September 9, 2011

Ontario Rivers Alliance
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Dear Members of the Ontario Rivers Alliance:

Thank you for participating in the review of the Class Environmental Assessment for Waterpower ("Class EA") for The Chute GS on Ivanhoe River. Xeneca Power Development Inc. ("Xeneca") believes it is worthwhile outlining dialogue to date and stated positions.

Xeneca is willing to meet and engage with members of the Ontario Rivers Alliance ("ORA"), and seeks to find a way to develop a cordial dialogue. We are committed to this process.

The ORA, based on previous correspondence and its website www.ontarioriversalliance.ca, is biased against the development of waterpower in Ontario and the FIT program. The ORA also has a bias against Xeneca as a developer of waterpower, based on information available on the ORA website. The site lists only **two** waterpower project developers in Ontario, including Xeneca, out of the numerous projects currently being developed.

Response to questions:

We thank the ORA for its input and observations.

Xeneca has found addressing the ORA submission challenging because it was a combination of input, requests, observations and questions which were often outside the scope of the Class EA process.

However, Xeneca would like to develop a working relationship with the ORA. For instance, we suggest that the ORA and Xeneca meet regularly to discuss post-EA issues. This will allow the ORA to develop an understanding of the process, provide input and, if necessary, intervene with Agencies.

Please see below Xeneca's response to the ORA's questions.

Cumulative Effects Section

Impacts of Dams and Climate Change

Questions presented to Xeneca:

1. Has Xeneca undertaken core sampling to identify mercury levels that exist today in the inundation zone? A baseline must be established.
2. Has Xeneca undertaken a scientific study based on probable mercury loading at the site to extrapolate the future mercury methylation rates, and their potential effects on the local fish community?
3. How will Xeneca protect local stakeholders and aboriginal communities who rely on this water for drinking?
4. What are the anticipated health threats to aboriginal and local stakeholders over the 40 year contract of this proposed facility?

Response from Xeneca:

Elevated Methylmercury

Please refer to page 103 of EA report. Response to questions:

- **Will the building and operation of The Chute increase mercury levels?** No. Methylmercury levels in the water can only occur if organic matter is left to decay in the headpond. Prior to the creation of the headpond, the organic matter that could cause the creation of increased methylmercury -- of which there is very little -- levels in the water will be removed. This is standard practice and will ensure that mercury cannot form.

- **Will Xeneca conduct baseline mercury studies?** Our mercury sampling has been done in coordination with the Ministry of the Environment ("MOE.") Xeneca has stated that it plans to remove trees in the inundated area to avoid increased methylmercury levels. Further, the size of the inundated area as it relates to the project is very small in relation to the flow of water flushing this system. The referenced science relates to studies on reservoirs that were orders of magnitude larger in volume and area (in relation to river flow) than is the case at The Chute.

- **Will Xeneca continue to monitor mercury levels?** Yes. This is done in coordination with MOE. Xeneca is testing for methylmercury according to accepted scientific methods prior to construction and again five and ten years after construction.

- **How will citizens and Aboriginal peoples be protected?** Please the response above.

- **What are the health risks over 40 years?** Although Xeneca concurs that methylmercury is a concern for fish and fish consumption throughout northern Ontario, it does not appear that this project has a significant potential impact related to methylmercury. The proposed monitoring is believed to be a reasonable method of addressing any uncertainty related to the available science.

Warming of water in headpond

Questions presented to Xeneca:

1. What are the expected impacts to local stakeholders and FN with this anticipated increase in pathogens and fatal toxins?
2. ORA requests more detailed information on the effects this thermal regime will have on the know populations of sensitive coldwater species or the impact of construction/operation of this facility would have on the ability of the up and downstream reaches to support sensitive coldwater species.

Response from Xeneca:

Significant temperature change will not occur. Please refer to page 94 of EA Report.

Xeneca re-iterates that because the headpond is small and retention times are short, this project will not contribute to significant warming. The warming effect has to be put into context of the warming that naturally occurs during various weather and flow conditions. As you correctly point out, warming is of greatest interest when flows in the river are low and conditions ambient temperatures are high (i.e. during the summer.)

Indeed this project was specifically engineered to have a small headpond and minimal inundation. Not only is the headpond very small in terms of the hours of storage created for operations as it compares to other hydro projects in Ontario, the headpond is also very small in absolute size when compared to the many hydro and water control structures existing across the province. It is significantly smaller than the impoundment created by the pre-existing Ivanhoe Lake Dam water control structure.

Town of Foleyet Concerns

Questions/Requests presented to Xeneca:

1. ORA requests that Xeneca provide detailed analysis to demonstrate that the above scenario WILL NOT happen.
2. The ORA requests a study to determine the potential environmental effect of the Town of Foleyet's effluent discharge on the riverine ecosystem, and all downstream water bodies, when allowed to sit in the headpond for up to 48 hours.

Response from Xeneca:

Please refer to pages 13, 14, 15, 61, 85, 86, 89, 123 and 142 of the EA Report.

The primary concerns raised by the Town of Foleyet were:

a) **Ivanhoe Lake Dam would be operated by the MNR in a manner that negatively impacted their water and sewage treatment to the benefit of electricity production at The Chute.**
This was addressed by Xeneca with MNR providing assurances this would not occur. The engineering aspect of backwater effects on the Town of Foleyet has been assessed and there is no engineering concern or risk that this project, located 19 km downstream, will affect the flows from the sewage effluent discharge at Foleyet in any manner. With respect to the concern over ice blockage, the presence of a headpond decreases the risk for an ice blockage to occur.

b) **Operation of The Chute would impact the upstream water levels leading to impacts on the operation of the water treatment and sewage facilities at Foleyet.**
The upstream impacts are limited to 6.4 km, and Foleyet is 20 km upstream, so this will not occur. With respect to the effluent discharge, Xeneca was not aware that the town of Foleyet is allowed to discharge a bacterial soup into the riverine ecosystem. We believe the matter of residence time and water temperature has been fully addressed in the answer to the previous question. This project will not have a significant adverse effect on the residence time of the river.
As to the nature of the effluent discharge by the Town of Foleyet and its potential impacts on water quality in the Ivanhoe River, it would be best to defer this question to the Town of Foleyet and MOE.

Please refer to Annex I. 100-year flood analysis showed no risk to the Town of Foleyet. Ice blockage or other natural occurrences will not affect the water levels so as to impact the Town of Foleyet. Water levels are also controlled by MNR at the Ivanhoe Lake Dam and managed through the Water Management Plan administrated by MNR.

Effluent discharge by the Town of Foleyet is a MOE water quality issue and needs to meet provincial standards; if this is the case, the effluent released into the Ivanhoe River after 20 km of river flow should pose no issue. Water from The Chute headpond downstream is constant and will provide a continuous flow so any effluent (assuming it exists) would move from the headpond downstream.

Identified Potential Effects

Questions/Requests presented to Xeneca:

1. ORA is requesting clarification on whose professional judgment Xeneca is referring to? Would it be the professional judgment of a proponent who has everything to lose by finding significant risks?

2. Independent and unbiased studies must be undertaken to ensure the significance, or non-significance, of all the potential negative effects in the ER?

Xeneca's response:

With respect to the paragraph and statements listed in " Identified Potential Effects," Xeneca has come to the general conclusion that there will be a limited number of significant environmental effects related to this project. Various steps were taken in the planning and design of this project to limit environmental impacts.

The size of the project is very small in electrical capacity and headpond storage. This step was taken to make the project as close as possible to an environmentally friendly run-of-river facility. For comparison, the large OPG facilities in northern Ontario are hundreds of MW in size. Niagara Falls is several thousand MW in size. Large hydro facilities typically have reservoirs that provide weeks or months of water storage; this project has storage for only a few hours. Large projects can inundate thousands of hectares; this project has dozens of hectares of inundation.

Based on information on the ORA's website and the nature of the alliance's engagement on the EA process, it appears that the ORA objects to waterpower development outright. Xeneca respects this position and understands that the ORA is trying its best to protect natural river environments for recreational canoeing and kayaking uses. However, we would also like ORA to recognize that Xeneca has done much to limit the environmental impact of this project. We would also like ORA to recognize that every project has some impact, be it a water control structure for recreational users, a water withdrawal for town water use or the effluent discharge from a treatment plant. There may even be impacts related to providing the public access to rivers for recreation uses as the ORA is advocating. However, every project and use also has socio-economic reasons for existing, as does this project.

The electricity from this project will be green, clean and environmentally low impact. It will replace electricity currently derived from dirty coal facilities. By operating the project in a manner that allows more of the power to be generated during daytime hours, it will provide the power when it is needed by households in Ontario and thus further reduce the use of electricity from polluting sources.

The project is aligned with provincial objectives to move to renewable energy sources for more of Ontario's future energy supply. This will not only improve air quality but contribute in a positive way towards addressing climate change.

Xeneca would ask the ORA to recognize that the Province of Ontario has set aside and protected a large number of lakes and rivers in Ontario where waterpower development cannot occur. This was done for the benefit of the ORA, the environment and the many recreational users of Ontario's abundant fresh water resources. Hence, Xeneca is restricted to rivers where multiple and general uses are permitted. The Ivanhoe River is such a river, and mining, cottages, water supply and forestry are among the many uses that need to share this river.

Xeneca is committed to sharing the Ivanhoe River and to minimizing the environmental footprint of its facility. We have done so in many aspects of the planning and design of this project. Extensive studies have been done to document the natural heritage in the zone of influence, to evaluate potential impacts and to mitigate to the extent possible. However, we also ask the other users of the river to share this precious resource with Xeneca and respect that this project will bring significant socio-economic benefits to the region and the province. In other words, we ask that the ORA respect that Xeneca has as much of right to share this river as the ORA does.

Contempt of Process Section

Xeneca would observe, as outlined in its prologue, that the ORA has a bias. In our opinion the ORA misunderstands the process, the technical issues and the history of waterpower.

Xeneca respects the process and believes it has been followed correctly.

Site Release & Applicant of Record

Questions presented to Xeneca

1. Why should Xeneca be given preferential treatment, or even expect it?
2. Why should Xeneca's timelines take precedence over policy, procedure, provincial regulations and most of all the health and well-being of the community, the environment and the river ecosystem?

Xeneca's Response:

Xeneca proceeded with its approach in full knowledge and with full acceptance of the risks identified by the Agencies. Xeneca's position is that the timeline of the FIT contract necessitated that decision.

Regulation decisions for the projects are dealt with during the post-EA regulatory permitting phase. A successful EA completion only begins this process; it does not dictate that permits and approvals will be authorized automatically. More detailed information is supplied as supporting documentation along with the ER for these applications.

Xeneca objects to the allegation of "Contempt of Process." Xeneca has in no manner shown contempt of process at any point in time. To be specific, we would like to state the following:

Internal discussion between Xeneca and government Agencies are between these two parties only and in no way affect the ORA. The Ministry of Energy and the Ontario Power Authority stipulated certain deadlines in the contracts that were entered into with Xeneca; these constrain the timelines available.

With respect to concern expressed by Agencies over timelines over one year ago, these matters were discussed and addressed. Xeneca outlined a strategy to the Agencies that would allow certain work to occur in parallel without any impact on due process and in a manner that works within the timelines of the FIT program. Xeneca also engaged legal counsel to obtain an opinion on the legislative legality of this approach. The approach was confirmed by legal counsel and the Agencies ultimately bought in to the approach. This approach has in no way resulted in contempt of process and we find this allegation by the ORA unprofessional.

MNR and MOE have long advocated that proponents collaborate with the Agencies to plan, review and discuss project information before it is released to the public. This is not done to exclude the public, but as a way to resolve issues or inform the regulatory process before the information is released to the public. The environmental review process does not legally require proponents or Agencies to engage in this process. It is simply deemed as productive for all parties to do so. It is not unusual for Agencies to ask for more time or information during these discussions; this is in no way contempt of process.

The development of The Chute is on one of the few remaining "General Use Rivers" which the Province of Ontario has dedicated to waterpower development. Over the last 20 years, numerous rivers have been assigned "Park" or "Conservation Reserve" status by the Crown in Ontario which prohibits waterpower development. This has lead to the cancellation of many waterpower projects to benefit of recreational users and advocates such as the ORA.

Xeneca would observe that if the ORA and other users wish to oppose waterpower development on "General Use Rivers," it defeats the purpose of this intended policy of setting aside rivers for recreational users and the policy should be reviewed. Many who view waterpower as a substantial benefit to the province would support that review.

The expectation is that current and future users on a "General Use River" will share the resource of which waterpower is an acceptable use. The Groundhog River (of which the Ivanhoe River is a tributary) was designated a waterway park in 2006 and numerous proposed waterpower developments were cancelled. The Groundhog is by far a superior river system that has been set aside for recreational enjoyment of the citizens of Ontario. When considering the development of the Chute the Xeneca asks the ORA to consider that the Groundhog is already available to local recreational users.

In summary, Xeneca proceeded forward based on a letter from the Minister of MNR into the FIT process and was awarded a FIT contract. On that basis, Xeneca commenced a Class EA. Class EA is a MOE process and there is no legal obligation to complete an MNR process to start or finish a Class EA.
Xeneca has closely and accurately followed the public consultation process as legally required under the Environmental Assessment process. Xeneca has engaged actively and repeatedly with all major stakeholders and First Nations, and kept detailed records of such engagement. Stakeholders and First Nations were notified of the Environmental Assessment process and their right to participate in the process as required by law.
Xeneca has in no way shown contempt of process in any manner as it relates to due public consultation on this project.

Applicant of Record

Applicant of Record has no meaning under law and grants nothing to Xeneca.

As defined by MNR, " 'Applicant of Record' means the individual/company/community including an Aboriginal community that through a site release process, has been granted the ability by the Ministry (MNR) to pursue required approvals and permits for waterpower development."

Permits and approvals are only issued after the Class EA is complete. MNR, under the *Lakes and River Improvement Act,* needs to issue Location Approval before it can issue Permits and Approvals; this requires a completed Class EA.

Field Studies Ongoing

Statement presented to Xeneca:
ORA submits that Xeneca must complete all studies before submitting their ER for Approval. Stakeholders cannot make an informed decision when all facts are not known.

Xeneca's Response:
Xeneca completed one season of study, which is the requirement to complete *New Projects on Managed Waterways* under the Class EA which is a 12 - 18 month process. Xeneca has provided this study work and its results in the Class EA for review.

Xeneca has determined that for future Permits and Approvals and working with Federal Agencies, additional study work would be prudent.

Project Description

Statement presented to Xeneca:
Xeneca was asked to prepare an addendum to the PD to include updates, but deemed it unnecessary**.**

Xeneca's Response:
Project Descriptions (PD) for each project are prepared at an early stage of the Class EA. The EA, supporting documents and post-EA permit applications represent the most current information. The detailed design phase of the project comes after the EA is approved, at which time more detailed information is available. Xeneca would be pleased to provide such information to the ORA on a regular basis as it is developed. ORA input is welcome.

Public Consultation

Requests presented to Xeneca:

1. An open, transparent and cooperative EA and approvals process;

2. Xeneca revisit all potential residual effects, and hire an independent consultant to conduct studies to confirm these important determinations and;

3. Public Meetings:
    - Must be held in a forum format where public participation is open, accommodating, fully informative, and everyone can hear all the questions and answers and
    - Xeneca provide displays with site specific design and engineered drawings, as well as details of the water management regime.

Xeneca's Response:

- **EA process:** Class EA requirements have been met and in many cases exceeded.

- **Public Information Centers:** PICs were held within process on the following dates:
    - January 13, 2011 – Foleyet Community Hall
    - July 7, 2011 – Chapleau Legion

  *Xeneca regularly met with local public interest groups

- **Study results and consultants:** Xeneca is satisfied with the studies and results conducted by its "arms-length" consultants.

Mitigation

Questions/Requests presented to Xeneca:

1. Will Xeneca release an increased environmental flow during spawning runs?
2. Fish ladders and/or resting areas for safe upstream/downstream passage
3. Long term study to establish the presence, numbers, seasonal movement and possible spawning area of Lake Sturgeon
4. Fish-friendly turbines
5. That a portage for canoers be provided

Xeneca's response:
Thank you for the input. Xeneca will work with the ORA to establish the practical details of implements the above objectives.

Public Safety

Questions/Requests presented to Xeneca:

1. ORA requests that Xeneca undertake further studies and incorporate effective safety measures into their operating protocol to ensure public safety, both above and below the dam.

2. Combined with global warming and poor ice condition above and below the dam, what mitigation steps does Xeneca propose to protect local stakeholders?

Xeneca's response:
In the post-EA phase of the process an independent, fully-qualified engineering firm will thoroughly review the safety aspects of Xeneca's facilities. It is Xeneca's intention to ensure the facility poses no additional hazard to river users than currently exists and the Ministry of Natural Resources and Transport Canada will be involved in ensuring this occurs.

Decommissioning of the Dam

ORA Requests to Xeneca:
ORA requests that Xeneca lodge funds in escrow for dam decommissioning if the GS is no longer viable and must be removed (due to Climate change etc.)

Xeneca Response:
Xeneca does not plan to decommission The Chute; it will be rehabilitated in 75+ years. At that time, if the GS is no longer viable, Xeneca will work the Agencies to set aside the necessary funds during the adoption period.

Modified Run of River

Requests: Requests made to regulators NOT Xeneca

Xeneca Response:
Thank you for the input. Please refer to Ministry of Energy website and http://www.mei.gov.on.ca/en/energy/renewable/?page=water_about.

The following are derived from MOE definitions:

> **Run-of-River:** A run-of-river facility uses only the natural flows in the river, as they are available, for generation. Therefore, all flow in the river is either passed through the plant, or partially released around the plant if the flow exceeds the capacity of the plant.
>
> **Run-of-River with Modified Peaking**: Many run-of river plants allow for limited storage of water. A run-of the river plant with modified peaking, however, allows the plant to produce more electricity during periods of high demand, and save water during periods of low demand for use at a later time.

Installed Capacity – Power Generated

Requests to Xeneca:
ORA is requesting that Xeneca use standardized references showing installed capacity as well as expected average power generation in all Notices and Reports for all dam proposals in Ontario.

Xeneca Response:
Thank you for your input.

Socioeconomic

Thank you for the input. Please refer to pages, 2, 6, 8, 9, 19, 30, 63, 66, 72, 96, 120, 139 and 146 of the EA Report.

Xeneca Response:
Xeneca believes that there will be substantial socio-economic benefit to the Town of Foleyet, the region and the Province as outlined in the Class EA. Xeneca believes over its operational lifespan, The Chute GS will provide economical clean electricity to the Province which, in the combination with taxes paid, will provide a net benefit.

Xeneca will work with all parties to optimize benefits and, if required, will provide a review of benefits post-construction.

The Chute and Third Falls

Request to Xeneca:
ORA requests that The Chute, Third Falls proposals, and the Ivanhoe Lake dam, be addressed under one Environmental Assessment, as these three dams would be operated as one unit, and would have a very significant negative cumulative impact on the Ivanhoe River, Groundhog River, and all downstream riverine ecosystems.

Xeneca's Response: Cumulative effects will be addressed in the Third Falls Class EA Report. Xeneca is not currently preparing the Environmental Report for Third Falls GS.

Conclusion

In conclusion we thank the ORA for its participation in the EA process. Xeneca hopes that the ORA will take up the offer to develop a cordial working relationship with Xeneca, and we hope that the ORA will engage further with Xeneca as we proceed in the process. Your input and suggestions are appreciated.

Best regards,

Vanesa Enskaitis
Xeneca Power Development
Stakeholder Relations