Erik Szkokan-Emilson, PhD Candidate,
Living with Lakes Centre,
Laurentian University,
Sudbury, ON. P3E 2C6
Email: Ex_SzkokanEmilson@Laurentian.ca

3 March 2014

The Honourable Jim Bradley
Minister of Environment
77 Wellesley Street West
11th Floor, Ferguson Block
Toronto, Ontario
M7A 2T5

Email: Minister.MOE@Ontario.ca
Fax: (416) 314-6748

Re: Wabagishik Rapids Proposed Waterpower Project – Part II Order Request

Dear Minister Bradley,

I am writing to address Xeneca's response, dated 18 November 2013, to my Part II Order request made on 1 November 2013. I apologize for the delay in responding; however, I have a busy schedule and this is the first opportunity I have had to respond to this important matter.

I would like to state up front that my concerns have not been alleviated as a result of Xeneca's response, and instead they have been heightened by their insistence that they have completed studies addressing key environmental and fisheries issues, when their Environmental Report (ER) and supporting documentation clearly indicates that they have not. I will address some of the more obvious inconsistencies as follows:

- The proponent insists that Wabagishik Lake will not be used as a headpond and yet admits that water level fluctuations during modified peaking will vary within a 10 centimetres (cm) operating band, and their operation will draw on the lake to generate power. If not for the use of Wabagishik Lake as their headpond, their power generation output would be significantly less.

- Xeneca claims they have "*committed to a robust water sampling and monitoring program for the Project*", and yet Hutchinson clearly states he did not study Wabagishik Lake on the basis that, "*HESL understands from Xeneca that the facility will not impound water in Wabageshik Lake."* [1]

- The Hutchinson attachment sites a conference call with Xeneca and Parish Geomorphic Ltd. on 5 November where Parish Geomorphic Ltd. dismissed my concerns of daily peaking resulting in erosion of Wabagishik Lake and the Vermilion River, and on the surface this sounds convincing, but no substantive studies or transparent and traceable means for how this conclusion was arrived at are provided.

[1] Annex IV, 3 of 4 – Hutchinson Environmental Sciences Report, P-3

- Xeneca claims "*the final ER contains thorough hydraulic analysis, Hec-Ras model results, bathymetry and flow modeling that clearly assesses potential effects of the project, including erosion potential, within the Zone of Influence (including Wabagishik Lake) and downstream to the Domtar headpond*"[2]; however, the word "erosion" doesn't even appear in the hydraulic or Hec-Ras reports, and the Parish Geomorphology Report clearly states that it did not study areas W1 (upper Vermilion), W2 (Wabagishik Lake), or W7 (lake pool area before the confluence of Vermilion with the Spanish River). Xeneca contradicts its own consultants and ER.

- Xeneca refers to the Parish Geomorphology Report in Annex 1 of the final ER, and claims it contains information stating "*there will be no additional erosion outside of that produced by normal seasonal fluctuations*"[3], however, fails to cite the page where this information appears in the report. In fact a careful search of this document provides no such declaration.

- Hutchinson admits that "*the mechanisms proposed by Mr. Szkokan-Emilson as potential adverse effects associated with the Wabageshik Rapids project are solid and have been substantiated in laboratory and field studies in which droughts persisted for 7, 30, 60 days and longer*"[4] but they go on to suggest that the short duration of drying imposed by the dam negates any effect. The release of metals from soils depends not on duration, but rather on the activity of sulphate oxidizing bacteria. The minimum time required to oxidize sulphur to the point of sulphate and metal release is not well understood in the scientific literature, and has not been addressed in the ER. There is no reason to assume the effect will not be observed at shorter drying periods.

- Hutchinson also states that regardless of elevated contamination in the area, sulphate and metal release will not likely be greater than elsewhere, as it will be limited by short drying cycles. Not only do we not understand the effect at shorter drying periods, but Watmough and Juckers (2013) noted that pre-drought pH played a strong role in determining post-drought metal release, with lower pH resulting in higher metals release. Note that many water bodies in and around Sudbury are still affected by acidification from smelters, and that nowhere in the report is the pH of the soils documented. Sulphate content is also likely elevated as a result of smelting, and this is overlooked as well. We must err on the side of caution in such sensitive ecosystems, and at the very least carry out controlled studies with sediments from the area before any approval is provided.

- It is on those long, dry, hot days of summer, during low flow conditions that many kilometers of riparian shoreline will be exposed to solar absorption, and left drying for 12 to 18 hours[5] (not 8 as indicated by Hutchinson) while water is being released from the lake, only to refill again to generate more power during the next peak demand period. There will also be days and perhaps weeks where there is insufficient flow to generate power during the very low flow conditions of summer, as indicated in Xeneca's proposed Operating Plan where it indicates "Facility Not Operating" for an estimated 5% of the time during summer months.[6] This is why studies are required to determine the totality of the heavy metal impacts. Public health and safety is at stake, therefore these studies must be completed before this project is allowed to move forward.

[2] Xeneca Letter to Erik Szkokan-Emilson, dated 18 November 2013, P-2
[3] Xeneca Letter to Erik Szkokan-Emilson, dated 18 November 2013, P-2
[4] Hutchinson Memorandum dated 13 November 2013, to Xeneca Power Development Inc., - P-5
[5] Ontario Energy Board – Electricity Prices
[6] Annex 1, Proposed Operating Plan & WMP Amendment, P-18

- Hutchinson stated in his report, "*the effects of daily peaking may not be able to be reliably predicted prior to operations given the variety of soil types, factors that affect metals generation from wet-dry cycles and variability of peaking operations required each year. This has been the case with mercury generation predictions from small-scale hydro operations, and MOE recognizes that additional scientific understanding is necessary to provide reliable predictions.*"[7] I submit that this is especially true when studies have not been completed by the proponent to determine the severity of the problem within the lake area or within the downstream bay area and their connecting wetlands. The wetlands within the lake area were not even identified, let alone inventoried. With the knowledge already at hand indicating several very toxic heavy metals are already many times over "severe effect levels", it is appropriate that the precautionary principal be used in order to err on the side of caution to protect public health and safety and riverine ecosystems.

- In answer to my concerns about the daily dewatering of critical habitat below the dam, Xeneca says it "*worked with MNR to address their concerns and we believe that the final ER has fully mitigated all potential negative impacts*", and yet nothing appeared in the ER stating MNR was satisfied, and in fact it reflected the opposite.

My Part II Order request stands as written, and I respectfully request that the Minister elevate this ER to an Individual Environmental Assessment. This would ensure that the project does not proceed without proper scrutiny and effective mitigation measures, which would result in a more environmentally and socially responsible project.

I have written to you Minister Bradley as I do not have the time or desire to get into a letter writing campaign with the proponent. Therefore, please accept this letter as my final response on this issue as it now stands. If you have any questions, I will be happy to provide answers upon your request. Thank you for your consideration.

Yours truly,

Erik Szkokan-Emilson

Cc: Stephanie Hodsoll, Xeneca – Shodsoll@Xeneca.com
Ellen Cramm, Environmental Planner/EA Coordinator - Ellen.Cramm@ontario.ca
Christine Selinger, MNR – Christine.Selinger@Ontario.ca
Linda Heron, Ontario Rivers Alliance – LindaH@OntarioRiversAlliance.ca

[7] Hutchinson Memorandum dated 13 November 2013, to Xeneca Power Development Inc., - P-4