Questions to Xeneca

ID	*Question*
1	Mr. Mark Holmes has committed to the Mayor of Petawawa on several occasions in the past that there will be no kind of concrete dam in the Petawawa River. However, Xeneca's Project Description (section 2.1.5 and Appendix A, plate 12A) clearly describes a "broad overflow weir topped by a control structure". Will Xeneca confirm that such a structure is now part of the reference design?

Reply

2	What is the current scheduled date for the Notice of Completion?

Reply

3	On what basis was the Notice of Commencement revised (on or about 24 Dec, 2010) to change the status of the waterway from "unmanaged" to "managed"?

Reply

4	We note that the Project Description is undated, and does not include a revision history. Nor is there any indication of the author, reviewer, or approver. This is typical of the other Xeneca documents we have seen. We have wasted valuable time on reviewing documents that are now being claimed to be "out-of-date". Please confirm that future documents will be subject to revision control, and will identify the individuals accountable for their production. Please provide and maintain on the Xeneca's website a listing of all project documents containing descriptive information (existing and proposed) including the issue date (actual or scheduled), the currency status, and a document abstract. This is necessary to that the public has access to the information necessary for them to gain a good understanding of the project, which is implicit in the Class EA process.

Reply

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5	Please provide a copy of the public safety requirements that apply to this project, bearing in mind that the area downstream, starting 700 metres from the powerhouse is heavily used for recreation. In a previous resonse to this request, you passed the buck to the President of the Ontario Waterpower Association. He provided links to a series of 5 volumes entitled "Technical Guidelines and Requirements for Approval Under the Lakes and Rivers Improvement Act". However, these documents are headed "Draft - for discussion purposes only". It is hardly reassuring to note that, in in volume III of these documents, the Big Eddy dam would appear to have a Hazard Potential Classification of High to Very High, and that, in Volume IV, the weir structure proposed for Big Eddy is referred to as a "Drowning Machine". However, what I need are the requirements that will actually apply to the Big Eddy project. As project proponent, it is not acceptable that you should have to refer me to another agency for answers on this critical subject.

Reply

6	Is it Xeneca's intent to operate the Big Eddy plant using a modified peaking strategy (i.e. a strategy where flow is varied daily and hourly to take advantage of the 35% incentive offered by the FIT program to facilities that can deliver power at peak periods), as stated in the Project Overview document?

Reply

7	Please provide 12 sets of numeric data (1 set per month) on the daily flow cycle that Xeneca will commit to in their dam operating plan for each month of the year, assuming average monthly historic flows. Please provide maps of the maximum downstream area of inundation for each data set. This information is necessary to assess the safety impact on the public.

Reply

8	What is the calculated failure frequency of the level control structure (in engineering terms, this is the Mean Time Between Failures, or MTBF)? The MTBF must account for failures in the computer control system. This is necessary to assess the risk that the relatively unrelaiable control structure (relative to a properly engineered concrete dam, that is) represents to the public.

Reply

9	If the failure frequency of the level control structure exceeds the safety requirements, what approach is proposed to raise the overall safety of the installation to meet these requirements?

Reply

ID	Question
10	Will Xeneca commit in writing complete the design to the point that the details of all safety-related features (barriers, horns, lights, etc) are approved before construction commences?

Reply

11	Why are daily flow and headpond level variations not listed in the Project Description as a threat to aquatic wildlife to be examined in the EA? Will they be added?

Reply

12	Please provide the minimum residual flow value to be committed to for this project so we have time to carry out our own analysis of the consequences of this number. Please provide an indication of the expected downstream extent of any area where river flow will be, even temporarily, reduced to a value below that of the river flow into the headpond. This is necessay to assess the aesthetic impact of the project. To state, as has been done in the Project Description, that "the determination of this effect is positive or negative" is cynical to say the least.

Reply

13	Please confirm that the “Operational Zone of Influence”, which according to the PD is currently “unknown”, is the area of the river that will be affected once the plant is operational. If this is the case, how can an environmental assessment even start as long as this area remains “unknown”? Please confirm that the project will, in fact, influence the downstream flows (both positive and negative) at least as far as the last set of rapids before the Ottawa River.

Reply

14	Since no solution is available to permit sturgeon to bypass the dam, what mitigating features are proposed to make this project environmentally acceptable for the Petawawa River?

Reply

15	If peaking will not be employed, why does the design employ Obermeyer gates, since a simple, manually adjustable sluice gate would appear to offer a cheaper, more reliable design solution for simple run-of-the-river operation? Will Xeneca commit to removing these gates from the refernce design, since that would reduce the concern that Xeneca, or some other future owner, could switch to a peaking strategy once the plant is in operation.

Reply

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16	Please provide a map identifying the maximum area of inundation under 100 year flood conditions. Please confirm that this calculation includes a conservative allowance for obstructions caused by ice dams, slush, tree trunks and other water-borne debris that may be trapped in the area of the dam structure.

Reply

18	When will Xeneca publish their “Schedule of consultation events” per section 6.2 of the Class EA? Specifically, what is the current scheduled date for pubic open house meetings, and for the Notice of Completion?

Reply

19	Since the powerhouse tailrace flow will apparently comprise a high percentage of the total river flow, and will now be directed across the natural river flow towards the south bank of the river, the south foundation of the Petawawa River bridge, and perhaps even as far as the already eroded bank in the area of the Legion, please provide an analysis that demostrates that there will be no adverse erosive effects in these areas over the 40 year life of the dam and beyond.

Reply

28	It is my understanding that Xeneca is now examining the feasibility of providing a "concrete and rubble ditch" to ensure the "navigability" of the river downstream of the dam. What will be the downstream extent of this ditch, given that reduced flows downstream of the powerhouse will occur on a daily basis?

Reply

29	Does Xeneca agree that kayakers are unlikely to be attracted to a "concrete and rubble ditch", and consequently the project will destroy one of the premier urban kayaking sites in North America?

Reply

30	Why is there no mention of downstream public safety effects in Table 5.1 of the PD?

Reply

32	If the frequency of failure of the control structure exceeds the safety requirements, what approach is proposed to raise the overall safety of the installation to meet these requirements?

Reply

ID	Question
34	Why are daily flow and headpond level variations not listed in the Project Description as a threat to aquatic wildlife to be examined in the EA? Will they be added?

Reply

38	Since the only long-term economic advantage to the community appears to be the percentage of revenue which has apparently been offered to the town, but is not mentioned in section 1.1.4 of the PD, will Xeneca quantify this benefit?

Reply

39	Will there be a horn activation and flashing lights to warn of increased river flow when flow through the turbine is increasing, and if so, what will be the noise level of these horns?

Reply

42	What are the chances of damage to a downstream property owner's river frontage when a “tide” of water from full operation of the turbine passes his frontage? What effect will variable flow have on the islands, sand buildup on the Ottawa river where the Petawawa enters it?

Reply

46	If members of the public are using the river downstream from the outlet from the turbine can they be fined? There is apparently a $5000 fine for being within the barriers on the Madawaska.

Reply

48	Has an inventory of migratory fish been done for the Petawawa River? A monitoring plan should be prepared for both before and after construction.

Reply

69	Willl any fences be affected by ice?

Reply

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70	Please provide a human factors analysis to demonstrate in a convincing way that, in an area of high recreational activity, it is reasonable to assume that the public will respond in a safe fashion to the sirens, flashing lights, and signage described in Volume IV of the safety requirements documents provided by the OWA.

Reply