years. Setting a fleet wide capacity bench mark of 40% needs to be assessed and tested against real world data over a number of operating years. The need to add the complexity of capacity factor is eliminated it producers are simply paid for their energy production \$/kwh, if energy is produced the producer gets paid if energy isn't produced the producer doesn't get paid.
1.4	What feedback do you have regarding the energy ceiling concept and price?	The concept has merit within the proposed framework. Generation against the floor and ceiling prices should be assessed on a monthly basis and the floor and ceiling should be adjusted to CPI annually. The final fixing of the energy floor or ceiling price should be tested against real world data from several years of operation. It's important to keep in mind hydrology results in dry years and plentiful years so is important to set the floor and ceiling price appropriate so achieve similar revenue to what is received through existing HCI contracts.
1.5	What feedback do you have regarding an appropriate percentage of the capacity factor for which an escalation factor (Ontario all-items CPI) should apply? What is the justification for the percentage you are recommending?	Both the capacity payment and the energy floor and ceiling should be 100% indexed to the Consumer Price Index, as is the case with existing contracts to support the required sustaining capital investments for these perpetual assets. While capex is "lumpy" over the life of a contract, in general it will be spread out over the time period, so full inflation is justified. An escalation factor is important, it provides an element of certainty regarding investment decisions.

## Small Hydro Program – Dispatchability

	Topic	Feedback
2.1	What feedback do you have on the approach to enhance payment for dispatchable facilities (increase capacity payment by X%, increase ceiling price or revenue share above ceiling price)? In your response, please note if you are a dispatchable facility / intent to become one as this design feature may only impact a very small portion of facilities.	The facilities that GRCA operates are not designed to accommodate or support dispatchability. The GRCA operated facility best suit the need of base load energy supply.

## Small Hydro Program – Tranching

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3.1	What feedback do you have regarding the recognition of economies of scale by providing an adjustment to the capacity payment of facilities under 1MW? What feedback do you have regarding an appropriate adder (in terms of a % of the capacity payment)?	Consideration of economies of scale is an important consideration for smaller facilities. GRCA supports the 10% adder suggested by the OWA. Smaller facilities are subject to the same legislative, regulatory and policy requirements as all other facilities (environmental, public safety, water management) and therefore bear a disproportionate financial burden.

## Small Hydro Program – Contract Length

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4.1	What feedback do you have regarding the option to terminate existing contracts and sign into the program at any time, with all contracts ending 20 years from program opening (ie. May 2043), regardless of when a contract is signed?	The GRCA supports this concept but recommends that there be a third option – that a current facility owner is permitted to sign a new contract at any time for the period between the expiry of the existing contract and May 2043. This is third option has relevance to contracts that expire after 2030. Its request that IESO’s report back to the minister consider this third option and consideration of contract options for contracts that expire after 2030.

## Small Hydro Program – Community, Conservation Authority & Indigenous Ownership

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5.1	What feedback do you have on a minimum Indigenous, Conservation Authority or Community ownership stake	The enhanced payment eligibility for CA or Municipal ownership is supported. Conservation Authorities are funded primarily by municipalities and, like the municipally owned infrastructure, play an integral role in water management. These locally owned and operated facilities provide community benefits that extend well beyond the production of electricity including public safety,

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	to qualify for an enhanced payment?	recreation, tourism, economic development, local employment and environmental benefits. Appreciate the IESO recognizing Conservation Authorities in the program design.
5.2	What feedback do you have on the maximum value of an adder (in the case of 100% ownership by an Indigenous Community, Community or Conservation Authority)?	I defer to the OWA suggestion the maximum value of community equity participation be approximately 10% (1.5 cents per kwh).

## General Comments/Feedback

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6.1	Please provide any additional comments or feedback that would assist in the design, development and implementation of a Small Hydro Program	During the discussions to date, the concept of flexibility has been discussed. The IESO is encouraged to include in their report back to the government consideration of the ability to include the ability to accommodate small expansions of existing facilities under new future contracts. This would provide flexibility to the owner and to the IESO. The province needs more electricity production in the future, the flexibility to accommodate amends to existing contracts to allow moderate expansions of production at existing facilities would provide flexibility to meet future demands. It would also be appreciated that in IESO's report back to the government that

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	<p>consideration is given to allow contracts that expire after 2030 to terminate and opt into a new contract that would run to 2043. In addition, there should be some discussion on the ownership of environmental attributes, particularly given the IESO's work on recommendations design of a Clean Energy Credit Registry. Some reasonable sharing of credits between the IESO and the generator would be appropriate, particularly with new expansions. Finally, the IESO is currently proposing to settle existing contracts on the Ontario Zonal Price (rather than the locational marginal price) post market renewal. This approach should be brought forward for consideration in detailed Program design. Thank you for the opportunity to comment and for the effort IESO staff have put into the engagement of small hydro producers.</p>