



23 January 2015

Independent Electrical System Operator (IESO)

FIT@ieso.ca

microFIT@ieso.ca

Re: FIT and mFIT Discussion Papers - Feedback

Dear Sirs:

Ontario Rivers Alliance (ORA) is a Not-for-Profit grassroots organization acting as a voice for the Friends of Temagami, Organisme de Bassin Versant du Témiscamingue, French River Delta Association, Kiishik Community Association, Vermilion River Stewardship, Friends of Grassy River, Mississippi Riverwatchers, French River Stewardship, as well as many other stewardships, associations, and private and First Nations citizens who have come together to protect, conserve and restore healthy river ecosystems all across Ontario.

ORA is very pleased to offer recommendations on the FIT and microFIT Discussion Papers. Our comments specifically concern:

Sections:

FIT – 4.4 and microFIT - 4.5 - Reconsider the Eligible Renewable Fuel Types

Proposed Enhancement:

Waterpower is removed from future versions of the FIT and microFIT Program as an eligible Renewable Fuel Type.

Rationale:

Since the adoption of FIT 2 and 3, the number of waterpower applications and contracts awarded is listed in your online presentation as ~1.0, and it appears there were none for microFIT. This is ample evidence that waterpower has proven to be unsuitable for the <500 kW size tranche, and should be removed from the FIT and microFIT programs. This would allow the IESO to focus its resources in a more efficient and effective manner.

Waterpower infrastructure is costly and complex, and should only be undertaken by highly experienced and qualified developers with a proven track record. All waterpower should fall under the Large Renewable Procurement program which would filter applicants through a more rigorous qualification and approvals process.



Waterpower, whether large or small, is very site specific and requires thorough environmental, social, heritage and economic considerations if it is to result in a responsible and sustainable project.

Considerations:

Waterpower development must not be entered into lightly, and must be weighed in the context of the significant costs to the environment, to biodiversity, and to ecological, social, cultural and natural heritage values. The collateral environmental damage caused by waterpower facilities has been well known and documented for decadesⁱ, including the loss or serious decline in migratory fish species (waterpower facilities are key factors in the listing of some iconic fish species as species at risk in Ontario and elsewhere); declining biodiversity^{ii,iii,iv,v,vi}, impaired water quality (including elevation of mercury concentrations in fish tissue); and are key threats to imperiled aquatic species.^{vii} Significant, collateral ecological damage from waterpower has been ongoing for many decades in Ontario.

Unless carefully identified and mitigated, cumulative effects of waterpower can occur at the watershed, regional and/or provincial scale. Some impacts will be ongoing throughout the life of the project, and may be irreversible.^{viii}

Protecting freshwater resources from ill-planned waterpower projects is crucial to those living in rural areas that are not connected to municipal drinking water systems, and draw their water directly from lakes and rivers.

Subsidies and incentives paid to maximize power generation during peak demand hours only encourages waterpower operators to hold water back from the downstream flow, in order to maximize profits.

Ban Ki-moon reported that, unless greater efforts are made to reverse current trends, the world will run out of freshwater. Although seemingly abundant, only a tiny amount of the water on our planet is easily available as freshwater. Biodiversity and the ecosystem services it provides are central to achieving the vision of a water secure world.^{ix}

Thank you for this opportunity to comment.

Respectfully,

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Chair, Ontario Rivers Alliance
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ⁱ Baxter, R. M. 1977. *Environmental Effects of Dams and Impoundments: Annual Review of Ecology and Systematics*, 8: 255-283.

ⁱⁱ Ricciardi, A. and Rasmussen, JB. 1999. *Extinction rates of North American freshwater fauna. Conservation Biology* 13:1220–1222.



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- ⁱⁱⁱ Vaughn, C., and Taylor, C. 1999. *Impoundments and the Decline of Freshwater Mussels: a Case Study of an Extinction Gradient*. *Conservation Biology* 13(4): 912-920.
- ^{iv} Bunn, S. and Arthington, A. 2002. *Basic Principles and Ecological Consequences of Altered Flow Regimes for Aquatic Biodiversity*. *Environmental Management*. 30-4: 492–507.
- ^v Carew-Reid, J., Kempinski, J., and Clausen, A. 2010. *Biodiversity and Development of the Hydropower Sector: Lessons from the Vietnamese Experience – Volume I: Review of the Effects of Hydropower Development on Biodiversity in Vietnam*. ICEM – International Centre for Environmental Management, Prepared for the Critical Ecosystem Partnership Fund, Hanoi, Viet Nam.
- ^{vi} Jelks, H. J., Walsh, S.J., Burkhead, N.M., Contreras-Balderas, S., Díaz-Pardo, E., Hendrickson, D.A., Lyons, J., Mandrak, N.E., McCormick, F., Nelson, J.S., Platania, S.P., Porter, B.A., Renaud, C.B., Schmitter-Soto, J.J., Taylor, E.B., and Warren, M.L. Jr. 2008. *Conservation status of imperiled North American freshwater and diadromous fishes*. *Fisheries* 33-8: 372–407.
- ^{vii} Wilcove D.S., Rothstein, D., Dubow, J., Phillips, A., Losos, E. 1998. *Quantifying threats to imperiled species in the United States* *BioScience* 48: 607–615.
- ^{viii} Gower, T., Rosenberger, A., Peatt, A., and Hill, A. 2012. *Tamed Rivers: A guide to river diversion hydropower in British Columbia*. Prepared for Watershed Watch Salmon Society. 64pp. Online: <http://www.watershed-watch.org/resources/tamed-rivers-a-guide-to-river-diversion-hydropower-in-british-columbia/>
- ^{ix} New York, 21 May 2013 - Secretary-General's message on the International Day for Biological Diversity, Ban Ki-moon, Secretary General, United Nations