



**ONTARIO
RIVERS
ALLIANCE**

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IESO

Email: FIT@ieso.ca

Re: 2017 Price Review

Dear Sirs:

Ontario Rivers Alliance (ORA) is a Not-for-Profit grassroots organization acting as a voice for several stewardships, organizations, and private and First Nation citizens who have come together to protect, conserve and restore healthy river ecosystems.

ORA is writing to comment on the 2017 Price Review. Our submission relates specifically to waterpower, as this is where our primary concerns lie.

Under FIT 4, the IESO increased the price paid to waterpower operators from 14.8 cents/kWh in 2013, to 24.6 cents/kWh in 2016. This resulted in a huge increase of 40 waterpower applications under 500 kWh, with a total net output of 13 MW. It is not surprising that there is such a gold rush mentality with the generous increase in prices paid for these small hydroelectric facilities.

Ultimately there were 9 waterpower projects approved for FIT 4 Contracts, with a total Nameplate Capacity of 2.722 MW; however, the net output would more realistically generate a total of 500 kWh to 800 kWh of power. The approved FIT Contracts ranged from 35 kWh to 500 kWh. It is incomprehensible that the IESO would even consider such small waterpower projects when the total amount of power generated by these 9 waterpower projects is so disproportionate to the potential risk and impacts to Ontario riverine ecosystems over the next 40 years.

The high level information provided by the IESO makes it impossible to decipher the type of projects, or how many rivers would be impacted. If these smaller applications are for drainage and utility pipes, then ORA is very much in favour; however, if they are for hydroelectric dams that will block the passage of fish, chop up fish, and do not provide any up-front dam decommissioning provisions, then ORA is very much opposed.

These tiny projects will receive 40 year FIT Contracts, and in a warming world, these types of projects are ill-advised. During the low flow season of summer or during drought conditions many true run-of-river and even some peaking facilities, especially on smaller rivers, cannot operate and have to be shut down due to low flows.



At the best of times, the electricity produced by small hydro is unreliable because it peaks during the high flows of spring when power is in low demand, and produces at its lowest during the hot summer months when consumption and demand are highest. These small waterpower projects would not contribute in any meaningful way to the power grid, but instead represent 40 years of death by a thousand cuts to many Ontario rivers. Even true run-of-river dams fragment habitat, chop up fish, and impede flow and vital nutrients to the downstream.

To further highlight this point, in 2014 an analysis was conducted by the Ontario Power Authority to determine the best means of connection for remote First Nation communities, and to enable forecasted growth to the Ring of Fire. It reported "*Northern hydroelectric generation is an energy limited resource known to have significantly reduced output and availability during drought conditions of the river system supplying these generating units.*"¹ In fact the recommendation of this report was to not build any new hydroelectric facilities, but primarily to build new transmission lines.

*"The accumulated effects of multiple small-scale waterpower operations could amount to similar overall environmental degradation per unit of electricity generated as is caused by larger projects."*² In fact the cumulative impacts of many small projects can be even larger, depending on the circumstance.^{3,4}

Additionally, proponents are not required to provide up-front dam decommissioning provisions or fish passage, and that leaves the taxpayer on the hook to pay for dams to be removed, and riverine ecosystems restored.

Additionally, unlike the Large Renewable Procurement process, applicants are not required to consult with the public, and have already approached the municipality and received endorsement without the public having had any knowledge of the proposal, or opportunity for input. Public consultation must be an essential requirement in FIT policy so that there is an opportunity for healthy discussion and input from the public before an application goes to Council for endorsement, or a FIT contract offered.

Whether large or small, hydroelectric proposals generate huge public and stakeholder pushback, and for good reason, as they can severely impact on communities, recreation, fisheries, drinking water, and livelihoods – and power procurement contracts are for a term of 40 years.

ORA urges the IESO to discourage waterpower projects by significantly reducing the price paid for waterpower in FIT 5.

Thank you for this opportunity to comment.

Respectfully,

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Chair, Ontario Rivers Alliance
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¹ *Ibid.*

² *Abbasi, T. and Abbasi, S.A. 2011a. Small hydro and the environmental implications of its extensive utilization. Renewable and Sustainable Energy Reviews, 15: 2134-2143.*

³ *Ibid.*

⁴ *Kibler, K.M., and Tullos, D.D. (2013), Cumulative biophysical impact of small and large hydropower development in Nu River, China, Water Resour. Res., 49, doi:10.1002/wrcr.20243.*