

North Bala Falls Small Hydro Project Briefing Notes: August 2010 Update

We appreciate that our North Bala Falls Small Hydro Project has become something of a "cause celebre" for some residents of Muskoka Lakes Township. In light of this and with the upcoming municipal election this coming fall, we felt it might be helpful if we highlighted some of the project's more notable benefits, dispelled some of the fiction disguised as facts (that unfortunately seem to receive wider coverage) and, provided an update on the regulatory approvals process.

Background

Swift River Energy Ltd. (SREL) was selected by the Ontario Ministry of Natural Resources (MNR) to pursue the development of a small hydro project at Bala's North Dam, under the government's Crown Lands Release policy/program. From the project's inception, we have bent over backwards to be transparent about our plans, and to solicit and incorporate community comments and concerns into the design and planning for this facility. We have had innumerable meetings with Township and District officials and we have gone the "extra mile" time and again throughout this three-year long, very public consultation process, to meet with the community – individuals, ratepayer groups and their representatives, as well as business associations – to identify and respond to community concerns.

We are proud of our efforts and we are especially pleased that these efforts have made for a substantially better project.

The original Option 1 Plan proposed that the facility would be contained in an above ground structure located entirely on crown land abutting Bala's North Dam and waterfall. The Option 1 Plan would not require the use of, or rights to, any adjacent properties. In response to public concern about the impact the Option 1 Plan might have on the traditional recreation uses to this area and its potential visual impacts, the District of Muskoka passed a Resolution to enter into an agreement with SREL, to provide a small parcel of District-owned land (approximately 30 metres away from the North Dam's waterfall), to enable the design and development of the Option 2 Plan. It is this Option 2 Plan (an underground facility located 35 metres away from the North Dam's waterfall) that has been the subject of extensive environmental review and public consultation over the past two years, and is now before the provincial and federal authorities for review and approval.

The Option 2 Plan, while more costly than the Option 1 Plan (abutting the North Dam's waterfall), offers a number of benefits over both the short- and long-terms. Over the long-term, the Option 2 Plan would provide:

- a new scenic park and lookout attraction in the heart of Bala
- better and safer access to the water's edge below Bala's North Dam to support continued use of this recreation area
- improved aesthetics



- lease payments to the municipality over the 40-year life of the agreement (see detailed discussion below).
- support for a four-season "foot/snowmobile bridge" to promote safer all-year access to Bala's services.

By contrast, the Option 1 Plan site, which is entirely contained on crown land, would be a more prominent, above ground structure, than the Option 2 Plan, and, would preclude the above-noted benefits associated with the Option 2 Plan.

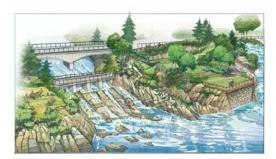


Renderings of Options 1 and 2:

Option 1 Plan: viewed from north shore (above)

Option 2 Plan: aerial view (top right), viewed from north shore (bottom right)





To address community concerns about the potential short- and long-term impacts of the project, Swift River Energy has, at the urging of the municipality, agreed to commission an Economic Impact Study that will examine the direct and indirect impacts of this project, from construction through its 40-year operating contract. This study commenced in early August and will be completed by the end of September 2010.

I urge you to familiarize yourself with the engineering and environmental assessment material contained in our North Bala Falls Small Hydro Project Environmental Screening Report (ESR) along with the array of communications outreach material Swift River Energy Limited distributed throughout the three-years of public consultations, available on our project website, www.balafalls.ca.



The following addresses some of the more notable fictions disguised as facts that seem to be receiving wider attention.

FICTION: The project offers no benefits – short- or long-term – to the community.

FACT: The project, and in particular the Option 2 plan, offers numerous short- and long-term community benefits.

Short Term Benefits

The 12 to 18 month construction period to build this small hydro project will result in numerous direct and indirect economic benefits to the Bala community.

- Local Jobs and Spin-offs for Local Businesses: A project of this nature requires rock blasting expertise, plumbing and electrical trades, as well as formwork and concrete work. These are skills and services we very much expect to be provided by local area trades and suppliers. To the extent that these services may come from the wider area, the 11 to 16 person-years of labour we anticipate this project will require, will draw on at least some of Bala's local services, e.g., motels/cottage rental, restaurants, convenience stores, gas stations, to meet these labourers' needs. While some outspoken critics would like to dismiss this local economic infusion, we believe it will represent a significant benefit to Bala's local economy over the 12 18 month construction period.
- Mitigating Construction Impacts: While we recognize any construction activity can at times be characterized as a "disturbance", we have every confidence that the engineers planning this work have been painstaking in their attention to detail, ensuring this project's design and construction will have minimal short term impact on the local economy and environment. To that end, the required road/bridge work will be confined to Bala's off-season. And, while construction is expected to take between 12 and 18 months to complete, SREL is committed to working with the municipality to ensure traffic flow for Bala's seasonal economy.

Long Term Benefits (40-year contract period)

• Long Term Land Lease Agreement with District: A long-term lease agreement is planned with the District of Muskoka for the District land required the Option 2 Plan. This lease presents an opportunity for both SREL and the District to detail the support SREL could provide the District (and in particular Bala community) over the life of the lease e.g. long-term revenue stream, financial/technical support for a snowmobile



bridge, financial and/or support in kind for town beautification projects and other local projects/festivals.

- A New Snowmobile Bridge: As part of the three-year stakeholder consultations, it was identified that the provision of a permanent separate structure to enable snowmobile access across the reach near Bala's North Dam would improve safety and provide a year-round pedestrian/snowmobile link between the two sections of Bala's central business district. As part of the discussions surrounding the lease of municipal land for the Option 2 Plan, Swift River Energy has offered to assist the Township with construction services for this valuable local initiative.
- Improved, Safer Island Access: In keeping with design initiatives developed by the Township and District, Swift River Energy intends to restore the island area surrounding the proposed project with a landscape plan and interpretive material that will enhance safe access to this site and restore the tourist destination point Bala enjoys. Creating such a "new attraction", with periodic plant tours, can only serve to benefit local area businesses. By the same token, we recognize the sensitivity the community has about not making this an "urban park" and to that end we remain committed to forming a Community Advisory Committee to help us work out the detailed design for this natural area.
- A New Socially Responsible Member of the Bala Community: Swift River Energy is committed to being a socially responsible member of the Bala community, providing its support for local community initiatives. In addition to providing support for some of Bala's more notable community-based initiatives like its Regatta Garden Club and Cranberry Festival, we hope to be able to open the powerhouse on occasion to the public to help build a better understanding of and, appreciation for Bala's rich power generating history. It is our belief these efforts can and will make a meaningful and measurable contribution to Bala's local economy over the long term.
- A Stronger, more Robust Local Electricity Supply: As part of the 40-year contract Swift
 River Energy recently entered into with the government (the Ontario Power Authority),
 all the electricity produced by the facility would be bought by the Province and
 distributed to local utilities and rural customers. Having a new source of electricity
 generation within the immediate Bala area will only improve the local electricity grid's
 reliability, reducing the frequency and periods of outages.
- A Better Managed Water System Up- and Downstream of Bala's North and South
 Dams: Since first engaging the community about our project, we have heard about
 historical concerns of dramatically fluctuating water levels. Some aspects of these
 fluctuating levels are unavoidable effects of extreme seasonal weather events, e.g.,



heavy snow accumulation combined with quick melting, unusually dry winters with long, protracted freshets, or, extremely hot/dry summers.

However, from a day-to-day perspective we are confident that by placing the management of Bala's North and South Dams into local control (we will be retaining Bracebridge Hydro Generation to provide local operational management services), and using automated controls (as opposed to relying on mechanical placement/removal of stop logs), water levels will be more stable, in keeping with the responsibilities we will assume under the legally binding Muskoka Lakes Watershed Management Plan. That means that during the summer season – where and when people come to play on and around the base of the North Dam's waterfall – water levels and the leakage through Bala's North Dam will be maintained to the extent as experienced currently in the summer.

Generally, under typical low summer flow conditions, the power station is not likely to be operating. Simply put, maintaining that legally binding summer leakage (or, "aesthetic flow") through the North Dam, takes priority (under MRWMP regulations) over the feasibility of producing electricity.

Other Fictions being Disguised as Facts

• **FICTION:** The original Option 1, located on crown land, is not feasible. Therefore, if the District denies SREL the lease for the District lands, SREL will be forced to abandon the project.

FACT: SREL fully expects that the District of Muskoka will honour its commitment made in a District Council Resolution (2008) to enter into a lease agreement with SREL should we obtain the necessary environmental approvals. SREL acted in good faith and committed substantial resources to develop the more "community friendly" Option 2 Plan favoured by both the Township and District.

However, should the District reverse its position with respect to that Resolution, SREL is fully prepared to pursue its rights to develop the Option 1 Plan on the crown land only. While some additional work may be required, the technical and economic viability of the Option 1 Plan abutting the North Dam's waterfall was confirmed during the Ministry of Natural Resource's Site Release process back in 2005. Since then the new Green Energy Act has only made this option more attractive. While Option 1 Plan would indeed be smaller, it would also be significantly less expensive than the Option 2 Plan.



• **FICTION:** The scenic falls will be dried up to just 1 cubic metre per second of water, a "mere bathtub amount".

FACT: Currently MNR operates Bala's North and South Bala dams. After spring freshet, MNR typically closes off the Bala's North Dam and allows only leakage through the stop-logs to pass through it. The South Bala Dam is then used as the prime water control structure to maintain water levels in Lake Muskoka and the downstream Moon River. SREL is proposing to maintain the same flow through Bala's North Dam as is currently experienced during the typical summer tourist season, i.e., 1 to 2 m³/s. Water for electricity generation would be drawn from the water that would otherwise flow through Bala's South Dam, as shown below.





Current typical summer flow through the North Dam = Proposed flow through North Dam

This "mere bathtub amount" is the amount that currently supports the summer recreation activities critics are in such despair to protect. These flow conditions would be maintained as a legal condition upon assuming responsibility for managing the operations of Bala's North and South dams. To ensure all other obligations and rights to water are protected (by OPG facilities downstream, Algonquin Power at Burgess Falls, the downstream Go Home Lake users, and the Bala North Dam aesthetic flows), as stipulated in the legally binding Muskoka River Water Management Plan, water flows through the Bala's South Dam would be adjusted as required. The proposed power station at Bala's North Dam would only operate after *all* these other conditions and competing uses were satisfied.

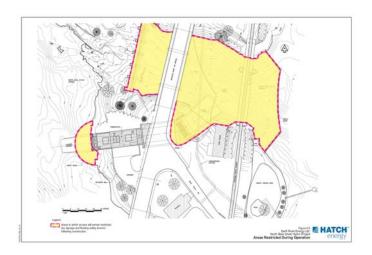
FICTION: That the project would shut out public access to hundreds of metres of shoreline.

FACT: This is simply not true. The Ministry of Natural Resources is engaged in a province-wide effort to improve public safety around the dams it controls. A similar widely advertised initiative is being undertaken jointly by the Ontario Provincial Police and Ontario



Power Generation Inc. (OPGI) to heighten public awareness for the risks associated with fast-moving waters around OPGI's dams. To this end, there in an initiative to install better and more visible safety booms up and downstream of all dams, across the province, in order to preserve public safety. In keeping with these efforts, MNR has adopted measures that will restrict access to dangerous parts of Bala's North and South Dams and are planning changes to these boom locations in the very near future. The intake structure for our proposed project will fall within the new restricted zone. Our proposed design would preserve and improve access to the water below the North Dam while providing a safety boom below the powerhouse's outfall to protect boaters and swimmers from turbulent waters. The proposed public access would include a lookout area atop the underground powerhouse and stairs leading to the base of the North Dam's waterfall. These facilities would provide the general public with safer access to this recreation area.

Restricted areas shown in yellow



• **FICTION:** That the blasting required to create a 50-foot wide by 50-foot deep cavity for the underground powerhouse and its intake structure will devastate the island and Bala's very seasonal economy (May to October).

FACT: Advances in the science of rock excavation have very much mirrored the advances in power engineering over the past 60 years. The fact is that blasting will be confined to only that very limited area where rock needs to be excavated for the underground powerhouse and intake structures (about 30 feet wide). Aside from making environmental sense, it also minimizes the construction costs by avoiding any unnecessary disturbance to or restoration of the surrounding area and such nearby structures as Bala's North Dam and the historically significant Stone Church. It is standard practice that any blasting activities, like that which we are proposing, be closely monitored. Accordingly, "audits" will be done of any



structures in the immediate area prior to blasting and Swift River Energy will be responsible for correcting any damage that might occur to these structures.

More to the point, the excavation work under MR-169 has been scheduled so as to occur outside of Bala's commercially sensitive period, i.e., before the May 24th weekend and/or after the Cranberry Festival. This work will require two overnight road closures, again outside of Bala's tourist season. The first overnight road closure will occur to install a two-way temporary bridge over the area that will be excavated. The second overnight road closure will occur – also outside of Bala's tourist season – to remove that temporary bridge structure.

• **FICTION:** The dangerous flows around the power station would virtually prohibit those activities now enjoyed in the area surrounding Bala's North Dam.

FACT: Transport Canada, the governmental agency responsible for assessing the suitability of the area for boating, has agreed with the appropriateness of the size and location of the booms that have been proposed both upstream and downstream of the project. They have further stated that water velocities at the Bala's Wharf will not be significantly different from current conditions and that the regatta may be conducted in its present form during operation of the facilities. Transport Canada has also noted that the water leaving the tailrace will result in less turbulent water than is currently experienced in that area and that will make safer conditions for small boat operators (a factor that is believed to have contributed to the drowning accident in this area last year).

• **FICTION:** Because Swift River Energy's Bala Falls Small Hydro Project is 14 times larger than the facility that was there through to the 1970's, it will devastate the island's character.

FACT: This couldn't be further from the truth. The fact is – thankfully for all of us – that engineering design and construction practices have made remarkable advances since Bala's original power station was taken out of service in the 1950's. Power engineering advances will allow this project to produce 14 times more power from a facility with a remarkably smaller environmental footprint than that 1920's era facility. The proposed powerhouse will be largely contained in an underground structure and the electricity it produces will be delivered to the provincial grid via underground electricity cables. Bala Fall's North Dam will not be redesigned or tampered with in any way, shape or form.



• **FICTION:** Spring and fall are the only times when there could be any significant amount of power generation from the proposed plant. However, Ontario's power demand is lowest in the spring and fall - due to low demand for air conditioning and heating. Consequently the surplus power produced would end up being sold to the USA at a loss.

FACT: Ontario has a complex fleet of power generating facilities to maintain Ontario's growing appetite for electricity. Nuclear facilities are excellently suited to provide base load electricity generating capacity (the minimum power needed through the low demand periods) to provide the continuous power needed on a "24/7" basis. At the other end of the spectrum are the fossil-fired stations (coal and natural gas) and large-scale hydroelectric facilities (with reservoirs) that are suited to the quick start-ups needed to meet the peaking demands for power during those extreme hot and cold periods. Weather permitting, wind and solar will be drawn on to help meet this demand for peaking power. Smaller hydroelectric facilities, like the one proposed in Bala, are generally most used through the fall, winter and spring when the water supply needed to generate hydroelectric power is greatest. Having these hydroelectric facilities available to generate electricity at these times has little to do with exporting power to adjacent jurisdictions. Producing electricity at those times with renewable hydroelectric energy, in fact, helps contribute to offsetting the need to produce electricity from dirty coal-burning facilities and other more expensive fuel sources.

• **FICTION:** The proposed plant is too small to work effectively within the grid system. In addition, the new mega power plants will be on line in the coming months and will effectively eliminate the need for any pittance of power that Bala might supply.

FACT: It is a demonstrated fact that a diverse and dispersed power generating system is a more robust system that is much more capable of preventing and overcoming isolated power shortages and outages. Historically, Ontario has enjoyed a very reliable electricity generating and delivery system, however, the ever increasing demand for electricity to run our air conditioners, fans, household appliances and electronic equipment, from evermore remote areas across the province, is putting extreme pressures on the capacity of the transmission system. The existing "electricity highway network" is largely operating at capacity; it has little room to absorb or move more power along its lines. While the province is addressing this challenge (to locate and upgrade the transmission system), it is a very costly and time-consuming undertaking that has very significant technical and environmental costs associated with it. It is a proven fact that promoting a distributed and decentralized power generating and delivery system, is good for the environment and that the system's overall robustness (the ability to avoid and overcome isolated power shortages and outages) is vastly improved. That is good for all residents and it is especially beneficial to businesses – large and small – that are so dependent on a reliable supply of electricity.



• **FICTION:** Advertisements are being placed by the OPP and OPG warning the public to stay away from hydro stations and surrounding shorelines and waterways. These warnings and fines will only serve to scare away tourists.

FACT: These critics ignore the fact that these warnings pertain to dams, whether or not they have power stations associated with them and will continue to apply to Bala's two dams irrespective of the proposed small hydro project.

These critics also overlook the "inconvenient truth" that a safer and readily accessible power generating facility offers a number of attractive benefits that would bring new visitors and commerce to Bala, including: its proposed sunset viewing deck; improved interpretive/heritage signage; improved safe access to the falls; and SREL's presence to help promote Bala as a visitor destination point. Actively promoting Bala's rich waterpower generating history at this century-old waterpower site offers many potential benefits and will be an important part of the Province's commitment to developing this clean, renewable energy sources to help meet Ontario's growing electricity needs.

• **FICTION:** The pickerel spawning beds that local conservationists painstakingly created and nurtured will be dried up and destroyed by this project. They are located precisely where the proposed coffer dam would be. This destruction would in turn ruin the fishing activity and its related contribution to commerce in Bala.

FACT: The federal government's Department of Fisheries and Oceans (DFO), through its responsibilities under the Fisheries Act, has direct and immediate authority over all matters pertaining to fish habitat in Canada's waters. The Fisheries Act stipulates that any activity that might result in habitat loss needs to have an approved plan for habitat replacement. Our Environmental Screening Report has identified relatively small known sports fishery habitats within the project's surrounding area. The construction and operating regimes we propose (see ESR for details) have been carefully designed to minimize potential impacts, most particularly by scheduling construction activities in the less sensitive seasons. That notwithstanding, these activities will be closely monitored by DFO and MNR personnel. Should any disturbances to existing habitats be identified, Swift River Energy will be responsible for providing suitable replacement habitat in accordance with DFO's direction.

• **FICTION:** The centuries old portage route between Lake Muskoka and the Moon River would be obliterated by the massive water intake grate for the turbine. This would be a significant loss to canoeing enthusiasts, children's camps and the businesses in Bala that cater to these visitors.

FACT: The "centuries old portage route" is not a narrowly defined trail nor is it even signed. Canoeists have been able to use a broad area along the shoreline to safely move between Lake Muskoka and the Moon River. Canoeists will be able to continue to readily and safely access the island's shoreline above and below Bala's North and South dams.



The Regulatory/Approval Process

• **Provincial/Federal:** To address the requirements under Ontario's Environmental Assessment Act and the regulations governing power project development, i.e., "Guide to Environmental Assessment Requirements for Electricity Projects (March 2001)" and the "Class EA for Waterpower Projects (2008)", Swift River Energy retained Hatch Energy's professional engineers and scientists to prepare an Environmental Screening Report (ESR) for our Bala Falls Small Hydro Project. This ESR and the comments received through a widely advertised 45-day public review period are now before the provincial Government for review and assessment. While the Ontario Ministry of the Environment takes the lead in reviewing this material, it is circulated among all relevant provincial and federal agencies with potential authority over some aspect of the project's scope. In this case, this includes Transport Canada and Fisheries and Oceans Canada at the federal level, and the Ministry of Natural Resources, Ministry of Aboriginal Affairs, and Ministry of Culture at the provincial level, to mention just a few.

This review could take upwards of 60 days at which point the responsible authorities decide to accept the ESR and approve the project, approve it with conditions/additional studies, or, require a fuller environmental assessment (see "Guide to Environmental Assessment Requirements for Electricity Projects (March 2001)" for details)

• Municipal: Under the current regulations governing power projects, municipalities do not have approval authority over the siting, or overall approval of power projects. However, early in the three-year consultation process, it became clear that the initial siting on crown land (Option 1 Plan) was not acceptable to the community (too close to the North Dam's waterfall). To address these concerns, the Option 2 Plan was developed to move the powerhouse about 35 metres south of the North Dam's waterfall and the municipality passed a Resolution in council to negotiate a lease of a small parcel of municipally-owned land to Swift River Energy (pending successful completion of the environmental assessment process).

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