

Renewable Energy shouldn't mean that Bala is Expendable

What is it about the Swift Energy proposal for a power plant at the North Falls in Bala? Please forgive the very short history lesson as it retraces much of what you may clearly know, but it also sets the debate about this power station into context.

The Early Days of Bala

We know that Bala began with the *Burgess General Store* just north of the North Falls. Regardless of how or when the current dams were constructed, there was always a transition from Lake Muskoka to the Moon River. The town began initially because the lakes and rivers provided the first transportation routes, so a store and a community at the junction of these waterways made great sense.

At the same time, we need to view the southern half of Bala as a narrow island bordering Lake Muskoka, Long Lake and the Moon River. At the widest point, this island is perhaps a mile wide. This small amount of available area has contributed to the way that Bala developed by lengthening the town as it could not bunch up due to the lack of available land.

Once the roads were built and 169 subsequently turned into a district highway, canoes and steamships were replaced by cars and the character of Bala changed again, becoming a waypoint for people transiting from Toronto and elsewhere through Gravenhurst to all points in the Muskoka area and beyond. This stimulated the development of some of the retail in town, although it can be argued that most of the stores and businesses were established to service the growing local cottage marketplace. It also stimulated tourism and it can be safely argued that the Bala Falls came to be viewed as the only natural tourist attraction in town.

Potential Impacts of the Construction of the Swift River power plant

We are collectively the inheritors of the natural topography of the area, and we can share the vision of the founders and the settlers and traders who came early to the area. There has been plenty of discussion and speculation about the potential impact of the construction of the power plant as well as concern about the ongoing impact that it will have upon the residents and visitors to Bala.

These concerns include the loss of business income for many of the vendors and service providers in town as visitors and residents avoid coming through the bottleneck that will be created by the construction. Similarly, another possible and permanent bottleneck has been suggested in the form of the installation of a traffic signal at the junction of District Road 169 and Bala Falls Rd.

A construction period of 12 to 18 months will force many residents and visitors to look for alternate providers for the goods and services they need. Many of them will not return when the construction is complete because they will have forged new relationships in other towns. Additionally, if a traffic signal is indeed installed at Bala Falls Rd., the resulting traffic jams on weekends will create traffic chaos and provide yet another reason for visitors and residents alike to seek alternatives.

Wouldn't it seem strange to consider that the original portage route from Bala Bay to the Moon River used by early pioneers and traders would no longer be available to canoe tourists and the kids from *Camp Pinecrest* because of the power plant? Similarly, how sad would it be if the annual regatta that has been held for over 100 years would be significantly impacted for similar

reasons? How would it seem if the town of Bala lost one of its 2 public swimming areas on Lake Muskoka? Clearly, many water activities on the Moon River may also be negatively impacted, to say nothing of the visual impact for everyone if the power station did draw off 90+ percent of the water in the South Falls that have become the visual icon of Bala. Imagine what it would look like if the water chute that we have all grown up with suddenly looked like a jagged, barren rock gully when the power station was operating?

Consider how unsafe you would feel if you had a health emergency or a house fire and the emergency vehicles were hung up in the construction and couldn't get to you on a timely basis because your home happens to be south of the planned project? Even a somewhat mundane problem could quickly escalate into an emergency under these conditions.

These are some of the reasons why we all need to be concerned about protecting the Bala Falls, just as we are concerned about protecting and enhancing all aspects of our community. We have heard that *Swift Energy* is involved in environmental assessment hearings and investigations regarding their project. Clearly, we must consider environment in a much broader context, so we must look at the potential impact of the construction and ongoing use of this power station in terms of how it will impact Bala in terms of the retail environment, the tourist environment, the social environment, and the community environment.

What are the Financial Implications of the Swift River power plant?

At the same time, we need to understand the financial impact foreseen by the *Swift Energy* principals. Their original prospectus speaks of a \$13 million investment to create the project, combining \$5 million for the turbine components and the remainder for construction and supplies. In a town of 500 people, \$8 million seems like a great deal of money. In terms of the roughly 10,000 seasonal landowners and the tourists who spend time in Bala, this investment is more like a drop in the bucket, particularly when one considers the value of the residential real estate in Bala Bay alone. Those homes would eclipse the value of the *Swift Energy* expenditure many times over. Add to that the soft expenditures of the residents and tourists, and the 12 to 18 month proposed purchases by *Swift Energy* would not even equal the expenses of building and running a smallish lodge.

So what do the principals of *Swift Energy* look to receive for the disturbance and potential loss of income that they will create for the rest of us?

So what is a Run of River power plant?

Swift Energy's proposal calls for a "run of river" generating station. Run of river means that there is no dam, or retained water and the station can only operate when water capacity is optimal. There are many such stations in the world. China is one of the leading creators of these types of power plants, with 48,000 run of river plants, producing 31 GW of power (a GW equals 1000 MW). Ontario's electricity production capability is 24,000 MW, and on first glance, *Swift River's* plan for a 4 MW plant seems hardly worth the effort. Nevertheless, China's example demonstrates that there are many such systems in the world.

However, the interesting issue around run of river power plants, according to *Power Generation in Canada*, a publication of the Canadian Electricity Association, is that these plants have a high variation on output, and that they generally have low or no production in the winter months. If you think about it, and you remember keeping an eye on the water flow through the Bala Falls throughout the year, you will remember that the Spring runoff would offer optimal flows. Then

you might recall that the flow usually trails off by the middle of July to minimal flows and then grows again toward the end of the year when they drop water levels for the winter. This would seem to demonstrate that there might be 5 or so months of the year when there is reasonable production capacity in the water flow over the falls.

Production Capacity and Swift River Energy

The concept of production capacity, or as the industry calls it, “capacity factor”, is used in these systems regularly. The Chinese run of river plants average 8% of the installed capacity. In other words, if the *Swift River* plant has an installed capacity of 4 megawatts, then at the same time, the capacity factor might be as low as 8% of that, or .32 megawatts. If we use the 29% average capacity factor for hydroelectric suggested by greenpowerinvestor.com, an internet newsletter for investors, the Bala Dam project might produce 1.12 MW on average.

So what does that mean to you and me? *Sphere Business Solutions*, a company selling solar solutions to homes and businesses estimate that 1 megawatt generally will provide enough power to run 750 homes. If that is the case, then the *Swift River* power plant would generate enough electricity per year (on a variable basis as described earlier), to power somewhere between 240 and 840 homes. Looking around Bala, this means that the *Swift River* plant would not be able to produce enough electricity to power the homes in the area around the town, let alone contribute in a significant way to the 24,000 MW provincial powergrid.

So why would the principals of *Swift Energy* want to put us through the misery of all the construction, take away our scenic Falls on a periodic basis, make the kids find somewhere else to have their annual regatta and cause some or possibly many of the shops to lose money? Simple, the Ontario government has an interest in approving small renewable energy projects, and they have **guaranteed** that the companies creating the projects will not lose money.

So, in a nutshell, it sounds like a small group of folks at *Swift Energy* with absolutely no ties or connection to Bala, want to create this because they can't lose. We can...we will lose our scenic Bala Falls. Many of the activities that have provided the glue that has held our community together and helped it grow over the years will have to change or simply not happen. We will be inconvenienced in traffic for a minimum of a year and possible 18 months. Our town will never be the same and we just might find ourselves off the tourist travel route. These things just might be enough of a reason for us all to get involved and tell our elected representatives at the Township, the District, and at Queen's Park that they had better sit up, take notice, and realize that some things are worth saving.