



SPECIAL COUNCIL MEETING AGENDA REPORT

TO: Mayor Ellis and Members of Council

MEETING DATE: August 11th, 2010

SUBJECT: NORTH BALA SMALL HYDRO PROJECT – ENVIRONMENTAL SCREENING / REVIEW

- RECOMMENDATION:**
1. That Council accept the August 11, 2010 North Bala Small Hydro Project- Environmental Screening Review Report prepared by the Chief Administrative Officer, and the recommendations contained therein; and
 2. That the Chief Administrative Officer be directed to work with Swift River Energy Limited to obtain answers to the questions identified in the report and establish time frames in which these answers will be obtained; and
 3. That the Chief Administrative Officer be directed to forward a copy of the Report and Councils concerns to the MOE Director of EAAB, responsible for the North Bala Small Hydro Project, requesting that the decision for the ESR Approval be deferred until answers to the municipalities concerns are addressed by SREL, most specifically those issues relating to public safety, the economic well being of the community and protection of persons and property.
 4. That the Chief Administrative Office report back to Council at its September 15th meeting with a project status update.

<u>APPROVALS:</u>	Date	Signature	
Submitted By:	Walt Schmid, CAO	<u>08/11/2010</u>	<u>Original signed by W. Schmid</u>

ORIGIN: Government of Ontario, Swift River Energy Limited

BACKGROUND:

The Government of Ontario has released a number of potential hydro electric power generation sites for development throughout the province. The North Bala Dam project was offered for competitive release under the MNR Waterpower Site Release Policy. Swift River Energy Limited Partnership (SREL) was named as the Applicant of Record, giving SREL the leave to undertake an environmental screening report of the proposed project and to seek the requisite permits and approvals.

Over the last number of years the Council of the Corporation of the Township of Muskoka Lakes has passed the following resolutions relative to the proposed North Ball Dam project:

- 1) On January 5, 2005 Resolution PC-7-5/01/05 was carried stating;

“the Township of Muskoka Lakes advise the MNR that any potential development at the Bala North Dam operated in accordance with the operating ranges of Lake Muskoka and Bala Reach as specified in the MRWMP;

and further that any potential facility also consider the need for scenic flows, public access for traditional uses and continuity of business in local area;

and further that a member of the Public Advisory Committee for the MRWMP be included on the review team for the proposed development.”

- 2) On July 8, 2008 Resolution C-29 08/07/08 was carried stating:

“BE IT RESOLVED THAT the Council of the Township of Muskoka Lakes, concurs “in principal” that the District Municipality of Muskoka consider the use of the District owned lands, located on the south side of the Bala Falls North Dam, by Swift River Energy, as part of a new hydroelectric generating facility, all subject to further public input and successful completion of the required Environmental Screening”.

- 3) On October 21, 2008 Resolution C-14-21/10/08 was carried stating:

“the council of the Township of Muskoka Lakes recommends to the Ministry of Natural Resources, and Swift River Energy that the environmental screening for the hydro project at the North Bala Falls include:

- i the heritage value of the North Bala Falls and any related heritage impact the hydro generation station may have on the falls. And that
- ii the environmental screening process takes into consideration the potential impact that the proposed construction may have on Bala’s economy, including its important winter economy by addressing safe snowmobile movement around the construction site, by investigating alternative water crossings of Bala Bay.”

- 4) On November 24, 2009, Resolution C-23-24/11/09 was carried stating:

Be it Resolved that the Report ,“North Bala Small Hydro Project- Environmental Screening Review” be forwarded to Hatch Energy for response to the various questions outlined in the analysis section of the report, all in keeping with the Environmental Screening Process established by the Ministry of the Environment, and;

That the Township of Muskoka Lakes requests that the Environmental Screening Process Review Period be extended for an additional 90 days in order to address the municipalities concerns, and;

That Township staff report its findings back to Council at some future date.

SREL hired Hatch Energy to complete an Environmental Screening Report (ESR) which was completed in October 2009. The proposed project is subject to the Ontario Environmental Screening Process for Electricity Projects as well as the Canadian Environmental Assessment Act.

Public comment for the development of a 4.3 MW run of the river hydroelectric facility at the North Bala Dam were accepted until November 27th, 2009. The release of the October 2009 ESR provided council with its first opportunity to analysis the proposed project with all facets presented together in one document and provided new information not yet presented.

The Township of Muskoka Lakes submitted an elevation request to Hatch Energy and the MOE Director of the EAAB in order to have municipal concerns addressed prior to any approval of the project.

A meeting was held with Swift River Energy Limited (SREL) representatives on January 22nd, 2010. The Township received a response to its "elevation request" on March 18th, 2010. A number of Township concerns were addressed in this correspondence however a number of outstanding issues continued to require answers. Accordingly numerous additional phone conversations have been held with SREL, as well as discussions with the Department of Fisheries and Oceans, Transport Canada, the Ministry of Natural Resources, the Township's solicitor, the Muskoka Lakes Chamber of Commerce and members of the community, in an effort to understand and address community concerns.

ANALYSIS:

Legal Opinion:

Many members of the public have asked *"Why doesn't the Township simply stop this project?"*

In staffs November 24, 2009 report, Council was advised that the Provincial Governments introduction of the Green Energy Act, and Green Economy Act would likely render certain municipal by-laws inoperative with respect to a municipality's ability to stop or change any designated renewable energy projects. It was likely that this would apply to the North Bala Dam Project.

To confirm the municipality's understanding of the new legislation, staff have obtained a formal legal opinion from its municipal solicitor, Burgar Rowe Professional Corporation. Burgar Rowe was asked to give an opinion whether the Township had the ability to control or stop the hydro project proposed at the North Bala Dam by SREL. A copy of the legal opinion is attached for Council's information, Appendix "A". In short the solicitor advises that:

1. "The net result of this (Green Energy Act Regulations) is to remove from the municipal level of government decision making into renewable energy projects. While proponents are required to engage in consultation with municipalities during the approval process, local authority to control or stop such projects has largely been removed and placed at the provincial level with limited rights of appeal to the ERT..... Under the Act , a "person resident" can appeal a renewable energy project only on grounds that it will cause "serious harm to human health" or "serious and irreversible harm to plant life, animal life or the natural environment". The harm must not only be serious, and in the case of plants, animals and the natural environment, irreversible, but the burden of proof rests with the appellant to prove that it will occur as a result of the proposed development"
2. *"In view of the overall intent of the legislation and the underlying government policy to promote and develop an economy based on sustainable renewable green energy, it is very unlikely that a municipality could prevent a green energy project from proceeding if it is likely to obtain EPA approval. The recommended approach is to participate actively in the consultative process by requesting detailed information and responses to objective questions at the earliest possible stage. It is also recommended to focus on mitigative*

factors and alternatives and alternatives that will attain the best solution local municipal interests with respect to a particular green energy proposal.”

In short the Township of Muskoka Lakes does not have the authority to stop, or control the North Bala Small Hydro Project Environmental Screening Report (ESR) or project. This authority lies solely with the Province of Ontario.

Analysis of SREL Response to the Townships Elevation Request,

A meeting was held with SREL on January 22nd to clarify the Townships concerns. A written response to the Township's concerns was received March 19th 2010. Numerous phone conversations have since been held with SREL, in order to gain clarification to their response. Similar discussions have been held with Transport Canada, the Department of Fisheries and Oceans, the Ministry of Natural Resources, the Ministry of the Environment, the Ministry of Culture and others in an attempt to clarify various positions.

Even though the municipality may not have had “jurisdictional rights” in various areas of concern or may have had its jurisdictional rights removed as a result of the new Green Energy Act, all agencies were cooperative and open in their responses.

The following analysis provides a copy of the Township's questions of November 24, 2009, the SREL March 18th response to these questions (in italic), and staff comments to SREL response. The analysis is presented in the order provided by SREL.

Staff comments may include updated information provided by SREL or comments from various government ministries, as may be applicable. In some cases SREL has satisfactorily answered the Townships inquiries, in other cases only partially so, hence requiring further information or a position by SREL. A complete copy of the SREL correspondence is attached as Appendix “B”.

Question 1a: Will the Bala North Dam be operated within the Lake Muskoka / Bala Reach Operating Ranges as set out in the MRWMP? The municipality seeks further clarification both from MNR and SREL as to the impact on Lake Muskoka water levels during high flows or the spring freshet, resulting from the establishment of the temporary cofferdam/working platform proposed to be constructed in the North Channel upstream of the powerhouse intake. Will the temporary cofferdam/working platform result in temporary higher water levels in Lake Muskoka? If so, to what extent?

SREL Response: *MNR will continue operations of the two dams to maintain the water levels on Lake Muskoka and the Bala Reach during the construction period as they do currently. Both the North and South Bala dams will remain operational during the construction period. The proposed upstream cofferdam will be located upstream of the road bridge leaving all of the North Dam spill bays available for passing flow. The South Dam will continue to have priority in terms of releasing flows from the Lake. Additional spill capacity is available at the North Dam once the maximum spill capacity at the South Dam is achieved.*

The construction of a temporary cofferdam will have little or no effect on water levels during high flows or the spring freshet. Any raising of the water level caused by the cofferdam can be easily compensated for by the removal of stop logs. Note that the upstream cofferdam will cover a relatively small area, as the actual intake structure will be constructed in the dry behind a rock plug. The cofferdam will only be required for some localized deepening of the intake channel. In order to limit any possible complications with spill operations, the construction schedule is planned to employ the upstream cofferdam outside of the spring freshet months of April and May.

Comment: SREL have advised that the coffer dam is not to be in place during the high flow spring freshet. MNR confirms that they will be monitoring the lake levels during the proposed construction, including the timeframe when the cofferdam is proposed to be in place in the North Channel. MNR will be responsible for the operation of both the North and South Bala Dams during the entire construction period. The onus of water level control will remain with the government agency which has historically been responsible for dam operations.

SREL response is acceptable and has been confirmed with the MNR.

Question 1b: Does the south dam have the capability to convey all the upstream flow? If not, to what extent does the south dam have the ability to relieve higher water levels on Lake Muskoka?

SREL Response: *The combined capacity of the north and south dams corresponds to the 1:100 year spring flood of 470 m³/s at a lake water level of 226.4 m. The south dam has the capacity to pass 252 m³/s and the north dam 218 m³/s. With the cofferdam in place, creating a restriction in the north channel, the reduced combined flood capacity of the north and south dams would be approximately 430 m³/s at a lake water level of 226.4 m (as estimated by our consultant Hatch). This reduced capacity corresponds approximately to the 1:48 year return period spring flood flows.*

It should be noted that based on historical records, the majority of the high spill requirements occur during the spring freshet period in April/May. In order to limit complications with spill operations, the construction schedule, as stated in Section 5.2.8.2 of our ESR is planned such that the upstream temporary cofferdam will be installed in the initial year of construction following the spring freshet (July) with the intention of removing it prior to the freshet the following year (February), thereby avoiding this period of high flow.

As is typical for these types of installation, the cofferdam will be constructed to withstand the 1 in 20 year spring flood event. The 1 in 20 year flood for this location is 362 m³/s which is less than the temporary combined capacity of the two dams.

Comment: Based on review of Figure 2.4, the average weekly historical flow (1982 to 1999) for the north and south dams during the high flow spring freshet have been recorded as 148cms and 108cms respectively for a total average weekly peak spring freshet flow of 256cms. The south dam if opened completely should convey 252cms, 4 cms less than the full capacity needed to convey the historical average weekly flow during the spring freshet. This leaves the entire capacity of the North Dam of 218 cms, less 4 cms, or 214cms, available for conveyance. With the cofferdam in place it is suggested by SREL that the North Channel capacity will be reduced by 40 cms or 178 cms, more than sufficient capacity to convey the average weekly historical flow. SREL advises that it will construct the cofferdam in July, after the spring freshet, when flows have been reduced, with the onset of drier summer weather. Average weekly historical flows (1982 to 1999) for July are 36 cms. The south dam would have more than ample capacity to convey average historical weekly flows during the summer and fall.

It should be noted however that heavy and prolonged rainstorm events especially when combined with quick spring snow melts could result in higher than normal flows, which may result in capacity concerns at the North Channel when the cofferdam is in place. SREL has suggested that the south dam and reduced capacity north dam could still convey 1:48 year spring freshet flow with the cofferdam in place if the cofferdam is installed as shown on Figure 5.2.

The 1 in 48 year melt is a significant high flow event. That being said, the Township has requested that it be provided with a cross-sectional area of the North Channel showing the greatest encroachment of the cofferdam into the waterway during construction. This information has been denied by SREL.

The Township requests that this information be provided to confirm the capacity reduction of the channel as a result of the cofferdam construction and to ensure that all agencies understand the extent to which the cofferdam will encroach into the North Channel.

Question 1c. Are there other constrictions upstream of the North Dam that has a greater effect on any backwater effects in Lake Muskoka created by the (cofferdam) working platform?

SREL Response: *There are upstream constrictions that can create localized changes in water level at the dam. In addition, given the large size of Lake Muskoka also experiences wind effects that can change water levels. All of these issues are currently managed within the MRWMP and will continue to be during the construction period.*

Comments: The MRWMP is monitored by the MNR and is outside of the municipality's jurisdiction and control. The MNR advise that they will be monitoring lake levels during the construction of the hydro generation facility to ensure that flooding that may cause property damage will be avoided or mitigated.

Question 1d. What measures are proposed to mitigate upstream flooding during construction should the introduction of the working platform create increased water levels on the Lake?

SREL Response: *Should a flood event occur that could not be passed by the combined South Dam and reduced capacity North Dam, SREL would have the cofferdam removed to allow the flood to pass. Given that the proposed work to be done behind the cofferdam will only be excavation work to deepen the channel, removing the cofferdam can be done quickly and easily, without any damage to our new construction. Note again, that the construction schedule will be designed to have this work completed outside of the spring freshet high flow period to minimize the chance of this scenario occurring.*

Comment: SREL indicates that the cofferdam will be constructed in July, after the spring freshet and removed prior to the spring freshet of the following year. SREL also indicates that should the capacity of the dams be exceeded, the cofferdam can be removed, opening up the North Channel to its full width.

Staff note that recent mid winter thaws have created high water levels and high flows in the Muskoka River. To minimize the potential of flooding upstream of the Bala dams and associated property damage, it is recommended that the coffer dam be removed from the North Channel as soon as practically possible, creating a capacity flow in the North Channel at least as great as currently exists. This requirement should be incorporated into the construction contract for the works.

It is also recommended that a contingency plan be created by SREL and approved by MNR that would clearly identify how the cofferdam would be removed in the event of any high water event. This contingency plan should identify what equipment is required to remove the cofferdam, where the equipment can be acquired, the flow rate or water level the equipment should be brought on site in preparation for a cofferdam removal , and at what water level or flow rate the cofferdam be removed in order to protect upstream properties.

The Township has concerns that should the cofferdam be removed too late in the process, cofferdam rock debris could be washed downstream by high velocity flows, potentially damaging the existing north dam structure. We leave this consideration to the MNR operating authority to address.

Question 2: That any potential generating facility consider the need for scenic flows, public access for traditional uses and continuity of business in the local areas.

Question 2a. It is recommended that both dams be modelled in order to visually observe the proposed controlled water flows. Based on this observation, a better determination can be made to establish an acceptable aesthetic flow over the dams.

SREL Response: *SREL and its consultant Hatch, with the assistance of MNR, completed a Qualitative Flow Assessment for the project in June 2009. An abridged version of this report is provided attached for your review. It includes photos from various locations around both dams at a flow of 2 m³/s. Unfortunately we were not able to reduce the flow to 1 cms at that time due to some worn or warped logs. In order to reduce to 1 cms, we will likely require replacement of stoplogs. A video was also taken at south dam at a flow of approximately 2.5 cms. Unfortunately, MNR had already started removing some of the logs before we were able to film the flow at 2.0 cms. This 28 second video is available to Council on request.*

Comment: Section 6.2.2.1. of the Environmental Screening Report proposes that should the project be approved, the flow rates at the north and south dams would be reduced to a combined total flow rate of 2 cms. This flow rate is less than the flow rate currently experienced at either dam when only leakage occurs and no water tops over the dam.

SREL hired Hatch Engineering to undertake a Quantitative Flow Assessment at the North and South Dams on June 11, 2009, (Appendix "C"). Flows were reduced to an estimated 2.0 cms per dam and included stop log leakage only. This would mean a total 4 cms was being passed down stream through stop log leakage, twice the proposed volume as recommended in the ESR. SREL has provided a copy of photographs illustrating the 2.0 cms flow downstream of each of the dam structures. Hatch advised that the flow could be reduced to the proposed 1 cms per dam if warped stop logs were replaced.

Staff suggests that the proposed 1 cms per dam is totally unacceptable and will dramatically affect the aesthetics of the falls. Although 2.0 cms may be the typical existing stop log leakage rate at the North Dam, 1.0 cms would be a dramatic reduction in the historical flow and attraction of the falls.

Review of the June 11th photographs of the South Falls at a leakage rate of 2.0 cms indicates a flow that would by no means attract the attention of tourists and residents that visit the site each year. Reduction of the flow down to the proposed 1.0 cms, would create a nonexistent rocky feature and would have a dramatic negative effect on Bala's tourism draw and economy.

These reduced flow concerns have been raised with SREL on numerous occasions. SREL has indicated that the final decision on aesthetic flows over both the North and South Falls will ultimately be decided by the MNR and or the MOE. Staff recommends that the aesthetic flow volumes be included in the economic impact study as a negative impact of the project on the Town of Bala, and that mitigating measures, including appropriate flow volumes be established as part of the study that should include higher flow rates than currently proposed by SREL. Assistance of the MNR and MOE are requested in this matter. These recommendations should be included as a condition, should the project be approved by the province.

Question 2b: A joint review committee of MNR, SREL, and township representatives, perhaps a member of the MRWMP Public Advisory Committee are recommended.

SREL Response: *SREL would welcome meeting with the MNR, Township representatives, and MRWMP Standing Advisory Committee (SAC) (note the PAC is no longer in effect) (as deemed appropriate) to discuss this report and its findings at the Township's convenience. It is our understanding that the Township has already been in contact with the MRWMP SAC. SREL has*

discussed this possibility of this committee with MNR, who has agreed to be an observer of the “joint review committee” that you suggest and could provide any regulatory input as requested. They would not, however, be a member of the actual review committee.

Note that it is our understanding that the final minimum flows to be provided over the North and South Falls will be determined by the province (MOE and/or MNR).

Comments: See comments to item 2 a.

Question 3: That a member of the MRWMP Public Advisory Committee be included on the review team for the proposed development.

Question 3a: Input from this important committee would be beneficial to the final analysis of the ESR. Additional time to seek MRWMP input is required.

SREL Response: *SREL has provided contact information for the MRWMP Standing Advisory Committee (SAC) Chair.*

It should be noted by the Township that SREL met with the MRWMP SAC on November 4, 2009 (during the 44 day public review/comment period for the ESR) at MNR’s Bracebridge offices to announce the release of the ESR document and outline the highlights of the document with focus on the proposed addendum to the MRWMP. A question and answer period followed the brief presentation.

The Water Management Planning Section of the ESR is intended to be a stand-alone document. Upon the official order for amendment, this stand alone document will be reviewed by the SAC and a determination made by MNR in consultation with the committee. The WMP order follows the EA process.

Comments: Staff has spoken to the MRWMP representative, who has indicated that they prefer to stay within the bounds of their own mandate.

Question 4a. That the ESR addresses the heritage value of the North Bala Falls and any related heritage impact the hydro generating station may have on the falls. Ministry of Culture must sign a letter of clearance of the archaeological condition prior to any construction operations, earth moving or blasting takes place.

SREL Response: *SREL received a letter from the Ministry of Culture dated March 6, 2009, accepting the Stage 2 Archaeological Report for the Project that recommends complete clearance of the archaeological condition of the subject property.*

Comment: The ultimate decision on the archaeological component of this project lies with the Ministry of Culture and is outside the jurisdiction and expertise of the Township. The Ministry has accepted the Stage 2 archaeological field assessment report prepared by Advance Archaeology on behalf of SREL

Question 4b. It is noted that the Historica document should be revised to clarify that ownership of the old Bala #1 Generating Station (Mill Street) resides with the Township of Muskoka Lakes.

SREL Response: *SREL acknowledges that while the Township of Muskoka Lakes owns the “building and property” that the Bala #1 Generating Station (Burgess GS), the actual “business” is owned and operated by Algonquin Power or its subsidiary, as are the rights to the water rights for the facility.*

Comment: Change to text acknowledged.

Question 4c. Council has received recent correspondence from the Muskoka Branch of the Architectural Conservancy of Ontario expressing concern that the project will negatively impact cultural qualities of the area. Additional time is required for further dialogue between all parties to fully understand their concerns.

SREL Response: *It is assumed that the Township has had sufficient time to dialogue with the Architectural Conservancy between the issuance of the elevation request and the writing of this response. No update has been received by SREL regarding this matter. SREL has, however, since contacted the President of the group (February 13, 2010) and offered to meet with its representatives. At the time of writing, however, the group has not been able to provide a date at which they are available to meet. It should be noted by the Township that this group is not a government regulatory body, but instead a possibly affected stakeholder and special interest group.*

Comment: The ultimate decision on the archaeological component of this project lies with the Ministry of Culture and is outside the jurisdiction and expertise of the Township. The Ministry has accepted the Stage 2 archaeological field assessment report prepared by Advance Archaeology on behalf of SREL.

Question 4d: Official Plan: It should be noted that sections of the Planning Act speak to Green Energy Development. Further discussions with SREL and Hatch Energy are required to fully understand the proposed concepts and proposed mitigating measures.

SREL Response: *As quoted on the Ministry of Municipal Affairs and Housing website “As a result of the new approvals framework established through the Green Energy Act (GEA) and related regulations, most renewable energy developments ... with some exceptions, are exempt from the provisions of the Planning Act.” This exemption includes projects and facilities which generate electricity from renewable sources such as water (as is the case for the North Bala Falls Project). The effect of this exemption is that renewable energy projects are not affected by the following local planning instruments:*

- *Official plans*
- *Demolition control by-laws*
- *By-laws or orders passed under Part V of the Planning Act, including zoning, site plan, holding and interim control by-laws*
- *Development permit system by-laws*

Also, the GEA has amended the Planning Act to allow leases up to 40 years for renewable energy projects without obtaining an approval under the Act.

Policy 1.8.3 of the Provincial Policy Statement, 2005 directs that renewable energy systems shall be permitted across Ontario – in settlement areas, rural areas and prime agricultural areas – in accordance with provincial and federal requirements.

As stated in the ESR, SREL is proposing to mitigate impacts by:

- Ensuring access is maintained to both sides of the north and south falls*
- Professionally landscaping the area to create a public park and river/sunset view lookout*
- Providing an upper lookout area adjacent to the road, that is handicap accessible*
- Incorporating interpretive signage into the site to describe the heritage of the area and its history with waterpower.*
- Assisting the Township with the constructing/installation of a year round snowmobile/pedestrian bridge between the Bala wharf and Diver's Point. The details of this are, however, still to be discussed.*

Comments: Staff has obtained a legal opinion from the Township's solicitor confirming the statements relating the GEA put forward by SREL, see Appendix "A".

Question 5a: That the ESR take into consideration the potential impact that the proposed construction may have on the Bala economy, including the winter economy, by addressing safe snowmobiling movement around the site, by investigating alternative water crossings of Bala Bay.

It is recommended that an Economic Impact Study be conducted by SREL to illustrate to what sectors of the local economy may benefit and what sectors may be negatively impacted and what can be done to mitigate effects. The study should consider the creation of a local committee, comprised of SREL, the contractor and local representatives that would meet on a regular basis to identify "items of concern" prior to the issues becoming "problems". This committee should develop "proactive" business strategies in support of local businesses and retailer's i.e. roadside signage indicating "Bala Merchants are Open for Business During Construction".

SREL Response: *SREL is currently considering the preparation of an Economic Impact Study, should we determine that it could provide useful information to ourselves and the community. We are currently contacting various economic consultants to discuss the terms of reference for such a study.*

SREL will also look to the Township for assistance with the development of a Terms of Reference for such as report should we decide to proceed. SREL has also scheduled a meeting with the Chamber of Commerce Executive for March 25th to discuss strategies and suggestions they may have to minimize potential negative impacts to their respective businesses during the construction period. Since this meeting was set up, the C of C has posted a notice to all members requesting input for this meeting.

A large construction project such as the one SREL are proposing, can be expected to provide some construction opportunities in the area as Contractors generally try to hire local labours. It is estimated that 4,000 to 6,000 person hours will be required for this project.

In addition, we foresee direct business opportunities for various service and retail industries in Bala and Muskoka with respect to lodging, restaurants, building supplies, fuel etc., while the contractor work force is in town for the 12-18 month period. It is estimated that an average of 15 workers will be required on site during this period. These direct opportunities generally result in "trickle down" or indirect opportunities for other business' in town that may see more business because the neighbouring businesses are profiting.

In addition, this may be an opportunity for some of the seasonal businesses, in particular for lodgings, to make the investment to winterize their facilities if they have a known revenue stream for 12-18 months. Then after the construction is over, these facilities will be ready to accept snowmobiling or other winter customers in future years. It should be noted that SREL and the Township of Muskoka Lakes are in discussions about SREL assisting the Township to install a new year round snowmobile/pedestrian bridge from Diver's point to the Public Docks that would further enhance the snowmobile industry for the area.

SREL are also in the process of investigating the options for including a "buy local where possible" policy in its agreements with the project contractors.

Comment: SREL has committed to the undertaking of an Economic Impact Study. Staff have been involved in the development of a terms of reference for this study and as recently as August 9th received a revised copy to the study outline. The Township has asked and SREL has agreed to ensure that local business input is obtained, as well as the input of the Muskoka Lakes Chamber of Commerce. The Economic Impact Study is expected to be initiated in August, 2010.

Question 5b. SREL should ensure existing tourism events such as the Bala Bay Regatta, Cranberry Festival etc., are minimally affected by any construction interruption.

SREL Response: *SREL is committed to working with the community to ensure that existing tourism events are minimally affected during the construction period. By completing all road work during the off-peak season, road interruptions should be minimized. Much of this could be attained by restricting or limiting construction activities during these events which generally occur on weekends. (Regatta – Civic holiday weekend, Cranberry Festival – Weekend after Thanksgiving, Craft and Gift Fair – 2 weekends: July and Oct, Antique and Nostalgia Show – 2 weekends July and October, Santa Clause Parade – weekend in November). Other events such as the summer market that occurs on Mondays, will have to be investigated with the Contractor and market organizer.*

Comment: The SREL commitment is a positive one. If the project is approved, it is recommended that this commitment and specific ideas be incorporated into the Economic Impact Study and that these recommendations become part of the project approval.

Question 5c. It is recommended that SREL incorporate "buy local where possible" policies in its agreements with project contractors.

SREL Response: *It is SREL's intention to discuss this option with the Chamber of Commerce at the March 25th meeting discussed above.*

Comment: It is staff understanding that "buy local" was discussed between SREL and the MLCC. The SREL commitment is a positive one. If the project is approved, it is recommended that this commitment and specific ideas be incorporated into the Economic Impact Study and that they become part of the project approval.

Question 5d. Snowmobiling during construction: There may be safety issues with snowmobiles crossing the proposed temporary Bailey bridge if it has a steel deck.

SREL Response: *SREL's engineers have indicated that an alternative deck material is entirely possible and will be included in the construction specifications (possibly timber). Note that this Bailey bridge will only be in place for the first winter season. This will not be an issue for the second winter season.*

SREL has proposed a joint venture with the Municipality for the provision of a Four Season Bridge from Divers Point Park to the Bala Wharf. Further discussions with the Township and the local snowmobile club are required to address this issue.

SREL remains committed to assisting the Township with the installation of the above mentioned bridge, should the North Bala Falls Small Hydro Project proceed, and the installation/construction of the bridge coincides with the Hydro Project's construction period. Details of such a joint venture would need to be worked out in further discussions between the Township and SREL.

It should be noted that if the hydro project doesn't proceed, this bridge would have to be significantly higher and more expensive than currently planned. Alternatively, the Township would need to obtain a navigational restriction to the North Channel from Transport Canada, or it would restrict access to the existing Purk's Place Boat House and Marina (not currently zoned for marina use).

Comment: Provision of a Bailey Bridge deck of alternative deck material suitable for snowmobiles is acceptable. Confirmation of this deck material with the District of Muskoka should be confirmed.

Construction of a four season bridge, from Divers Point to the Bala Wharf, capable of use by snowmobiles in the winter time and pedestrians in other seasons, was part of a long term economic plan proposed by the Chamber of Commerce some years ago. It is staffs understanding that construction of the generating station will not proceed in 2010 if approved. Further discussion regarding the proposed four season bridge should be discussed with the new municipal council.

Question 5 e: SREL proposes to close Bala Falls Road between the CPR overpass and MR#169 during construction. Township Council approval is required for this road closure.

SREL Response: *SREL will apply for approval of this road closure at the appropriate time in the construction process. Is it possible to get this approval at this point in time?*

Comment: Should the project be approved, road closure approvals should be made upon the development of a formal construction plan, in coordination with the District of Muskoka.

Question 6a: Section 5.2.1 of the ESR speaks to the possible crushing of rock on site. How will noise and dust emissions be monitored and controlled? During what time of year is the crushing proposed?

SREL Response: *Subsequent to the issuance of the ESR, SREL's engineers have concluded that no on-site crushing will be required.*

Comment: Agreed

Question 6b: The ESR should address the introduction of the upstream cofferdam/working platform in the North Channel and any potential backwater effect it may create. The Township requires further clarification and input from Hatch and MNR.

SREL Response: See Item 1.

Comment: Agreed. See staff comments item #1.

Question 6c: Muskoka Road #169 will be closed for two nights during construction as the intake channel is constructed under the roadway.

SREL Response: Road closures will be coordinated with the appropriate emergency services, so as to ensure that an option exists for emergency response during those closures. The conditions surrounding road closures will be agreed upon before permission is granted.

Comment: Agreed

Question 6d: A one lane Bailey bridge is proposed for 2 weeks prior to installation of a two lane Bailey bridge structure. Timing of the installation is requested to ensure proper coordination with other Bala events and activities.

SREL Response: Two 2-week lane reductions will be required before the installation of the **two** lane Bailey bridge structure to install it's the foundations. A second set of two 2-week lane reductions will be required upon removal of the bridge to remove the foundation work. All four weeks of lane reductions are planned to be conducted in the off-peak season (between the months of November and Victoria Day weekend). Notice of these lane reductions will be provided to the Municipality as well as the local businesses to ensure they don't coincide with any Bala events or activities. This timing will not be known until after a contractor is chosen.

Comment: Agreed

Question 6e: Impact on Bala's Economy during Operation:

Will reduced flows over the North and South Falls have a negative effect on both existing and new spawning beds? Is 200 m2 of "manmade" spawning habitat sufficient to maintain the fishery?

SREL Response: Fisheries and Oceans Canada (DFO) is the federal agency responsible for fish habitat, while the MNR is the provincial agency responsible for fish community and fisheries. A Fisheries Act Authorization is issued by DFO when the impacts to fish habitat are adequately mitigated. A mitigation plan has been proposed. A Fisheries Act Authorization application will be filed with the DFO. This typically follows the submission of the ESR. The DFO and MNR have both reviewed the

ESR and provided comments. These comments are being addressed by SREL and its fisheries experts. Application for Fisheries Act Authorization will be filed thereafter. This authorization will be issued only upon satisfaction of the DFO conditions.

Comment: The ultimate decision on the fisheries impact of this project lies with the federal Department of Fisheries and Oceans (DFO) and MNR and is outside the jurisdiction and expertise of the Township. Township staff has spoken to DFO staff. As of early August 2010, they continue to review the SREL application.

It is recommended that DFO approval be obtained prior to any ESR project approval by the MOE.

Question 6f: *Reduced flow over the North and South Dams: The Township needs to fully understand the visual impact on both falls and potential economic impact. Consideration should be given by the province, providing it flexibility to increase the minimum flows over the dams is the proposed flows seriously affect the aesthetics of the falls.*

SREL Response: *Please see answer to Item 2 above. The final determination of the flows to be released over each of the dams will be determined by MNR. As stated in Item 5 a), SREL is currently considering conducting an Environmental Impact Study to investigate impacts from changes to the aesthetics of the falls and any possible mitigation measures.*

Comment: As per comment item #2, staffs observation is that the proposed 1 cms per dam is totally unacceptable and will dramatically affect the aesthetics of the falls, the tourism attraction that the falls creates and correspondingly will have a dramatic impact on the local Bala economy.

Although 2.0 cms may be the typical existing stop log leakage rate at the North Dam, sealing up to North Dam to 1.0 cms would be a dramatic reduction in the historical flow and attraction of the North Falls.

Review of the photographs of the South Falls at 2.0 cms on June 11th, 2009 indicates a flow that would in no means attract the attention of the tourists that visit the site every year. Further reduction of the leakage flow down to the proposed 1.0 cms, would create a nonexistent feature of only bare rocks dramatically effecting Bala's tourism draw.

Reducing the flows through and over the North and South Bala Dams will have an effect on tourism and should be considered in the economic impact study soon to be undertaken by SREL.

This reduced flow concern has been raised with SREL on numerous occasions. SREL has indicated that the final decision on aesthetic flows over both the North and South Falls will ultimately be decided by the MNR and or the MOE. Ministry representatives are asked to attend the falls and assist in establishing more reasonable flow volumes. There are many examples where aesthetic flows volumes have been included in project approvals, including the local expansion of High Falls in Bracebridge.

Staff recommends that the aesthetic flow volumes be included in the economic impact study as an impact of the project on the Town of Bala, and that mitigating measures be established as part of the economic impact study that should include higher flow rates than currently proposed by SREL.

Question 6g: The Township wishes to participate in the proposed park design and discussions relating to ongoing park operations as well as the development of illustrative plaques in the Bala Falls area as recommended by Historica.

SREL Response: *SREL is committed to forming a Public Advisory Group to gather input on the park design and illustrative plaques among other things. A representative from the Township would be welcomed to the group when it is formed during the detailed design stage of the project (following the EA process).*

Staff Comments: Agreed. The commitment to create a public advisory group should be included as an ESR commitment if the project is approved.

Question 6h: *Section 9.4 should be revised to indicate that Burgess Generating Facility is owned by the Township and operated by Algonquin Power.*

SREL Response: *SREL acknowledges that while the Township of Muskoka Lakes owns the “building and property” that the Bala #1 Generating Station (Burgess GS), the “business” is owned and operated by Algonquin Power or its subsidiary, as are the rights to the water rights for the facility.*

Comments: Agreed. Ownership of the building and the property lay with the Township. The township at this point does not acknowledge ownership of the water rights of the Burgess #1 facility. An investigation of our records is ongoing.

Public Safety Issues

Question 6i: The ESR should confirm that the upstream and downstream booms are in fact the final locations.

SREL Response: *The final location of safety booms will be determined by Transport Canada (TC). TC has reviewed the ESR and provided written comments on the project as provided attached. These comments confirm that the proposed upstream and downstream boom locations are “reasonable” as shown in the ESR. An Application for Navigational Water Protection Act Authorization will be filed after final acceptance of the ESR. This authorization will be issued only upon satisfaction of the TC.*

Comments: Staff has reviewed the Transport Canada correspondence of January 22, 2010 and has spoken to the Transport Canada official involved with the SREL application, regarding the placement of the upstream and downstream safety booms in the North Channel in early August, 2010. The Transport official has verbally indicated that he is satisfied with the placement of the safety boom provided by SREL, insofar as marine vessel safety is concerned both upstream and downstream of the generating facility.

Transport Canada expects that the upstream flow velocities in the immediate area of the Bala Wharf will not be affected insofar as vessel navigation is concerned. This includes canoes.

Transport Canada advises that the overall flow velocities downstream will actually decrease and the existing circular flow patterns will be removed making navigation of small vessels more predictable at a generator flow of 80+/- cms. For comparison sake it should be noted that a 80cms flow is one that could currently be expected in early March, the middle of April, mid November and mid December when there is little vessel traffic.

In regard to the "historic portage" which currently accesses the North Channel at Purk's Place, Transport Canada advises that alternative access points would be acceptable, including upstream at the Bala Wharf and Divers Point and downstream at the Portage Street Town Dock. .

Staff remains concerned that the flow velocities in the area of the Bala Wharf will remain higher than what could safely be compensated for by someone swimming off the Bala Wharf, or someone who may have fallen off the wharf, or out of a canoe or boat.

Staff has discussed with SREL, the possibility of creating a short breakwall, built at a 90 degree angle to the Wharf into Bala Bay. This breakwall would be located at the south end of the wharf, adjacent to the North Channel. The breakwall would extend to the lake bottom, cutting off any current into the North Channel from the area in front of the Wharf, in effect creating a stilling action for these waters. If built appropriately, the north side of the breakwall could create a safe canoe access point further away from the North Channel entrance, but close to the railway underpass and access to a crossing point of Muskoka Road #169. SREL has not committed to the construction of such a breakwall.

That further discussions be held with SREL to create the potential breakwall at the south end of the Bala Wharf as a means of improving public safety, and that this requirement be included as a condition of any ESR approval.

Question 6j: The Township requires further clarification as to the expected flows in and around the Bala Wharf under various flow conditions during different times of year. A comparison of existing flow velocities is also requested (water going over the existing North Dam). The Township requires that flow velocity figures be created for the area further out into Bala Bay to understand the potential impact on recreational swimming, canoeing and boating in the area and related safety issues.

SREL Response: *The attached letter from TC confirms that while velocities may exceed 0.61 m/s at the intake, the velocity near the Bala Wharf will dissipate to 0.3 m/s during spring low and at full plant operation. TC further concludes that navigation will not be affect in the Bala Wharf area.*

Comment: Staff has requested further information regarding flow velocities from SREL. In-Situ flow velocities were taken the week of December 10th, 2008 but were not included in the ESR. This information has now been provided to the municipality.

Drawing No. H-327078-SK1, illustrates North Channel velocities that range between 0.3 to 0.45 m/s, roughly in the area of the most upstream safety boom, under an actual flow rate of 80 cms at the North Dam and 0.6 m/s velocities in the area of the proposed intake channel. Decreased velocities existed closer to the Bala Wharf.

Again staff expresses concern regarding public water safety. If the project is approved, it is strongly recommended that an appropriately sized breakwall be created to shelter the waters in the area of the Bala Wharf and any North Channel currents. Although Figure 6.1 indicates that flow rates through the proposed plant will be greatly reduced during the summer months, this does not preclude swimming or the potential of an individual from falling into the water during the late spring or fall seasons when generating rates are higher, nor does it preclude the possibility of a wet summer season and higher than average flow rates being passed through the plant during the peak tourist season when inexperienced boaters may be in the area.

It is staffs understanding that as a result of fisheries concerns, the maximum velocity at the intake to the generating station will be 0.6 m/s. This would result in the velocities illustrated on Figure 6.2c. It is staffs understanding that Transport Canada has based their approval on these projections.

In reviewing Figures 5.2, 6.3 and other schematics in the ESR, it is shown that the intake structure to be 9.5m wide. Assuming a lake water level of 225 m (as discussed with SREL) and an intake channel invert elevation of 219 m, (Figure 5.2), a water depth of 6.0m would be created. Assuming an intake volume of 80 cms, the velocity at the intake channel would be 1.4 m/s, not 0.6 m/s. At the maximum plant capacity of 96 cms, the intake velocity would increase to 1.68 cms. These increased velocities would have a significant impact on channel approach velocities at the outer safety booms and in the Bala Wharf area.

SREL has indicated that the actual invert elevation of the intake channel would likely be 217 m. Assuming a lake level elevation of 225 m, this invert change would create flow velocities of 1.05 m/s and 1.26 m/s at the intake structure, under generation volumes of 80 and 96 cms respectively. Again these velocities are above the 0.6 m/s required for the fisheries and would likely increase channel approach velocities at the safety booms.

It should also be noted that deepening the intake channel invert to 217 m would require further construction encroachment into the North Channel. If this were to be the case the temporary upstream cofferdam would likely extend further into the North Channel thereby reducing the capacity of the North Channel to convey flows during a high flow event. This may create flooding concerns upstream and potential property damage.

Increasing the width of the intake channel could decrease approach velocities. How wide the intake channel would have to be, and what effect a widened intake channel would have on encroachment into the North Channel and other project components should be investigated by SREL.

Staff's estimates are simple hand calculations but reflect a public safety concern relating to intake channel flow velocities. There is significant reason to ask for further clarification on the plant intake configuration and associated approach velocities prior to any ESR approval.

Question 6k: Clarification is required regarding the ability of the public to access the north shore of the North Falls. Will currents from the tailrace prohibit swimming in the area?

SREL Response: *As illustrated on the attached figure 6.5 from the ESR, there will be no restricted access to the north shore of the North Falls, downstream of the dam. TC's attached letter also states that while velocity at the outfall will increase from 0.6 to 1.3 m/s, overall velocities will be reduced from 2.4 to 1.3 m/s. It also states that velocities will quickly dissipate to negligible. Therefore, velocities will not be significantly affected on the north shore.*

SREL, however, cautions the Township that swimming in this area is currently not advised. "Danger – Fast Water – Keep Away – No Swimming" signs are posted on the downstream face of the North Dam. SREL cannot, therefore, suggest that it would be safe to swim in the area either with, or without, the installation of our project.

TC's letter does, however, indicate that because the flow from the tailrace will be straight out from the plant and perpendicular to the shore, it will eliminate the swirling (circular) flow which presently occurs in that area during high flows. The removal or reduction of this swirling water should allow for easier handling of small vessels in the zone around the tailrace.

Comments: The north shore and the river bottom of the North Bala Falls are owned by the Provincial Government who has the jurisdiction to restrict or prohibit swimming downstream of the generating station. The MNR has not indicated whether there will be swimming restrictions or

prohibitions placed on swimming downstream of the North Falls or the generating station. MNR is requested to confirm any future swimming prohibitions expected.

Question 6l: Confirmation is required that public will have access to the south bank of the North Channel.

SREL Response: *As the attached Figure 6.5 from the ESR illustrates, there will be no restricted areas along the south bank of the North Channel, downstream of the North Dam. SREL is also proposing to construct a new set of stairs down this incline to facilitate access.*

Comment: Accepted. Access to the south bank between the MR #169 and the CPR Bridge will be limited by the introduction of a security fence. See comment Item 6n, to mitigate the industrial look of the security fence.

Question 6m: Section 6.3.6.1 requires clarification regarding the “portage” route between Lake Muskoka and the Moon River.

SREL Response: *Suggested alternative portage routes to replace the current upstream “take out” on the crown land adjacent to Purk’s Place, include the flat area adjacent to the Bala Wharf (Bala Bay) and Diver’s Point, during summer low flow conditions. “Put in” locations downstream include the Town Dock in Bala Reach. TC’s attached letter confirms that these locations are appropriate.*

Comment: Staff suggest that a canoe launch be incorporated into a short breakwall at the south end of the Bala Wharf.

Question 6n: Section 6.3.6.1 indicates that access to the water in the area of the works will be discontinued. Clarification is requested as to how this restriction will be done.

SREL Response: *The attached Figure 6.5 clearly outlines the restricted area during the operations phase of the project. The water side of the tailrace restricted area will be enclosed by a floating safety boom and the land side will be blocked with a combination of landscaping features (vegetation and rocks) as well as architecturally designed handrail systems that meet the Ontario Building Code to keep children from falling through or people climbing on.*

The landside of the restricted area around the intake will be enclosed by fencing. All attempts will be made to ensure that this fencing is either visually appealing or masked by vegetation. The upstream end of this area will be blocked with a floating safety boom.

There are currently no plans to fence the area along the upstream north shore of the North Channel as this is Municipal land. SREL would be open to discussions with the Municipality should they wish to have SREL assist with the installation of fencing and/or landscaping to provide a physical barrier between the land and water. The water in this area is currently not easily accessible by land already because of the very dense shrubbery and rocks (see photo attached).

SREL also do not have any current plans to erect any barrier on the CP Rail land where it meets the restricted zone unless requested by CP Rail. Again, the water in this area is not easily accessible from land as the rail bridge abutments and vegetation restrict access to a large extend (see photo attached).

Comment: Staff recognizes the need for safety fencing around the intake channel. That being said the Township requests input to the appearance of the fencing in order to minimize any negative aesthetic appearance of the fencing along the North Channel.

In addition to the above, it is believed that the CPR is the owner of the property along the north shore of the North Channel. The Township may have an easement over these lands. This ownership is currently being confirmed by the Township. That being said, the Township should not be burdened by the cost of new fencing along the north side of the North Channel, should fencing be required as a result flow regimes that create a public safety hazard created by the hydro generating station. The proponent should be responsible for these fencing costs. These conditions should be included in any ESR approval.

Question 6o : The Township requires clarification that the trail along the north side of the upstream North Channel will not be affected by the proposed construction or operations.

SREL Response: *No work is proposed to be completed on or near the north shore of the North Channel, upstream or downstream of the North Dam, with the exception of the downstream anchor for the relocated boom and the installation of the proposed year round pedestrian/snowmobile bridge should the Township wish to proceed. See above item (n) for possibilities regarding barriers to water in this area.*

Comment: Agreed

Question 6p : SREL is requested to identify any restrictions or warnings that may be imposed on divers in and around the works.

SREL Response: *Divers will no longer be able to dive in the area shown in yellow on the attached Figure 6.5. Generally diving is not recommended near intakes or upstream of dams. It has been suggested by members of the public that divers currently use the area off Diver's point to commence dives. While this is not recommended either with or without our project, our project should not significantly change the existing strength of the currents in this area. Divers would, however, risk the chance of swimming below the two closely spaced safety booms. This is currently the situation with the adjacent south dam. Signage will be posted to notify people of the dangers of passing into the restricted zones beyond the safety booms, similar to what is present at the south dam.*

There would be a small restricted area within the tailrace boom downstream of the plant as shown on Figure 6.5. It is assumed that divers generally use the deeper areas downstream of the dams and should; therefore, they should not be significantly impacted by our project.

Comment: Should the project be approved, the recommended restricted areas shown in yellow on Figure 6.5 appear logical.

Future Employment and Economy

Question 6q : The Township requests that an Economic Impact Study be undertaken by an independent consultant to identify both the positive and negative attributes of the proposed development after the construction is completed and the plant is operational. The study should identify amongst other things, the effect on the seasonal and year round economy given the proposed changes to the North and South Falls. If negative concerns are raised the report should identify possible mitigating measures that could be taken.

SREL Response: *As stated above, SREL are seriously considering undertaking an Economic Impact study to identify impacts to the local economy for the construction and operational periods and outline possible mitigation measures. SREL are proposing to hire Bracebridge Generation, a branch of Lakeland Holdings out of Bracebridge, for the plant operations, maintenance and management. Bracebridge generation has indicated that they foresee hiring additional staff for this role.*

Comment: SREL has committed to undertake an economic impact study of the proposed project on the local Bala economy establishing both negative and positive effects of the project as well as recommending mitigation measures that may be undertaken by SREL, local businesses, the community and Township. The study is expected to start in August 2010.

It is recommended that the findings and recommendations of the study be completed prior to ESR approval to fully understand the impact on the Bala Community. To do otherwise would certainly be putting the cart before the horse for those most directly impacted by the proposed works.

Bonding and Securities

Question 6r : The Township inquires whether the Province requires a Bond or Security for the completion of the project.

SREL Response: *It is my understanding that the Provincial Government does not generally require such a thing for these types of projects. However, SREL are required to provide security to the Ontario Power Authority (OPA) under our FIT application and eventual FIT contract to ensure that we do proceed to Commercial Operation.*

In addition, both the original MNR site release program and the recent OPA FIT application required verification of SREL's financial capability to complete the project.

Comment: Requirements for bonding and securities for the SREL proposal lay solely with the provincial government who have jurisdiction over the project approval.

BURGAR  ROWE

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BY EMAIL ONLY TO: wschmid@muskokalakes.ca

May 22, 2010

The Corporation of the Township of Muskoka Lakes
 1 Bailey Street
 P.O. Box 129
 Port Carling, Ontario
 POB 1J0

ATTENTION: Walt Schmid, CAO

**RE: TOWNSHIP OF MUSKOKA LAKES AND SWIFT RIVER ENERGY LIMITED
 NORTH BALA FALLS HYDRO PROJECT
 OUR FILE NO. 45737**

You have requested my opinion concerning the ability of the municipality to control or stop the proposed hydro project for the north Bala falls site being put forward by Swift River Energy Limited ("SREL"). In preparing this opinion, I have reviewed the correspondence that you have provided to me from SREL, the Ministry of Environment Environmental Assessment and Approvals Branch ("MOE") and all related enclosures. I have also reviewed the relevant legislation in addition to background materials and commentary available regarding the *Green Energy Act, 2009* and its impact on the planning approval process and municipal powers.

Green Energy Act, 2009*Context:*

The *Green Energy and Green Economy Act, 2009* ("GEGEA") was introduced in February of 2009 and received Royal assent on May 14, 2009. The GEGEA enacted a stand-alone *Green Energy Act, 2009* ("GEA") and, at the same time, amended and repealed numerous other statutes including the *Planning Act*.

The context within which the legislation was introduced included the need for the Province to move away from electrical energy generation programs considered unsustainable and environmentally unacceptable. The province also saw the need, flowing from Ontario's "hybrid" electricity market comprised of both private and public interests, to encourage and capitalize on the development of local private initiatives to develop sustainable energy supplies serving local and provincial needs in an environmentally responsible manner ("green energy"). Developing renewable energy sources and fostering a conservation oriented

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culture were seen as cornerstones of the Province's balanced plan to provide clean, reliable and affordable energy.

During its review of Ontario's energy system and its future needs, the Province had identified concerns among proponents of new green energy projects that the approval process was difficult and proponents faced many challenges or impediments due to the multiple processes involved including local public resistance to projects considered unacceptable in local areas. In order to achieve success in changing the electrical power generation system in Ontario and move toward a sustainable and green energy future, the Province saw a need to consolidate the approval process under one roof while still ensuring responsible environmental and planning oversight.

Through the enactment of the GEGEA and the GEA, the Province sought to streamline the environmental approval process for renewable energy generation projects and provide a service guarantee for proponents. The GEA, by creation of the Renewable Energy Facilitation Office, would provide a one-window contact and advocate for renewable energy applicants. The MOE was designated as the Ministry responsible for co-ordination, review and approval of renewal energy generation projects through a process identified as Renewal Energy Approval ("REA"). The REA was to provide a single new approval that integrated the environmental and health and safety matters traditionally dealt through the following requirements:

- Existing land use planning (municipal government level)
- Environmental assessment
- Environmental approvals
- Water takings

The REA process would deal with the following:

- Wind facilities
 - Over 3kw but less than 50kw (streamlined requirements)
 - Over 50kw (including setbacks)
 - All off-shore wind projects
- Solar facilities
 - Ground mounted over 10kw
 - No approval required for rooftop or wall mounted of any size
 - Prime agricultural land restrictions (within feed in tariff contract)
- Bio-energy facilities
 - Defined in the *Green Energy Act* as biomass, biogas or biofuel
 - Can be anaerobic digestion or thermal treatment facilities
 - No approval required for farm-based operations addressed under the *Nutrient Management Act*



Waterpower facilities (hydroelectric projects) did not require a REA. Waterpower hydro projects would continue to be processed through the existing Class EA regime for which MOE/MNR approvals would still apply.

Waterpower Facilities (history):

The Province decided to treat waterpower facilities differently than other proposals for green energy facilities due to the historical background and experience with approvals for hydroelectric generation projects in Ontario. Renewable energy in the form of water power has been regulated by the provincial government for over 150 years and hydro-electrical generation has been regulated for over 100 years.

While terminology and emphasis may have been different from time-to-time, the objectives of the regulatory schemes have remained the same: the promotion of the development of such energy sources, and hence Ontario's economy, while protecting the environment and those others with an interest in the resource. Most of Ontario's current hydroelectric structure was in place by the 1970's having been approved before the implementation of planning legislation giving local planning authorities significant autonomy and control over planning and development approvals.

Historically, the Ministry of Natural Resources ("MNR") had oversight for approvals relating to hydroelectric projects. Approvals for water power projects could be required under the *Lakes and Rivers Improvement Act*, the *Public Lands Act*, the *Fish and Wildlife Conservation Act, 1997* and the *Conservation Authorities Act*. In addition, a variety of other provincial and federal statutes including the *Environmental Assessment Act* and the *Fisheries Act* could come into play in the review and approval process. The *Ministry of Natural Resources Act* allowed the Minister of Natural Resources to require proponents of hydroelectric energy projects to provide information prior to granting of approvals relating to development of a renewable energy project. A sophisticated review and approval process was developed and, throughout the late 1990's and 2000's, the MNR worked on refining the tools, policies, procedures and requirements including working with stakeholders and other Ministries to further refine the process.

Green Energy Act – A new direction:

In its efforts to streamline the approval process for renewal energy projects, the Province wanted to create a regime where one Ministry would have oversight and responsibility for the review and approval process. As stated earlier, the GEGEA amended many provincial statutes and enacted the GEA as a standalone piece of legislation by which the Ministry of Environment became the central processing body at the provincial level coordinating the comments and approvals received from all interested stakeholders.

The vehicle through which the MOE and MNR regulate the approvals for proposed hydroelectric energy developments is through the existing Class Environmental Assessment



process. The MOE and MNR approval requirements continue to apply to waterpower facilities proposed to generate renewable energy.

For waterpower projects, the Ministries elected to rely on the streamlining efforts set out in the Water Power Class Environmental Assess (2008). Projects having a name plate generation capacity of more than 200 MW are required to go through an Individual Environmental Assessment. Projects that fall below this 200 MW threshold and that are expected to have an environmental impact that can be mitigated are subject to the Class EA process. The Water Power Class EA was designed to allow proponents of waterpower projects to coordinate the requirements under various government Ministries and pieces of legislation in a single process.

Municipal Impact – Changes to the Planning Act:

The GEA amended subsections 50(3) and 50(5) of the *Planning Act* and added section 62.0.1 and 62.0.2 to exempt renewable energy projects and renewable energy generation facilities from the direct regulation, control and approval processes available under the ambit of municipal planning authority.

Subsections 50(3) and 50(5) of the *Planning Act* were amended to include a new exception to the subdivision and part lot control restrictions in the Act to allow long term leases of between 21 and 50 years for the purposes of renewable energy generation facilities and renewable energy projects. The amendment was intentionally geared to accommodate the long term lease arrangements required to dovetail with the Province's feed-in tariff program ("FIT") that provided a standard offer contract to purchase power from waterpower generation projects for a term of 40 years in order to encourage the development of renewable energy sources.

In addition to the amendments to the subdivision and part lot control provisions of the *Planning Act*, the GEGEA added new a couple of new section to the Act. The addition of Section 62.0.1 to the *Planning Act* exempts renewable energy generation facilities and renewable energy projects from most municipal planning controls including zoning by-laws, site plan control by-laws and interim control by-laws. As well, the addition of Section 62.0.2 exempts such facilities and projects from compliance with official plans and provides that demolition control by-laws do not apply to a renewable energy undertaking.

Prior to the enactment of the GEA, proponents of renewable energy projects were required to comply with the official plan and zoning by-laws of a municipality or, alternatively, seek approval for a minor variance or an OP and zoning amendment as necessary. This is no longer the case. The enactment of the GEA and the resulting amendments to planning and environmental legislation have served to reduce somewhat the local public consultation process and have substantially restricted third party rights of appeal.

Municipalities are no longer approval authorities for renewable energy projects and have been reduced to commenting bodies only. Rights of appeal formerly available to the OMB



are now restricted in nature and are to the Environmental Review Tribunal (“ERT”) under the *Environmental Protection Act*. While the OMB process enabled members of the local community, interested stakeholders and/or the municipality to initiate a hearing in which the prospective developer and all interested parties could advocate their positions, the EPA process is more restrictive.

Section 16 of O. Reg 359/09 of the *Environmental Protection Act* requires a person who proposes to engage in a renewable energy project to hold at least two public meetings in the local municipality where it is to be developed. Section 18 of the Regulation requires that at least 90 days before the final of the two public meetings held for the purposes of Section 16, the proponent must distribute a consultation form to, among others, the clerk of each local municipality and upper-tier municipality in which the project location is situate.

Subsection 18(2) of the Regulation states that the consultation form is to be distributed for the purpose of consulting on matters relating to municipal or local infrastructure and servicing. Additional matters to which proponents are required to consult are set out in Table 1 of the Regulation a copy of which is enclosed. Table 1 outlines the supporting documents that must be enclosed in and application for a renewable energy approval under the Environmental Protection Act.

The net result of this is to remove from the municipal level of government decision making impediments to renewable energy projects. While proponents are required to engage in consultation with municipalities during the approval process, local authority to control or stop such projects has largely been removed and placed at the provincial level with limited appeal rights to the ERT.

ERT Appeals under the Green Energy Act

Schedule G of the GEA sets out an appeal process from renewable energy approvals and embodies the following key elements:

- 15 day timeframe for notices of appeal, unless varied by regulation
- No leave to appeal requirement
- Deemed approval if appeal not resolved within timeframe as set out in regulations
- High standard of proof with onus on appellant
- Appeal must be decided consistent with MOE policies issued under section 47.7 of the EPA in effect at the time the approval is issued

Under the Act, a “person resident” can appeal a renewal energy project only on grounds that it will cause “serious harm to human health” or “serious and irreversible harm to plant life, animal life or the natural environment”. The harm must not only be serious, and in the case of plants, animals and the natural environment, irreversible, but the burden of proof rests with the appellant to prove that it *will* occur as a result of the proposed development.



While there is some case law that suggests the a softer “ecosystem” approach is the more appropriate standard to follow, the clear principles set out in the GEGEA and the policy objectives set by the government to move toward a green economy with green energy at its base appear to favour a fairly rigid adherence to the high burden of proof before the ERT. Successful appeals of approved energy projects are very likely to be quite limited.

Municipal Control and Regulation of Green Energy Projects – Is there any?

As a result of the significant curtailing of local municipal oversight on green energy proposals, several writers have attempted to look at what residual powers might be available to municipalities to control, regulate and perhaps even stop green energy proposals. The curtailment of municipal authority over green energy proposals under the *Planning Act* leaves little, if any, ability in the hands of local government to influence or prevent development on land within municipal boundaries apart from the consultative role under the EPA process.

Still, some legal writers have suggested that the broad and flexible powers given to municipalities under the *Municipal Act, 2001* may yet be utilized to regulate and restrict green energy initiatives. Relying on the decision in *114957 Canada Ltee (Spratech, Société d'arrosage) v. Hudson (Town) (2001)*, 2 S.C.R. 241 (“Hudson”), it has been suggested that the by-law making powers afforded to municipalities under the *Municipal Act, 2001* might provide a mechanism to regulate or prohibit green energy projects including by-laws dealing with:

- Economic, social and environmental well-being of the municipality (Section 11, para. 5)
- Health, safety and well-being of persons (Section 11, para. 6)
- Protection of persons and property, including consumer protection (Section 11, para. 8)
- Structures, including fences and signs (Section 11, para. 10)
- Regulation of public nuisance (Section 128)
- Regulation of noise, odour, dust etc. (Section 129)

These suggestions are based, in part, upon in decision in cases such as Hudson where the Court have recognized that it was possible for a municipal regulatory by-law to co-exist with upper level government legislation where the municipal by-law did not conflict with the senior level government legislation. The Courts have been tending toward the adoption of a very restrictive view of what constitutes a conflict in these cases and appear to be efforts to allow the municipal legislation to co-exist with the senior government legislation.

The suggestions are also based, in part, on recent Court decisions that have taken a deferential approach to the interpretation of powers available to municipalities under new municipal legislation including the *Municipal Act, 2001*. Cases such as *Toronto (City) v. Goldlist Properties Inc. (2003)*, 67 O.R. (3d) 441 have supported a deferential approach to municipal authority and taken a restrictive view on the issue of conflict where Provincial legislation permitted development of a property dealing with conversion of rental properties



to condominiums and the local municipal legislation contained such restrictive rules that the project was effectively prevented.

Having said this, there is no case law at this time that would assist in interpreting how a Court might approach the issue of conflict between a municipal by-law enacted to regulate, control or prevent a green energy project such as the Bala falls project proposed under the GEA. In my opinion, it would be very difficult to defend a municipal by-law enacted with the purpose of regulating or preventing a green energy project given that the Province has specifically building into the GEGEA legislation a packaged approval process that relegates municipalities to that of a consultative role only. **The by-law would have to have been enacted in good faith and based upon some objective criteria relating to health, safety or environmental protection in my opinion.**

In addition, unless there is clear evidence of serious and permanent harm to the environment (which, broadly defined, might include the impact on the local community), any adverse impacts are to be mitigated through measures imposed on the proponent through the EPA review process. To me, this is reinforced by subsection 5(2) of the GEA that allows a designated renewable energy project to proceed despite “any restriction imposed at law that would otherwise prevent or restrict the activity”. Under subsection 5(3) of the GEA, municipal by-laws that purport to restrict a designated renewable energy project will be deemed to be inoperative to the extent that they would prevent the designated activity.

In view of this, it is my opinion that the Courts are more likely to favour the provincial legislation as providing a complete review and approval mechanism that substantially ousts the jurisdiction of municipalities over green energy proposals except in the consultative role and any appeal rights that might be exercised before the ERT under the EPA.

Moreover, it has been noted that Section 451.1 of the *Municipal Act, 2001* allows the Lieutenant Governor in Council to make regulations imposing limits and conditions on a municipality’s exercise of its general power (but perhaps not its specific powers such as by-laws dealing with nuisance). While the regulation is time-limited to 18 months, it would allow time for the Province to override a municipal by-law that sought to regulate or prohibit a green energy project.

Conclusion

In view of the overall intent of the legislation and the underlying government policy to promote and develop an economy based on sustainable renewable green energy, it is very unlikely that a municipality could prevent a green energy project from proceeding if it is likely to obtain EPA approval. The recommended approach is to participate actively in the consultative process by requesting detailed information and responses to objective questions at the earliest possible stage. It is also recommended to focus on mitigative factors and alternatives that will attain the best solution local municipal interests with respect to a particular green energy proposal.



I note, as well, that the GEA has amended the *Environmental Bill of Rights* to impose and obligation on the Environmental Commissioner to provide an annual report to the speaker of the Legislative Assembly on the progress of activities in Ontario. Under subsection 58.1 (2)(c)(ii), the report must include an identification of any municipal by-laws that have created barriers to the development or implementation of measures to reduce the use or make more efficient use of electricity, natural gas, propane and transportation fuels.

I trust that this opinion will be of assistance to you. If you have further questions or concerns, please do not hesitate to contact me.

Yours very truly,

BURGAR ROWE

Professional Corporation

A handwritten signature in black ink, appearing to read 'James I. McIntosh', with a long horizontal flourish extending to the right.

Per: James I. McIntosh

JIM/jm

email: mcintosh@burgarowe.com

cc:

encl:



March 18, 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 – Response to Elevation Request Dated
November 27, 2009**

Dear Walt:

The following letter attempts to address those concerns outlined in your report issued to Council dated November 24, 2009 that was attached to your elevation request dated November 27, 2009 to our consultant Hatch Energy and the MOE Director of the EAAB. Many of the items were discussed with you previously during our meeting of January 22, 2010 and subsequent phone conversation on February 1, 2010.

Item 1. Will the Bala North Dam be operated within the Lake Muskoka / Bala Reach Operating Ranges as set out in the MRWMP?

- a. *The municipality seeks further clarification both from MNR and SREL as to the impact on Lake Muskoka water levels during high flows or the spring freshet, resulting from the establishment of the temporary cofferdam/working platform proposed to be constructed in the North Channel upstream of the powerhouse intake. Will the temporary cofferdam/working platform result in temporary higher water levels in Lake Muskoka? If so, to what extent?*

MNR will continue operations of the two dams to maintain the water levels on Lake Muskoka and the Bala Reach during the construction period as they do currently. Both the North and South Bala dams will remain operational during the construction period. The proposed upstream cofferdam will be located upstream of the road bridge leaving all of the North Dam spill bays available for passing flow. The South Dam will continue to have priority in terms of releasing flows from the Lake. Additional spill capacity is available at the North Dam once the maximum spill capacity at the South Dam is achieved.

The construction of a temporary cofferdam will have little or no effect on water levels during high flows or the spring freshet. Any raising of the water level caused by the cofferdam can be easily compensated for by the removal of stop logs. Note that the upstream cofferdam will cover a relatively small area, as the actual intake structure will be constructed in the dry behind a rock

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plug. The cofferdam will only be required for some localized deepening of the intake channel. In order to limit any possible complications with spill operations, the construction schedule is planned to employ the upstream cofferdam outside of the spring freshet months of April and May.

- b. *Does the south dam have the capability to convey all the upstream flow? If not, to what extent does the south dam have the ability to relieve higher water levels on Lake Muskoka?*

The combined capacity of the north and south dams corresponds to the 1:100 year spring flood of 470 m³/s at a lake water level of 226.4 m. The south dam has the capacity to pass 252 m³/s and the north dam 218 m³/s. With the cofferdam in place, creating a restriction in the north channel, the reduced combined flood capacity of the north and south dams would be approximately 430 m³/s at a lake water level of 226.4 m (as estimated by our consultant Hatch). This reduced capacity corresponds approximately to the 1:48 year return period spring flood flows.

It should be noted that based on historical records, the majority of the high spill requirements occur during the spring freshet period in April/May. In order to limit complications with spill operations, the construction schedule, as stated in Section 5.2.8.2 of our ESR is planned such that the upstream temporary cofferdam will be installed in the initial year of construction following the spring freshet (July) with the intention of removing it prior to the freshet the following year (February), thereby avoiding this period of high flow.

As is typical for these types of installation, the cofferdam will be constructed to withstand the 1 in 20 year spring flood event. The 1 in 20 year flood for this location is 362 m³/s which is less than the temporary combined capacity of the two dams.

- c. *Are there other constrictions upstream of the North Dam that has a greater effect on any backwater effects in Lake Muskoka created by the working platform?*

There are upstream constrictions that can create localized changes in water level at the dam. In addition, given the large size of Lake Muskoka also experiences wind effects that can change water levels. All of these issues are currently managed within the MRWMP and will continue to be during the construction period.

- d. *What measures are proposed to mitigate upstream flooding during construction should the introduction of the working platform create increased water levels on the Lake?*

Should a flood event occur that could not be passed by the combined South Dam and reduced capacity North Dam, SREL would have the cofferdam removed to allow the flood to pass. Given that the proposed work to be done behind the cofferdam will only be excavation work to deepen the channel, removing the cofferdam can be done quickly and easily, without any damage to our new construction. Note again, that the construction schedule will be designed to have this work completed outside of the spring freshet high flow period to minimize the chance of this scenario occurring.

Item 2. That any potential generating facility consider the need for scenic flows, public access for traditional uses and continuity of business in the local areas.

- a. It is recommended that both dams be modelled in order to visually observe the proposed controlled water flows. Based on this observation, a better determination can be made to establish an acceptable aesthetic flow over the dams.*

SREL and its consultant Hatch, with the assistance of MNR, completed a Qualitative Flow Assessment for the project in June 2009. An abridged version of this report is provided attached for your review. It includes photos from various locations around both dams at a flow of 2 m³/s. Unfortunately we were not able to reduce the flow to 1 cms at that time due to some worn or warped logs. In order to reduce to 1 cms, we will likely require replacement of stoplogs. A video was also taken at south dam at a flow of approximately 2.5 cms. Unfortunately, MNR had already started removing some of the logs before we were able to film the flow at 2.0 cms. This 28 second video is available to Council on request.

- b. A joint review committee of MNR, SREL, and township representatives, perhaps a member of the MRWMP Public Advisory Committee are recommended.*

SREL would welcome meeting with the MNR, Township representatives, and MRWMP Standing Advisory Committee (SAC) (note the PAC is no longer in effect) (as deemed appropriate) to discuss this report and its findings at the Township's convenience. It is our understanding that the Township has already been in contact with the MRWMP SAC. SREL has discussed this possibility of this committee with MNR, who has agreed to be an observer of the "joint review committee" that you suggest and could provide any regulatory input as requested. They would not, however, be a member of the actual review committee.

Note that it is our understanding that the final minimum flows to be provided over the North and South Falls will be determined by the province (MOE and/or MNR).

Item 3. That a member of the MRWMP Public Advisory Committee be included on the review team for the proposed development.

- a. Input from this important committee would be beneficial to the final analysis of the ESR. Additional time to seek MRWMP input is required.*

SREL has provided contact information for the MRWMP Standing Advisory Committee (SAC) Chair.

It should be noted by the Township that SREL met with the MRWMP SAC on November 4, 2009 (during the 44 day public review/comment period for the ESR) at MNR's Bracebridge offices to announce the release of the ESR document and outline the highlights of the document with focus on the proposed addendum to the MRWMP. A question and answer period followed the brief presentation.

The Water Management Planning Section of the ESR is intended to be a stand-alone document. Upon the official order for amendment, this stand alone document will be reviewed by the SAC and a determination made by MNR in consultation with the committee. The WMP order follows the EA process.

Item 4. That the ESR addresses the heritage value of the North Bala Falls and any related heritage impact the hydro generating station may have on the falls.

- a. Ministry of Culture must sign a letter of clearance of the archaeological condition prior to any construction operations, earth moving or blasting takes place.*

SREL received a letter from the Ministry of Culture dated March 6, 2009, accepting the Stage 2 Archaeological Report for the Project that recommends complete clearance of the archaeological condition of the subject property. A copy of this letter is attached.

- b. It is noted that the Historica document should be revised to clarify that ownership of the old Bala #1 Generating Station (Mill Street) resides with the Township of Muskoka Lakes.*

SREL acknowledges that while the Township of Muskoka Lakes owns the “building and property” that the Bala #1 Generating Station (Burgess GS), the actual “business” is owned and operated by Algonquin Power or its subsidiary, as are the rights to the water rights for the facility.

- c. Council has received recent correspondence from the Muskoka Branch of the Architectural Conservancy of Ontario expressing concern that the project will negatively impact cultural qualities of the area. Additional time is required for further dialogue between all parties to fully understand their concerns.*

It is assumed that the Township has had sufficient time to dialogue with the Architectural Conservancy between the issuance of the elevation request and the writing of this response. No update has been received by SREL regarding this matter. SREL has, however, since contacted the President of the group (February 13, 2010) and offered to meet with its representatives. At the time of writing, however, the group has not been able to provide a date at which they are available to meet. It should be noted by the Township that this group is not a government regulatory body, but instead a possibly affected stakeholder and special interest group.

- d. Official Plan: It should be noted that sections of the Planning Act speak to Green Energy Development. Further discussions with SREL and Hatch Energy are required to fully understand the proposed concepts and proposed mitigating measures.*

As quoted on the Ministry of Municipal Affairs and Housing website “As a result of the new approvals framework established through the Green Energy Act (GEA) and related regulations, most renewable energy developments ... with some exceptions, are exempt from the provisions of the Planning Act.” This exemption includes projects and facilities which generate electricity from renewable sources such as water (as is the case for the North Bala Falls Project). The effect of this exemption is that renewable energy projects are not affected by the following local planning instruments:

- Official plans
- Demolition control by-laws
- By-laws or orders passed under Part V of the Planning Act, including zoning, site plan, holding and interim control by-laws
- Development permit system by-laws

Also, the GEA has amended the Planning Act to allow leases up to 40 years for renewable energy projects without obtaining an approval under the Act.

Policy 1.8.3 of the Provincial Policy Statement, 2005 directs that renewable energy systems shall be permitted across Ontario – in settlement areas, rural areas and prime agricultural areas – in accordance with provincial and federal requirements.

As stated in the ESR, SREL is proposing to mitigate impacts by:

- Ensuring access is maintained to both sides of the north and south falls
- Professionally landscaping the area to create a public park and river/sunset view lookout
- Providing an upper lookout area adjacent to the road, that is handicap accessible
- Incorporating interpretive signage into the site to describe the heritage of the area and its history with waterpower.
- Assisting the Township with the constructing/installation of a year round snowmobile/pedestrian bridge between the Bala wharf and Diver's Point. The details of this are, however, still to be discussed.

Item 5. That the ESR take into consideration the potential impact that the proposed construction may have on the Bala economy, including the winter economy, by addressing safe snowmobiling movement around the site, by investigating alternative water crossings of Bala Bay.

Impact on Bala's Economy During Construction:

- a. It is recommended that an Economic Impact Study be conducted by SREL to illustrate to what sectors of the local economy may benefit and what sectors may be negatively impacted and what can be done to mitigate effects. The study should consider the creation of a local committee, comprised of SREL, the contractor and local representatives that would meet on a regular basis to identify "items of concern" prior to the issues becoming "problems". This committee should develop "proactive" business strategies in support of local businesses and retailers i.e. roadside signage indicating "Bala Merchants are Open for Business During Construction".*

SREL is currently considering the preparation of an Economic Impact Study, should we determine that it could provide useful information to ourselves and the community. We are currently contacting various economic consultants to discuss the terms of reference for such a study.

SREL will also look to the Township for assistance with the development of a Terms of Reference for such as report should we decide to proceed. SREL has also scheduled a meeting with the Chamber of Commerce Executive for March 25th to discuss strategies and suggestions they may have to minimize potential negative impacts to their respective businesses during the construction period. Since this meeting was set up, the C of C has posted a notice to all members requesting input for this meeting.

A large construction project such as the one SREL are proposing, can be expected to provide some construction opportunities in the area as Contractors generally try to hire local labours. It is estimated that 4,000 to 6,000 person hours will be required for this project.

In addition, we foresee direct business opportunities for various service and retail industries in Bala and Muskoka with respect to lodging, restaurants, building supplies, fuel etc., while the contractor work force is in town for the 12-18 month period. It is estimated that an average of 15

workers will be required on site during this period. These direct opportunities generally result in “trickle down” or indirect opportunities for other business’ in town that may see more business because the neighbouring businesses are profiting.

In addition, this may be an opportunity for some of the seasonal businesses, in particular for lodgings, to make the investment to winterize their facilities if they have a known revenue stream for 12-18 months. Then after the construction is over, these facilities will be ready to accept snowmobiling or other winter customers in future years. It should be noted that SREL and the Township of Muskoka Lakes are in discussions about SREL assisting the Township to install a new year round snowmobile/pedestrian bridge from Diver’s point to the Public Docks that would further enhance the snowmobile industry for the area.

SREL are also in the process of investigating the options for including a “buy local where possible” policy in its agreements with the project contractors.

- b. SREL should ensure existing tourism events such as the Bala Bay Regatta, Cranberry Festival etc. Are minimally effected by any construction interruption.*

SREL is committed to working with the community to ensure that existing tourism events are minimally affected during the construction period. By completing all road work during the off-peak season, road interruptions should be minimized. Much of this could be attained by restricting or limiting construction activities during these events which generally occur on weekends. (Regatta – Civic holiday weekend, Cranberry Festival – Weekend after Thanksgiving, Craft and Gift Fair – 2 weekends: July and Oct, Antique and Nostalgia Show – 2 weekends July and October, Santa Clause Parade – weekend in November). Other events such as the summer market that occurs on Mondays, will have to be investigated with the Contractor and market organizer.

- c. It is recommended that SREL incorporate “buy local where possible” policies in its agreements with project contractors.*

It is SREL’s intention to discuss this option with the Chamber of Commerce at the March 25th meeting discussed above.

- d. Snowmobiling during construction: There may be safety issues with snowmobiles crossing the proposed temporary Bailey bridge if it has a steel deck.*

SREL’s engineers have indicated that an alternative deck material is entirely possible and will be included in the construction specifications (possibly timber). Note that this Bailey bridge will only be in place for the first winter season. This will not be an issue for the second winter season.

- e. SREL has proposed a joint venture with the Municipality for the provision of a Four Season Bridge from Divers Point Park to the Bala Wharf. Further discussions with the Township and the local snowmobile club are required to address this issue.*

SREL remains committed to assisting the Township with the installation of the above mentioned bridge, should the North Bala Falls Small Hydro Project proceed, and the installation/construction of the bridge coincides with the Hydro Project’s construction period. Details of such a joint venture would need to be worked out in further discussions between the Township and SREL.

It should be noted that if the hydro project doesn't proceed, this bridge would have to be significantly higher and more expensive than currently planned. Alternatively, the Township would need to obtain a navigational restriction to the North Channel from Transport Canada, or it would restrict access to the existing Purk's Place Boat House and Marina (not currently zoned for marina use).

- f. SREL proposes to close Bala Falls Road between the CPR overpass and MR#169 during construction. Township Council approval is required for this road closure.*

SREL will apply for approval of this road closure at the appropriate time in the construction process. Is it possible to get this approval at this point in time?

- a. Section 5.2.1 of the ESR speaks to the possible crushing of rock on site. How will noise and dust emissions be monitored and controlled? During what time of year is the crushing proposed?*

Subsequent to the issuance of the ESR, SREL's engineers have concluded that no on-site crushing will be required.

- b. The ESR should address the introduction of the upstream cofferdam/working platform in the North Channel and any potential backwater effects it may have. The Township requires further clarification and input from Hatch and MNR.*

See Item 1.

- c. Muskoka Road #169 will be closed for two nights during construction as the intake channel is constructed under the roadway.*

Road closures will be coordinated with the appropriate emergency services, so as to ensure that an option exists for emergency response during those closures. The conditions surrounding road closures will be agreed upon before permission is granted.

- d. A one lane Bailey bridge is proposed for 2 weeks prior to installation of a two lane Bailey bridge structure. Timing of the installation is requested to ensure proper coordination with other Bala events and activities.*

Two 2-week lane reductions will be required before the installation of the **two** lane Bailey bridge structure to install its foundations. A second set of two 2-week lane reductions will be required upon removal of the bridge to remove the foundation work. All four weeks of lane reductions are planned to be conducted in the off-peak season (between the months of November and Victoria Day weekend). Notice of these lane reductions will be provided to the Municipality as well as the local businesses to ensure they don't coincide with any Bala events or activities. This timing will not be known until after a contractor is chosen.

Impact on Bala's Economy during Operation:

- e. Will reduced flows over the North and South Falls have a negative effect on both existing and new spawning beds? Is 200 m² of "manmade" spawning habitat sufficient to maintain the fishery?*

Fisheries and Oceans Canada (DFO) is the federal agency responsible for fish habitat, while the MNR is the provincial agency responsible for fish community and fisheries. A Fisheries Act Authorization is issued by DFO when the impacts to fish habitat are adequately mitigated. A mitigation plan has been proposed. A Fisheries Act Authorization application will be filed with the DFO. This typically follows the submission of the ESR. The DFO and MNR have both reviewed the ESR and provided comments. These comments are being addressed by SREL and its fisheries experts. Application for Fisheries Act Authorization will be filed thereafter. This authorization will be issued only upon satisfaction of the DFO conditions.

- f. Reduced flow over the North and South Dams: The Township needs to fully understand the visual impact on both falls and potential economic impact. Consideration should be given by the province, providing it flexibility to increase the minimum flows over the dams is the proposed flows seriously affect the aesthetics of the falls.*

Please see answer to Item 2 above. The final determination of the flows to be released over each of the dams will be determined by MNR. As stated in Item 5 a), SREL is currently considering conducting an Environmental Impact Study to investigate impacts from changes to the aesthetics of the falls and any possible mitigation measures.

- g. The township wishes to participate in the proposed park design and discussions relating to ongoing park operations as well as the development of illustrative plaques in the Bala Falls area as recommended by Historica.*

SREL is committed to forming a Public Advisory Group to gather input on the park design and illustrative plaques among other things. A representative from the Township would be welcomed to the group when it is formed during the detailed design stage of the project (following the EA process).

- h. Section 9.4 should be revised to indicate that Burgess Generating Facility is owned by the Township and operated by Algonquin Power.*

SREL acknowledges that while the Township of Muskoka Lakes owns the “building and property” that the Bala #1 Generating Station (Burgess GS), the “business” is owned and operated by Algonquin Power or its subsidiary, as are the rights to the water rights for the facility.

Public Safety

- i. The ESR should confirm that the upstream and downstream booms are in fact the final locations.*

The final location of safety booms will be determined by Transport Canada (TC). TC has reviewed the ESR and provided written comments on the project as provided attached. These comments confirm that the proposed upstream and downstream boom locations are “reasonable” as shown in the ESR. An Application for Navigational Water Protection Act Authorization will be filed after final acceptance of the ESR. This authorization will be issued only upon satisfaction of the TC.

- j. The Township requires further clarification as to the expected flows in and around the Bala Wharf under various flow conditions during different times of year. A comparison of existing flow velocities is also requested (water going over the existing*

North Dam). The Township requires that flow velocity figures be created for the area further out into Bala Bay to understand the potential impact on recreational swimming, canoeing and boating in the area and related safety issues.

The attached letter from TC confirms that while velocities may exceed 0.61 m/s at the intake, the velocity near the Bala Wharf will dissipate to 0.3 m/s during spring low and at full plant operation. TC further concludes that navigation will not be affected in the Bala Wharf area.

- k. Clarification is required regarding the ability of the public to access the north shore of the North Falls. Will currents from the tailrace prohibit swimming in the area?*

As illustrated on the attached figure 6.5 from the ESR, there will be no restricted access to the north shore of the North Falls, downstream of the dam. TC's attached letter also states that while velocity at the outfall will increase from 0.6 to 1.3 m/s, overall velocities will be reduced from 2.4 to 1.3 m/s. It also states that velocities will quickly dissipate to negligible. Therefore, velocities will not be significantly affected on the north shore.

SREL, however, cautions the Township that swimming in this area is currently not advised. "Danger – Fast Water – Keep Away – No Swimming" signs are posted on the downstream face of the North Dam. SREL cannot, therefore, suggest that it would be safe to swim in the area either with, or without, the installation of our project.

TC's letter does, however, indicate that because the flow from the tailrace will be straight out from the plant and perpendicular to the shore, it will eliminate the swirling (circular) flow which presently occurs in that area during high flows. The removal or reduction of this swirling water should allow for easier handling of small vessels in the zone around the tailrace.

- l. Confirmation is required that public will have access to the south bank of the North Channel.*

As the attached Figure 6.5 from the ESR illustrates, there will be no restricted areas along the south bank of the North Channel, downstream of the North Dam. SREL is also proposing to construct a new set of stairs down this incline to facilitate access.

- m. Section 6.3.6.1 requires clarification regarding the "portage" route between Lake Muskoka and the Moon River.*

Suggested alternative portage routes to replace the current upstream "take out" on the crown land adjacent to Purk's Place, include the flat area adjacent to the Bala Wharf (Bala Bay) and Diver's Point, during summer low flow conditions. "Put in" locations downstream include the Town Dock in Bala Reach. TC's attached letter confirms that these locations are appropriate.

- n. Section 6.3.6.1 indicates that access to the water in the area of the works will be discontinued. Clarification is requested as to how this restriction will be done.*

The attached Figure 6.5 clearly outlines the restricted area during the operations phase of the project. The water side of the tailrace restricted area will be enclosed by a floating safety boom and the land side will be blocked with a combination of landscaping features (vegetation and rocks) as well as architecturally designed handrail systems that meet the Ontario Building Code to keep children from falling through or people climbing on.

The landside of the restricted area around the intake will be enclosed by fencing. All attempts will be made to ensure that this fencing is either visually appealing or masked by vegetation. The upstream end of this area will be blocked with a floating safety boom.

There are currently no plans to fence the area along the upstream north shore of the North Channel as this is Municipal land. SREL would be open to discussions with the Municipality should they wish to have SREL assist with the installation of fencing and/or landscaping to provide a physical barrier between the land and water. The water in this area is currently not easily accessible by land already because of the very dense shrubbery and rocks (see photo attached).

SREL also do not have any current plans to erect any barrier on the CP Rail land where it meets the restricted zone unless requested by CP Rail. Again, the water in this area is not easily accessible from land as the rail bridge abutments and vegetation restrict access to a large extent (see photo attached).

- o. The Township requires clarification that the trail along the north side of the upstream North Channel will not be affected by the proposed construction or operations.*

No work is proposed to be completed on or near the north shore of the North Channel, upstream or downstream of the North Dam, with the exception of the downstream anchor for the relocated boom and the installation of the proposed year round pedestrian/snowmobile bridge should the Township wish to proceed. See above item (n) for possibilities regarding barriers to water in this area.

- p. SREL is requested to identify any restrictions or warnings that may be imposed on divers in and around the works.*

Divers will no longer be able to dive in the area shown in yellow on the attached Figure 6.5.

Generally diving is not recommended near intakes or upstream of dams. It has been suggested by members of the public that divers currently use the area off Diver's point to commence dives. While this is not recommended either with or without our project, our project should not significantly change the existing strength of the currents in this area. Divers would, however, risk the chance of swimming below the two closely spaced safety booms. This is currently the situation with the adjacent south dam. Signage will be posted to notify people of the dangers of passing into the restricted zones beyond the safety booms, similar to what is present at the south dam.

There would be a small restricted area within the tailrace boom downstream of the plant as shown on Figure 6.5. It is assumed that divers generally use the deeper areas downstream of the dams and should, therefore, they should not be significantly impacted by our project.

Future Employment and Economy

- q. The Township requests that an Economic Impact Study be undertaken by an independent consultant to identify both the positive and negative attributes of the proposed development after the construction is completed and the plant is operational. The study should identify amongst other things, the effect on the*

Township of Muskoka Lakes
March 18, 2010

seasonal and year round economy given the proposed changes to the North and South Falls. If negative concerns are raised the report should identify possible mitigating measures that could be taken.

As stated above, SREL are seriously considering undertaking an Economic Impact study to identify impacts to the local economy for the construction and operational periods and outline possible mitigation measures. SREL are proposing to hire Bracebridge Generation, a branch of Lakeland Holdings out of Bracebridge, for the plant operations, maintenance and management. Bracebridge generation has indicated that they foresee hiring additional staff for this role.

Bonding and Securities

- r. The Township inquires whether the Province requires a Bond or Security for the completion of the project.*

It is my understanding that the Provincial Government does not generally require such a thing for these types of projects. However, SREL are required to provide security to the Ontario Power Authority (OPA) under our FIT application and eventual FIT contract to ensure that we do proceed to Commercial Operation.

In addition, both the original MNR site release program and the recent OPA FIT application required verification of SREL's financial capability to complete the project.

Please feel free to distribute this letter to the other councillors and/or staff as you feel appropriate.

Respectfully,

Karen McGhee

North Bala Small Hydro Project Manager
Swift River Energy Limited

c.c. Trion Clarke, Hatch Energy
Kristina Rudzki, EAAB, MOE