Feedback Form

Small Hydro Program Design, March 2022

Feedback Provided by:

Name: Shawn Cameron

Title: Operations Manager

Organization: Renfrew Power Generation

Email:

Date: March 29,2022

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

Following the (March 29, 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 <u>engagement@ieso.ca</u> **by April 19,2022** If you wish to provide confidential feedback, please mark the document "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.



Small Hydro Program – Engagement Approach

Topic	Feedback
What questions or feedback do you have about the IESO's engagement approach?	Click or tap here to enter text.

Small Hydro Program – Principles & Goals

Topic	Feedback
What questions or feedback do you have on the design goals for the program?	Hydropower facilities are perpetual and provide the best value for the green energy they produce not to mention the benefits of water management.
What questions or feedback do you have on the principles that the design is founded on? (focus on value, promote competition, incent market-driven operations and allow for flexibility in future system operation).	Being a small producer, we do not have the capacity to be competitive nor do we have the flexibility. Also being where we are situated geographically would dispatchability be a benefit to the province? City centers need the energy not small towns etc. Run of the river sites that do not have ponding capabilities to simply shutdown if requested involves a method to spill which can cost us to dispatch staff and depending on time of year be a challenge.

Small Hydro Program – Design Concepts

Торіс	Feedback
What questions or feedback do you have relating to Design Concept #1: Capacity Payments	Further information is needed as to what capacity will be used, installed cap., average over so many years??? The HOEP rates currently are quite low to rely on for profits.
What questions or feedback do you have relating to Design Concept #2: Dispatchability	Not something RPG would support, run of the river system with no ponding capability and not sure how this would work on the Bonnechere River with 3 facilities cascading all owned by different entities.
Is your facility currently dispatchable?	No, run of the river
If your facility is currently not dispatchable, is there an interest in becoming dispatchable?	Simply do not have a head pond that water can be stored. If we don't use the water, it is spilled

Торіс	Feedback
What would be required to become dispatchable and what are the barriers (if any)?	and essential a waste of resource. Head pond changes would lead to environmental, and proponents push back. Most facilities operate under a water management plan which was designed to provide a balance to users and protect the water system and all environmental associated not tailored for energy production in this way.
What questions or feedback do you have relating to Design Concept #3: Tranching	One attribute that must be considered is other operators on the same water way to assure a consistent water flow for each facility. Possibly consider facilities on the same river system need to work together and have similar contract variables. The first operator on a system has most of the water control for the others downstream.
What characteristics would you consider to be defining features of your operations or facilities as it relates to potential criteria for contract payments?	We have 6 units varying in output. We have Thomas Low (TLGS) with 2 units installed capacity of 4 MW and Plant 1 at 1MW and plant 2 at 1MW. Both plant 1 and plant 2 currently do not have a contract and are paid from HOEP and used on a limited basis as HOEP rates are quite low. With this arrangement we have an ability to use up to 30 cubic meters per sec (CMS) or turn down to 2 CMS to deliver energy 365 days a year. We will be looking to get Plant 1 and Plant 2 on a contract. This will add 2MW to the province in the form of green energy. TLGS - 4MW is at 44KV and P1 and P2 are 2 MW at 4.16KV. This certainly has benefits to the town of Renfrew generating at two different voltages. Currently Plant #1 has a black start capability. With the movement to electric vehicles RPG generating at the distribution voltage will help the Renfrew Hydro system maintain as demand increase soon. RPG owns and maintains 5 dams and 3 facilities. We carry a debt service that surpasses the current HCI contract expiry. To stay current RPG has made considerable capital investment which has required borrowing. Although every attempt is

Торіс	Feedback
	made to target revenues annually, we still rely on what mother nature supplies which is unpredictable and tends to significantly vary year to year. It is diligent for us to consider the possibility of dry years or major failures and have adequate revenues to put aside reserves to carry us through those times. Financial stability remains very important.
What questions or feedback do you have relating to Design Concept #4: Investment?	RPG is already solely owned by the Town of Renfrew
Have you considered adding an on-site battery to your facility? If so, what stage of development are you in? Is there potential for Indigenous and/or community ownership?	Not currently. Is it economical to be adding battery storage to each of these small facilities? Is this something that could be created on larger scale at the provincial level and key locations where the province take energy from the grid as required to manage the storage sites.
Are you aware of your sustaining capital requirements over the next 5 years?	Yes, RPG owns and operates 5 dams and 3 hydropower facilities. There is always infrastructure and equipment maintenance and upgrades with some of the infrastructure over 100 years old.
Have you considered any upgrades or capital projects at your facility? If so, what stage of development are you in? Is there potential for Indigenous and/or community ownership?	We are currently owned by the Town of Renfrew. With contract certainty RPG would plan to rewind and upgrade turbines on the two older plants that have been in operation since 1901, 1911.This would increase output slightly and refresh these units for another 40 years. Rpg has just finished a major capital project to dam #1. There is ongoing budgeted infrastructure maintenance at the dams and annual maintenance at the facilities.
What questions or feedback do you have relating to Design Concept #5: Contract Length ?	Longer the better, this gives a stability for budgeting and confidence for lenders. Hydro facilities need ongoing maintenance to follow safety standards and remain efficient. RPG has made capital investments based on HCI rates;

Торіс	Feedback
	debt service does extend past HCI contract expiry.
What questions or feedback do you have relating to a program review in 2026?	Does this not lead to complications as IESO will likely have revisions to programs already established and then have varying contracts for each facility.

Small Hydro Program – Other Design Ideas

Торіс	Feedback
Are there any other design ideas for the development of a Small Hydro Program that should be considered?	HCI seemed to provide financial stability and was an easy contract to administer. It seems like a lot of work and wasted resources to create something completely new which for the most part was working well before IMO. Leave HCI as the standard contract and consider adders or credits given to those facilities who fit certain credentials IESO is looking for on top of the HCI.

Small Hydro Program – Challenges

Торіс	Feedback
Are there challenges that you foresee in transitioning to a new contract structure? What are these challenges?	More a concern, the price per Kwh under the new program must be reflective of what HCI is. Budgets and financial models have been based off the rates we receive now. If this changes it can cause financial stress and uncertainty for the lenders as we have debt service that surpasses the HCI contract and would deter future capital expenditures if not adequate.
If you expect any challenges in transitioning to a new contract structure, do you have any suggestions on how the IESO can assist in the transition or reduce any anticipated barriers?	I expect you will receive vital information and gain insight from these feedback forms that will help guide to create a program that works. How the new program effects future revenue is my biggest concern.

General Comments/Feedback

I appreciate the opportunity to share comments regarding the development of this program.