Mitchell Shnier

From: Mitchell Shnier [Mitchell@shnier.com]
Sent: Saturday, November 7, 2009 2:40 PM
To: Mitchell_Shnier@ieee.org
Subject: Save The Bala Falls e-Newsletter - November 7, 2009

Hello Shnier Mitchell,

Responding to the Environmental Screening Report for the Proposed Hydro-electric Generating Station at the Bala Falls

We are continuing our efforts on a number of fronts to have the review of the proposed power station at the Bala Falls elevated to an Individual Environmental Assessment. Over the past several months and years we've heard your passionate objections and thoughtful concerns regarding this project, and **now** is the time for you to be heard and **only through our individual efforts** will our concerns be heard.

THE BALA FALLS NEEDS YOUR HELP NOW!!

There are now only 20 more days to respond to the proponent's environmental screening report (so far, the proponent has rejected extending this review period, even when directly asked by our Councillor Mary Grady at the last District Council meeting).

Please take the time to write a letter to the Director of the Environmental Assessment and Approvals Branch (details below) and let them know why the recently released Environmental Screening Report has not effectively mitigated your concerns regarding the project. We have summarized below the key areas of concern that we have identified so far, some of which will most certainly be also of critical concern to you.

There is information in our presentation which was made to District Council last week by Jeff Mole, Alice Murphy and Mitchell Shnier, as well as in this follow-up letter, and this additional detail. The proponent has posted their environmental screening report, and we have summarized some of our concerns on our web site, http://SaveTheBalaFalls.com

Please review the above information **and the points at the end of this e-Newsletter** (you can also e-mail questions to Hatch Energy, details below).

If you agree that the proponent has not successfully mitigated significant negative effects of their proposed hydro-electric power station, please note these concerns in a letter or e-mail addressed to:

Director of the Environmental Assessment and Approvals Branch
Ministry of the Environment

2 St. Clair Avenue West, Floor 12A
Toronto, ON M4V 1L5
Phone: 416 314-8001 and 1 800 461-6290
Fax: 416 314-8452
E-mail: EAABGen@ene.gov.on.ca

Also send a copy to:
Trion Clarke
Hatch Energy
4342 Queen Street, Suite 500
Niagara Falls, ON L2E 7J7
Phone: 905 374-0701, extension 5298
Fax: 905 374-1157
E-mail: TClarke@hatch.ca

Specific Important Information for your Letter

a. These letters/faxes/e-mails must be received at the Ministry of the Environment by November 27, 2009.
b. Ensure your letter notes this concerns the Bala Falls Power Station project.
c. Include your full contact information, as the Ministry of the Environment will acknowledge receipt your input and provide contact information should you have additional questions.
d. Please send a copy of all your correspondence to info@SaveTheBalaFalls.com
e. Mention this to your Muskoka neighbours to be sure they get involved too.

The only way to get the proposed project stopped is that it must first be examined in more detail due to concerns that the proponent's proposed mitigation of the negative effects is not adequate. And the first step of this is to have the project elevated to an *Individual Environmental Assessment.* Therefore, your letter to the Ministry of the Environment could begin: "For the following reasons, I am submitting this request for an elevation." Then summarize your concerns, and then describe each in more detail with reference to what the proponent suggests and why this is not acceptable in this particular situation.

For example, you could choose one or two of the following issues that you feel comfortable writing about, read the corresponding additional detail (and referenced Sections of the environmental screening report) at the end of this e-Newsletter, and put your concerns into your own words (as simply copying and pasting text isn't as effective).

1. Public Safety
    a. For existing recreational activities, the proposed warning signs and safety booms would be dangerously inadequate.

b. The proposed design of the upstream safety boom is dangerous, and the correct redesign would be disruptive to the area's existing marine navigation, economic, and recreational activities.

c. The power station's water intake would create currents near the town docks that would be dangerous to boating, swimming and other existing recreational activities.

d. The proposed power station would destroy forever the centuries-old (and only safe) portage location for Lake Muskoka and the Moon River. The alternate portaging routes suggested are dangerous, unworkable, and don't make sense.

2. Negative Economic Impacts

a. Our cherished Bala Falls would be just a trickle, and would no longer be a tourist attraction or a cause for people to return to Bala to experience the natural beauty of the Bala Falls and the solid bedrock of the Canadian Shield.

b. The loss of 500' of scarce and easily accessible public shoreline – which is almost all there is in the area.

c. The negative and long-term effect on the tourism and economy of the area would be irreversible. The proponent has not done an economic study of this crucial issue.

d. Compensation, for either during construction or afterwards, has not been negotiated for the two immediately adjacent businesses.

3. Appearance

a. People are drawn to Bala to experience the natural beauty of the Bala Falls and the solid bedrock of the Canadian Shield, not to see artificial landscaping plunked down on a two-storey concrete industrial building.

b. The 81'-wide concrete intake (with safety fencing along the entire length) would ruin the small-town feel at Purk's Place and the Stone Church.

c. The proponent has refused to provide even the most basic details of the appearance of this proposed industrial facility. This is inexcusable, given that it would be located at the best-known, and most visible and visited part of Bala.

4. Noise

a. The noise calculations need to include all the noise sources, and a vibration analysis is also required.

b. The noise calculations used the wrong background noise assumption.

5. Fish Habitat

a. The proposed power station would destroy significant fish spawning habitat and the report provides conflicting suggested alternative locations, and no indication that these would be acceptable.

b. The analysis of the impact of fish getting sucked into the power station needs a second opinion.

6. Construction

a. There isn't enough detail provided on the disruptions that would occur during construction.
b. The proponent must post a performance bond so we have a guarantee that if construction begins, the project would be fully completed and the site fully restored.
c. Why is it that the wash sink in the proposed power station wouldn't need to connect to the town sewer line.

7. Operation
   a. More detail is needed concerning the testing for leaks and contaminents into the 288,000 litres per day of water which would be dumped into the Moon River after being used for cooling of equipment in the proposed power station.
   b. More detail is needed on the proposed changes to the Muskoka River Water Management Plan and the proposed Best Management Zone. Does this mean the water flow through the station would be stopped and started more frequently during the summer months.

Here is additional detail on the issues summarized above, including references to the proponent's text in their environmental screening report. Many of the issues below are described in Section 6 of the environmental screening report and other Sections are posted here.

1. **Public Safety**
   a. Warning signs to not jump off the railway bridge are already ignored and youth jump into the north channel. The proposed power station's water intake would make this extremely dangerous as the area below the railway bridge would be downstream of a safety boom and during the low water flow of the summer months, the flow into the water intake could vary widely, so that sometimes it would be found to be "safe" to jump and this would result in youth jumping at unsafe higher-flow times as well. In Table 6.1 the proponent notes “No mitigation measures possible to protect public safety”. The same youth would be tempted to jump off the lookout of the proposed power station into the turbulent tailrace water exiting the power station (I can imagine that being quite fun - but stupidly dangerous). The proponent's only suggestion is that posted signs would discourage this (Section 6.3.1, Figure 6.5). Also moving the fast water which is currently from the! south channel 160' closer (which is where the proposed tailrace would be) to the recreation area at the base of the north falls will create danger for this important public area (Section 6.2.2.3 and Figure 6.2b). They proposed safety booms and warning signs will not provide public safety (Section 6.3.2, Section 6.3.6.1 Appendix B Table B1 Effect 6.8).
   b. The upstream safety boom proposed (Figure 6.5) does not facilitate "self-rescue", due to the concave shape facing upstream. Firstly because being held by the current against the safety boom means that your boat would have the broad side towards the on-coming waves and current (which is extremely dangerous, especially considering that you're being drawn into

the most dangerous place on all of Lake Muskoka – the proposed power station's water intake). Secondly, to pull your boat by hand along the safety boom would require you to be pulling against the current to get your boat towards the shore. The safety boom for this configuration should be a "V" shape, with the point far upstream, so that you'd be going downstream to travel along the safety boom to shore. But this would make it difficult for boaters leaving the town docks, and this would mean that the safety boom would be in the way of going across the diver's point. The point is, ! there is no safe way to have fast water at the north channel. The fast water should stay at the south channel where it currently is.

c. While the proponent claims that the water speed at the town docks above the proposed water intake would be safe, their own water speed simulation (Section 6.2.3.1, 6.2.5.6, Figure 6.2c) shows that if one overshoots the dock, your boat would be pushed by the water to be held against the safety boom (they justify this water speed as being the same as during spring freshet – even though there wouldn't likely be any boating at this dangerous time). If you were to panic and jump out (or tip out of your canoe or kayak), then you'd really be in trouble. They have no suggestion for how someone would be rescued, or what group should have responsibility for this (or what training or equipment they'd require). They have no information on how long it would take to get the power station shut down. Transport Canada asked for this information in an e-mail to the proponent dated March 12, 2009, who replied that this information would be provided in the environmental s! creening report but it is not (Appendix D22).

d. Currently, portaging between Lake Muskoka and the Moon River only requires walking directly across the road. However, the proposed portage routes are unworkable and dangerous, as they require walking along the road or narrow highway sidewalk - with a canoe! And for some reason the possible future snowmobile bridge (which would be parallel to the CPR bridge) is suggested even though it has nothing to do with getting to or from the Moon River (Section 6.3.6.1).

2. **Negative Economic Impacts**

a. The proponent hasn't offered any justification nor had any community consultation on why the proposed 1 m^3/s or 2 m^3/s of flow over the north and south dams would be of any interest to potential tourists (Section 6.2.2.1, Section 6.3.5.1, Section 6.3.5.2, and Section 9.9).

b. Bala would be losing **500'** (!!) of publicly-accessible shoreline, but the proponent notes (Section 6.3.6.1) "*However, there will be an abundance of shoreline in the vicinity of the project*". However, most of the rest of the accessible shoreline in Bala is private, so this loss of public shoreline would be an irreversible, completely negative, and an unmitigated disaster. This loss of shoreline, and the loss of the Bala Falls (they would only be a trickle) would permanently remove the main reasons people come to Bala and return year after year.

c. They somehow expect there to be a net positive long-term effect due to this project, because of one employee who would periodically visit the power station and the taxpayer's money which would heavily subsidize them to

produce electricity (Section 6.3.7 and Table 6.1). They have not done any economic impact study on the effect that the reduction in tourism would have on the area's businesses.

d. They haven't finalized any compensation for the disruption (either during construction, or in the after-math of it) with Purk's Place or the business at the Stone Church (Section 6.3.1, Section 6.3.6.1 and Section 6.3.7.1).

3. **Appearance**

a. The proponent's suggestion of artificial landscaping on top of their concrete power station wouldn't be of interest to potential tourists as people can see that type of landscaping over the underground parking garages at condominiums in Toronto. People are drawn to Bala to experience the natural beauty of the Bala Falls and the solid bedrock of the Canadian Shield (Section 6.3.1).

b. Having an 81'-wide concrete water intake with fencing (even if a few bushes were planted in front) located directly adjacent to Purk's Place and the Stone Church would forever ruin the small-town feel of an important part of Bala's centre and feature attraction (Section 6.3.6.1 and Figure 6.3).

c. While the proponent has offered to landscape the project, we have no idea what would be under the landscaping, for example; where's the front door, how would the huge intake and tailrace gates be hoisted, how would waste be stored and handled, where are the ventilation intakes and exhausts, where is the emergency back-up generator's diesel engine exhaust, how would the huge 33'-wide, 18'-high steel gate and face of the power station looming over the Moon River be disguised, what could they do for the side of the power station facing the north falls other than pile up blasted rock, what would be the appearance of the 75'-long and 15'-high retaining wall (facing the Moon River) for the driveway. These details would be required before anyone else could get a building permit; we need to know these important details for this very visible and high-profile structure now as part of this part of the environmental screening report review process, not at some future detaile! d design stage (Section 6.3.5.3 and Figure 6.6).

4. **Noise**

a. Currently, the noise calculations (Appendix C1) only includes two noise sources (the generator cooling fan and the step-up transformer magnetostrictive noise). Missing is the noise from the turbine, generator, inverter electronics, and the transformer cooling fan. Also, there needs to be a vibration analysis included – for the locations on and beside the power station where the public will be expecting a "park-like setting" (Section 6.3.4).

b. The noise calculations (Appendix C1) assume the area is Class 1 or Class 2 (as defined in the Ministry of the Environment's *Sound Level Limits for Stationary Sources in Class 1 and 2 Areas (Urban)*, which is posted on their web site), which assumes that Bala has a background "urban hum" to mask the noise of the power station. Firstly, Bala doesn't have an urban hum (which is defined as the "aggregate sound of many unidentifiable, mostly road traffic related noise sources"). Given that if this project proceeds, the

falls would be reduced to a trickle, so there wouldn't be any masking background sound from the falls. Table 7.1.

5. **Fish Habitat**

   a. There is inconsistent information given on where the additional fish spawning areas proposed (to make up for the areas lost due to lack of water flow) would be, or even any confirmation that they would be adequate (Figure 5.3 and Figure 6.3) and acceptable to the Ministry of Natural Resources and Department of Fisheries and Oceans. This should be resolved before approval is given to proceed.

   b. In Section 6.2.5.6 there are almost five pages on *fish entrainment* (that means fish getting sucked into the 45'-high, 31'-wide water intake). They provide much discussion on what fish are expected to do, for example "Fish would most likely utilize burst swimming capacity to escape entrainment", "Small fish may not be able to attain sufficient swimming speeds to escape entrainment into the intake...", "it is felt that small fish would be able to determine the changing flow velocity regime in order to avoid swimming into the higher velocity plumes. However, if for some reason they do enter the higher plume areas (e.g., while escaping predation), they may become entrained through the powerhouse (see mortality discussion below)". And "trashracks do provide a visual cue to fish that they are entering the intake, and need to swim to escape". Finally, they conclude "There is not predicted to be any difference in the ! number of fish that are lost to Lake Muskoka due to going through the powerhouse post-construction or going over the North Bala Dam under current conditions. Given this, no additional mitigation is proposed." That is a really big logic jump there. Currently only the surface water at dams goes over the falls (and fish would just get thrown over the dam. But the power station's water intake would be like a floor-to-ceiling vacuum cleaner sucking fish from every depth into it. <u>It would be great if knowlegable people could check the references in this Section to see how relevant they are in this situation</u>. Also this is the only place in the report where the water speed is examined for safety, they don't look at what a safe water speed (at the safety boom, for example) would be for any type of boating activity, nor for swimming. Yet in Section 6.3.6.1 they conclude that the regatta could continue to run because the water speed at the town docks will not be increased.! They neglect to mention that a few feet from the town docks the water speed would certainly be increased (as they show in Figure 6.2c), and this would draw people to the extremely dangerous water intake.

6. **Construction**

   a. They note possible short-term (and short-sighted) benefits of some construction work, but neglect to mention rock-drilling machines, the blasting cycle (stop all traffic, sound warning horns, detonate explosions), the construction crane with a 100' boom, the water pumps running to keep the water out of the 270'-long coffer dam at the base of the north falls and the 160'-long cofferdam in the north channel, the 65'-long steel Bailey bridge (with 8½'-high sides and 90' of approach ramps to the 4½'-high raised roadbed), the noise of the rock crusher, the 1,700 dump-truck loads of rock and 445 dump-truck loads of soil to be excavated and hauled (and

the idling dump-trucks), and that all the trees west of the road and beside Purk's Place would be cut down. What would 18 months of this (including an entire summer season) do to the area's economy. And any delay would result in a second summer of this.

b. Normally, one withholds some of a contractor's payments to ensure that the job is fully completed satisfactorily. Because in this case the proponent is getting other sources of funding, the District, the Township, the MNR, and we have no assurance that the job would be completed as proposed and the site fully restored. It should therefore be required that the proponent post a performance bond to ensure that the project would be finished completely as planned and the site fully restored as required – even if there was a dispute with the contractor, a change in the political or business environment, a technical problem encountered, or a problem within the proponent's partnership (which has no operating history or other assets). The proponent states that site remediation would be the responsibility of the contractor (Section 10.2), but if the contractor encounters some business difficulty or disagreement with the proponent, it should be required that the ! proponent accept full responsibility. The proponent has only offered that they could and fully intend to finish the project, and that they have provided evidence of this to the MNR (Appendix D23). We feel it is absolutely necessary that the proponent **guarantee** (that means, with pledged collateral, not just evidence that they are high net-worth individuals that could personally raise the financing if all goes - and continues to go - well) that the project would be completely finished, to the satisfaction of the Township, District, and MNR.

c. They do not propose connecting to the town sewer line (which runs past the proposed site) for their wash sink even though this is required for all other buildings and residences.

7. **Operation**

a. The proponent does not provide any detail or efficiency of the method to be used to remove nutrients from the drain water from the wash sink, nor how effective their oil-water separator would be for any oil or other fluid leaks into the 288,000 litres per day of water they will use for cooling of the plant's machinery (Section 6.2.2.4), that will then be dumped directly into the Moon River (that's as much water as is used by 260 year-round homes). They don't say whether it is a second oil-water separator or the same one that will deal with oil leaks into the main sump (Section 6.2.4.3). They don't mention how oil leaks into the cooling water would be detected, nor how often they would check for this. This significant operational impact should be in Table 7.1 but isn't.

b. They repeat several times that the power station would be a run-of-river operation (Section 6.1, Section 6.2.2.1, Section 6.2.5.4, Section 9.7), which means that the volume of water through the turbines would be the same as that which would have run over the dams. But they propose an amendment to the Muskoka River Water Management Plan which they call the Best Management Zone (Section 6.2.2.2, Section 9.9, and Figure 9.3). During the main summer recreation period (June to September) they would be able to stop the water flow through their turbine and let the water level of Lake

Muskoka build up by 4 cm to 6 cm, and then let this water out through the turbine at a faster rate until the water level in Lake Muskoka drops the 4 cm or 6 cm. This "ponding operation" would enable them to run the power station intermittently when there wouldn't be enough run-of-river flow to run the turbines (which require at least 14 m^3/s – Section 6.2.2.1). Th! ey do not provide any other rationale for proposing this Best Management Zone. Note that even though Section 9 confirms they are required to provide "the rationale for the proposed amendment", this does not appear in the document (other than "to provide some operational flexibility to the plant in order to deal with changing inflow rates" – but if that was the reason, why is the largest tolerance band needed when the water flow rates are the lowest when it should be the easiest to regulate the water level). Such ponding operation would be harmful to the fish (Section 5.2.8.5), would significantly add to the danger to nearby recreation since one wouldn't know whether the plant is running or when it might start (can you imagine kids jumping from the railway bridge thinking the plant wasn't running an hour ago and it was safe to jump then, or not being concerned about overshooting docking at the town docks upstream of the power station because last ti! me it wasn't a problem).

If you have any questions or comments, please contact us at
info@SaveTheBalaFalls.com
