



November 5, 2010

Township of Muskoka Lakes
P.O. Box 129
1 Bailey Street
Port Carling, ON
POB 1J0

Attn: Mr. Walt Schmid, P.Eng., CAO

Re: North Bala Falls Small Hydro Project – Follow-up to Township Staff Report dated October 5, 2010 regarding SREL’s Response to Elevation Request

Dear Walt:

The following letter is in response to the Township’s Staff Report dated October 5, 2010 that is the latest in the following sequence of dialogue regarding the original Township elevation request issues of November 27, 2009.

1. November 27, 2009, Township issues elevation request to MOE and SREL.
2. SREL responds to issues in elevation request on March 17th, 2010.
3. Township issues a staff report commenting on SREL’s March 17th response on August 11, 2010.
4. SREL provides update to Township on August 8, 2010 on specific issues from Staff Report.
5. SREL responds to Township’s March staff report on September 22, 2010.
6. Township issues staff report commenting on SREL’s September responses on October 5, 2010.

For brevity, I have only provided SREL’s responses to those issues that the Township has indicated to still be outstanding in the October 5th staff report and have combined those items that are similar or identical. Copies of the previous correspondence are available upon request.

Question 1b, 1d, 6b:

As previously stated a cross section of the North Channel has not been produced as it is not required for our work, and is therefore not available. Instead of producing such a drawing, Hatch Energy has reanalyzed the capacity of the Bala dams to handle the potential flows with the proposed cofferdam in place with the Township’s concerns in mind and provided a memo from Hatch Energy to describe the basis and conclusions of the calculations.

2300 Yonge Street
Suite 801, P.O. Box 2300
Toronto, ON M4P 1E4
Phone: 1-866-578-BALA (2252)

To summarize Hatch's earlier memo, "The flow capacity estimate of the north channel, while the cofferdam is in place, has been reviewed and found to be reasonable. That is, the capacity of the channel is expected to reduce by 40 m³/s to 178 m³/s (from 218 m³/s) when the lake level is at 226.4 m (i.e. the 100-yr lake level).

In an effort to further explain the conclusions, it should be noted from the drawings that the depth of the channel is significantly deeper at the proposed location of the cofferdam than at the dam. Therefore, in existing conditions, the dam capacity is the limiting variable regarding how much flow can be passed through this channel and dam. With the cofferdam in place, even though in plan it appears to take up approximately 40% of the area of the channel, when the channel's depth is taken into consideration, the overall capacity of the temporarily restricted channel (at the cofferdam) will only be slightly lower (by 40 m³/s) than the existing dam.

The following table illustrates that the existing flow area immediately upstream of the north dam is only slightly larger (101.6) than the flow area at the cofferdam when the cofferdam is in place (90.6).

Cross Sectional Areas:

Cross Section Location	Flow Area (m²) Before Cofferdam	Flow Area (m²) With Cofferdam in Place
At middle of cofferdam	253.2	90.6
Immediately upstream of north dam	101.6	88.3

SREL considers this item to be resolved.

Question 2a, 2b, 3a, and 6f:

SREL formed a multi-stakeholder Flow Distribution Committee to review the flow distribution plan as presented in the ESR. The Township's CAO sat as a member on this committee along with 8 other individuals from the community and 3 non-voting members. The 3 non-voting members included, MNR who attended the meetings as an observer and presenter of information regarding the MRWMP, the current operations of the Bala dams, and the regulatory process. The Committee was chaired by a member of the MRWMP Standing Advisory Committee and SREL sat as a non-voting member providing information and making presentations to the group.

Three meetings were held in October 2010 for a total of over 12 hours of presentations and deliberations. The result of these meetings was that the committee made several recommendations to SREL regarding possible changes to the proposed MRWMP amendment for the project. These recommendations are now being reviewed by SREL to determine the economic and operational impacts to the project prior to finalizing any modifications to the MRWMP amendment. The amendment will ultimately be reviewed the MRWMP SAC and a decision on its appropriateness will be made by the MNR District Manager.

SREL considers this issue to be resolved from the Township's standpoint as MNR, MRWMP SAC, and SREL has listened to the comments from the public and MNR will be agency making the final decision on these flows for the MRWMP.

Question 4d:

SREL has provided its comments in writing to the Township in its August 8th update regarding its solicitor's document and subsequently talked to the solicitor on the phone on October 14th for further clarification. It was agreed by both parties that the regulation was incorrectly named, but the general conclusions by the Township's solicitor remain correct.

This issue is considered to be resolved with respect to SREL's involvement, any further actions are between the Township and the Township's solicitor.

Question 5a, 5b, 5c, and 6q:

The Economic Impact Study has been completed by an independent consultant C4SE. Two hard copies of the study have been provided to the MOE and the Township. SREL will be posting the document on its website www.balafalls.ca for the public.

The general conclusions of this study indicate that from a provincial and overall Muskoka perspective, the economic benefits will be significant. In addition, it was noted that many businesses are willing to provide goods and services to the project during construction. SREL's "buy local" policy, therefore, should result in positive benefits for the local Bala Community over the construction phase. The study further concludes that they do not expect long term negative impacts from this project.

Recommendations have been provided to help to reduce inconveniences associated with the construction phase. SREL is excited to work with the community to implement these recommendations.

This issue is considered to be resolved.

Question 5d:

The Economic Impact Study indicated that there is no consensus as to whether or not the community would like or benefit from the four season bridge. We, therefore, leave this issue with the municipality to make the decision if they would like this initiative included as a part of the compensation plan for the municipal land. If so, this message will need to be relayed to the District of Muskoka for the future lease discussions.

SREL considers this issue to be resolved with respect to the elevation request. However, future discussions may be forthcoming from the point of view of future lease discussions. This would, however, be outside of the MOE approvals process.

Question 5e:

It is assumed that the Township issue with the earlier response is that it was not a definitive statement. SREL agrees to install a temporary traffic light at the intersection of the MR-169 and Bala Falls Road if it is decided by the Township and District as appropriate and the required approvals are provided.

SREL considers this item to be resolved from an elevation request perspective. Future discussions regarding the installation of this system will, however, need to occur with the appropriate municipal staff.

Question 6e:

It is understood that the Township has not requested more information regarding this issue, however, we have provided the following as a matter of update on the subject.

SREL, MNR and DFO have been in further discussions regarding the fisheries impacts at the site. SREL has agreed to provide sufficient flow over the north dam (as determined by MNR and DFO) to maintain the walleye spawning beds that are currently in this location. The DFO is currently reviewing this commitment and will be providing final comments on an amendment to the ESR to incorporate this change in the upcoming weeks. This is a very positive milestone in the development of the project with respect to fisheries.

SREL considers this issue to be under the mandate of other regulatory agencies (MNR and DFO).

Question 6i and 6j:

The Staff Report's statement that "SREL also indicates that this is not a regulated maximum so it may be safe to assume that the flow rates may at times be higher" is not correct. The statement that "this is not a regulated maximum" was to clarify that there is currently no agency defined velocity to protect fish from impingement or for public safety at the inlet. However, once the intake is constructed to allow a maximum of 0.6 m/s velocity, the velocity through it could not go any higher unless the turbine size was increased to allow more flow. There would not be an operational decision to change velocities, but instead a structural design that sets the maximum velocity at the intake.

In response to the Township's request for examples of mitigating measures that could be implemented to ensure that velocities in the area of the Bala Wharf: a baffle or curtain could be hung laterally at the south end of the dock to reduce velocities.

It should be noted that the studies completed on estimating velocities at the Bala Wharf indicate that velocities will be well within acceptable ranges for boating and swimming. These estimates were based on flows through the plant equal to 80 m³/s. It should be noted that typical flows in Lake Muskoka during the typical swimming season (June through September) are half of that value (average monthly flows in June = 48 m³/s, average monthly flows in August = 22 m³/s) (based on the flow data from 1937 to 2007).

SREL considers this item to be resolved.

Township of Muskoka Lakes
November 5, 2010

Question 6k:

The Township is asking for clarification from MNR and therefore this is not an issue for SREL.

However, it should be noted that MNR has currently posted that swimming, boating, fishing and wading are not permitted in this area at the north falls. Therefore, SREL cannot suggest that the project will either allow or prohibit swimming in this already unsafe area.

That said, our hydraulic studies shown in Figure 6.2b of the ESR illustrates that the flows from the tailrace are not expected to “fan out” to in front of the north falls. Again, it should be noted that this figure was based on plant flows of approximately 82 m³/s and that typical flows being passed through the combined Burgess G.S., North Dam, South Dam and the new plant will average less than half of this amount during typical swimming seasons between June and September (average monthly flows in June = 48 m³/s, average monthly flows in August = 22 m³/s) (based on the flow date from 1937 to 2007)

Please call me if you would like to discuss any of these items further (905-331-9692).

Respectfully,
Swift River Energy Limited



North Bala Small Hydro Project Manager

c.c. Larry King, Hatch Energy
Adam Sanzo, EAAB, MOE
Steve Taylor, MNR