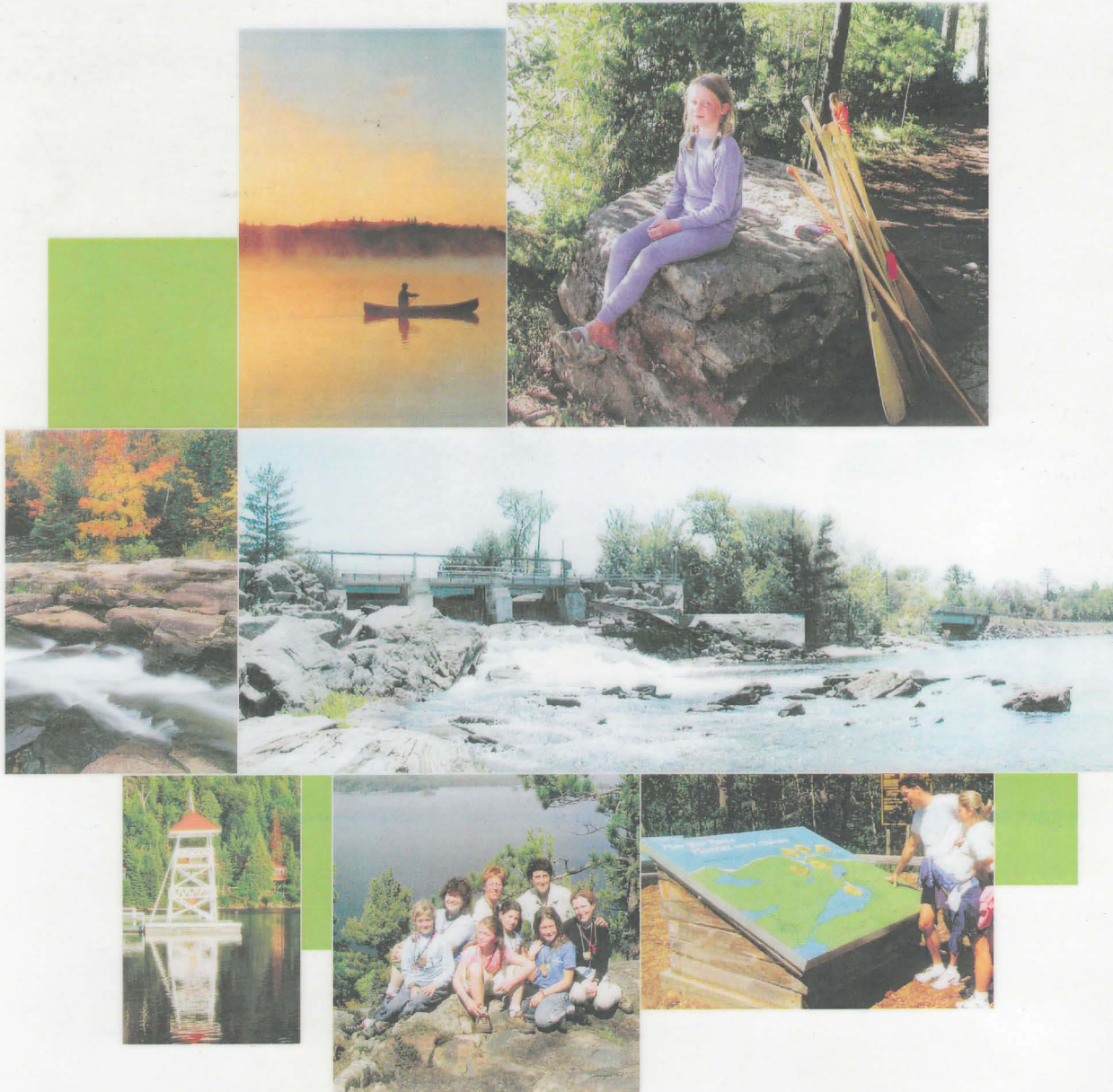


Ministry of Natural Resources

NORTH BALA DAM

PROPOSAL # : MNR-DAM-RFP-01-05

JULY 05 2005



in association with
Horizon Hydro Inc.
Acres International
Limited
Bracebridge
Generation Limited
Forrec Ltd.
Gowling's Energy Group



1 Stage I – Mandatory Requirements

1.1 Submission Form – Appendix B

Please refer to page 3.

1.2 Tax Compliance Declaration Form - Appendix C

Please refer to page 7.

1.3 Reference Form – Appendix E

Please refer to pages 9 to 12.

1.4 Other Mandatory Requirements

The proponent, Swift River Energy Limited, acknowledges Section 3.2.4 “Other Mandatory Requirements” of the Request for Proposal (RFP) No. MNR-DAM-RFP-01-05 and its requirement that the Proponent submit “an outline of their technical and financial abilities to restore and operate the structure”. We believe that our responses to the rated criteria, specifically, “Financial Capability” and “Technical and Feasibility of Project” fully address these required technical and financial abilities and refer you to those sections.

NOTE

**PAGES 3 TO 20 HAVE BEEN EXCLUDED TO
PRESERVE CONFIDENTIALITY OF
INFORMATION**

To the Reader:

This copy of our North Bala Dam proposal dated July 2005 has been edited in order to preserve the confidentiality of some pieces of financial and personal information. The omission of this information does not affect the technical content of the proposal. All aspects of technical issues presented in this copy of the proposal are identical to those presented by Swift River Energy Limited to the MNR in the original proposal. The project schedule has been delayed due to the extensions of dates for submitting proposals to the Ontario Ministry of Energy for renewable energy projects.

Please note that the conceptual layout as presented in the proposal is preliminary, and the final details will depend on dialogue with regulatory agencies while taking public feedback into consideration. Regardless of the final design, the proposed facility will be operated so as to ensure that the Lake Muskoka levels are maintained within the range prescribed by the Muskoka River Water Management Plan.

It is our intention to keep the community well informed of the project developments as they occur. Making this proposal available for your viewing is in keeping with this commitment. We look forward to working with you and the community.

Swift River Energy Limited

Ministry of Natural Resources

NORTH BALA DAM

PROPOSAL # : MNR-DAM-RFP-01-05

JULY 05 2005



in association with
Horizon Hydro Inc.
Acres International
Limited
Bracebridge
Generation Limited
Forrec Ltd.
Gowling's Energy Group



78 Mathersfield Drive
Toronto, Ontario
M4W 3W5
Tel: 416-413-0579

July 5, 2005

Ministry of Natural Resources
Lands and Waters Branch
300 Water Street, 5th Floor South
Peterborough, ON K9J 8M5

Attention: Site Release RFP Coordinator

Gentlemen/Mesdames:

**Request for Proposal MNR-DAM-RFP-01-05
North Bala Dam**

Swift River Energy Limited is pleased to submit its proposal for the construction and operation of a hydroelectric generating plant at the North Bala dam.

Our proposal has the financial backing of Horizon Hydro Inc. and Zwig Property Management Services Partnership. Technical and environmental competence is provided by Acres International Limited. Operation of the plant and dams will be by Bracebridge Generation Ltd. Our legal counsel is the Chair of the National Energy and Infrastructure Group of Gowling, Lafleur Henderson LLP. We have incorporated key ideas and values from Forrec Limited, a landscaping and site development firm with extensive local experience.

Our intent is to provide a comprehensive proposal that supports the Ministry's "goals and objectives" while meeting the MNR's need for new renewable sources, maximizes an existing resource and is sensitive to the aesthetics of this highly visible site. We believe that this project will set a standard that will showcase a successful site release program.

Swift River is aware that the Bala site has substantial beauty for the local population, both permanent and summer residents, and is a tourist gem for the people of Ontario. This is clearly recognized in our proposal. We have utilized the expertise of two firms that have recently been involved in local water development: Bracebridge Generation Ltd. is building an addition to their High Falls project near Bracebridge, and Forrec is working on a substantial upgrade of Gravenhurst's waterfront.

Our proposal incorporates the safe public use and enjoyment of the site, attractive landscaping, a public educational component, and the funding of local school scholarships in the environmental sciences.

The principals of Swift River are experienced executives and professionals of high net worth who have created an outstanding team with the requisite track record in screening, permitting and constructing like-sized water power projects. The financial strength of a major Toronto developer and construction firm provides the backstop needed to ensure that this project is built as proposed.

We look forward to working cooperatively with the MNR, the other federal and provincial agencies as well as local community authorities and interested citizens to create Bala's contribution to Ontario's energy goals, through Swift River Energy Limited.

Yours very truly,

A handwritten signature in black ink, appearing to read "Paul Fisher", written over a horizontal line.

Paul Fisher, Co-Chief Executive Officer and Director
Swift River Energy Limited

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Annex 1 Company Profiles

Note: Some pages containing confidential/financial information have been omitted. The technical content has not been affected by these omissions.

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2.2	Flow Duration for Muskoka Lake at North and South Bala Dams
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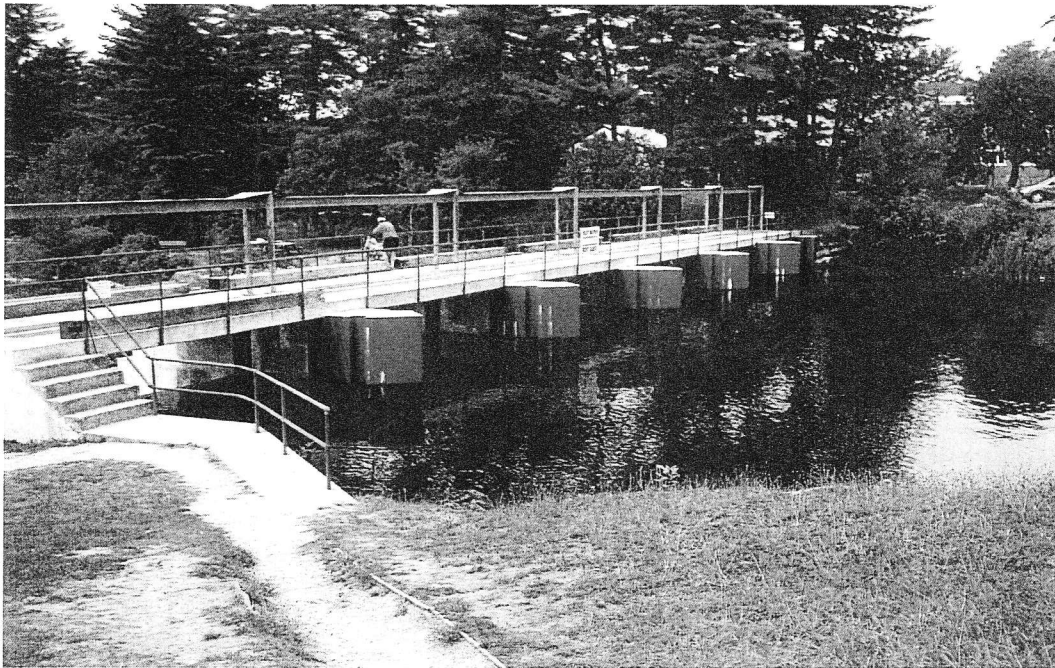
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Executive Summary

Swift River Energy is pleased to submit our proposal for the hydroelectric development of the North Bala Dam site on the Muskoka River basin. Our team has tried to show how it understands the importance of the landscape and how its connection to the community is tied to wise management of our land and water resources.

We have thoroughly reviewed the Request for Proposals (RFP) and are confident that our proposal reflects the aesthetic concerns and values, local sensitivities and historic nature of this site. We have also worked to optimize the project to maximize generating potential while providing sufficient compensation flow for tourists and to maintain a fish habitat.



We are proposing a four (4) Megawatt (MW) generating facility that is in keeping with the current land use and is sensitive to the cottage area in which it is located. A viewing platform on top of the below ground plant provides scenic views of the lower river as well as telling the story of the old, and new generating facilities. Trees, existing rocks and new landscaping will help fit the project in to the existing pre-Cambrian site.

The project is proposed by a highly seasoned team of professionals, including Swift River Energy Limited; Horizon Hydro Inc.; Acres International Limited; Bracebridge Generation Limited; Gowling, Lafleur Henderson LLP; and, Forrec Limited. The financial support comes from three high net worth individuals plus

the substantial resources of the Horizon Legacy Group, a Toronto based commercial real estate firm. Engineering and design comes from Acres, who designed and built the successful Misema generating station for Canadian Renewable Energy Corporation. Gowling's National Energy and Infrastructure Industry Group is providing legal advice and services. Forrec Limited is an internationally acclaimed landscaping and site designer that is active in the Muskoka Lakes district.

The Swift River team has been involved with the development of numerous waterpower facilities and 17 major office buildings in Ontario within the past 20 years, and is prepared to build an eco-sensitive renewable energy project in Bala that demonstrates the MNR's commitment to new energy sources.

2.2 Category 2 – Technical and Feasibility of Project

2.2.1 Overview of the Project

The proposed development is a low-head hydroelectric power facility constructed at the south end of North Bala dam. The conceptual layout of the proposed facility is shown in Figures 2.1 and 2.2. The entire development would be on Crown land.

The power facility would be operated as a ‘run-of-river’ power plant operated in conformance with the water levels and available flows detailed in the Preferred Option in the Options Report for the Muskoka River Water Management Plan (WMP).

The project is feasible for installed capacities in the range of 3 to 4 MW. Swift River Energy Limited has decided that the preferred installed capacity is 4 MW. At this installed capacity, Swift River would be able to take advantage of any higher flows in the spring, winter and fall to compensate for the restrictions associated with generation during the summer season.

Further details of the proposed development are presented in the following sections in response to the information requested in the Request for Proposals (RFP).

2.2.2 Proposed Project Arrangement

The proposed general arrangement for the hydroelectric development is shown in Figures 2.1 and 2.2.

This arrangement is the preferred solution and is based on the assumption that the distribution of flow at the face of the intake would be acceptable to the manufacturer of the turbine.

To confirm this assumption, it would be necessary to perform detailed hydraulic studies. Such studies might indicate that the general arrangement should be modified.

If approach flow conditions dictate, one alternative that would be reviewed would be to put the powerhouse within the limits of the existing dam. It would be necessary to replace the spillage capacity that would be displaced by the proposed powerhouse. This is not our ideal solution and we will examine different alternatives to ensure the best combination of hydraulic flow, minimizing disruption to the existing structures and maximizing generation efficiency.

The selected development will consist of three major hydraulic components:

- approach channel
- intake/powerhouse
- tailrace channel.

All of these hydraulic components would be constructed in the dry behind cofferdams constructed at the upstream end of the approach channel and just downstream of the proposed tailrace.

Further, more detailed descriptions of the major hydraulic components shown in Figures 2.1 and 2.2 are presented below.

Approach Channel

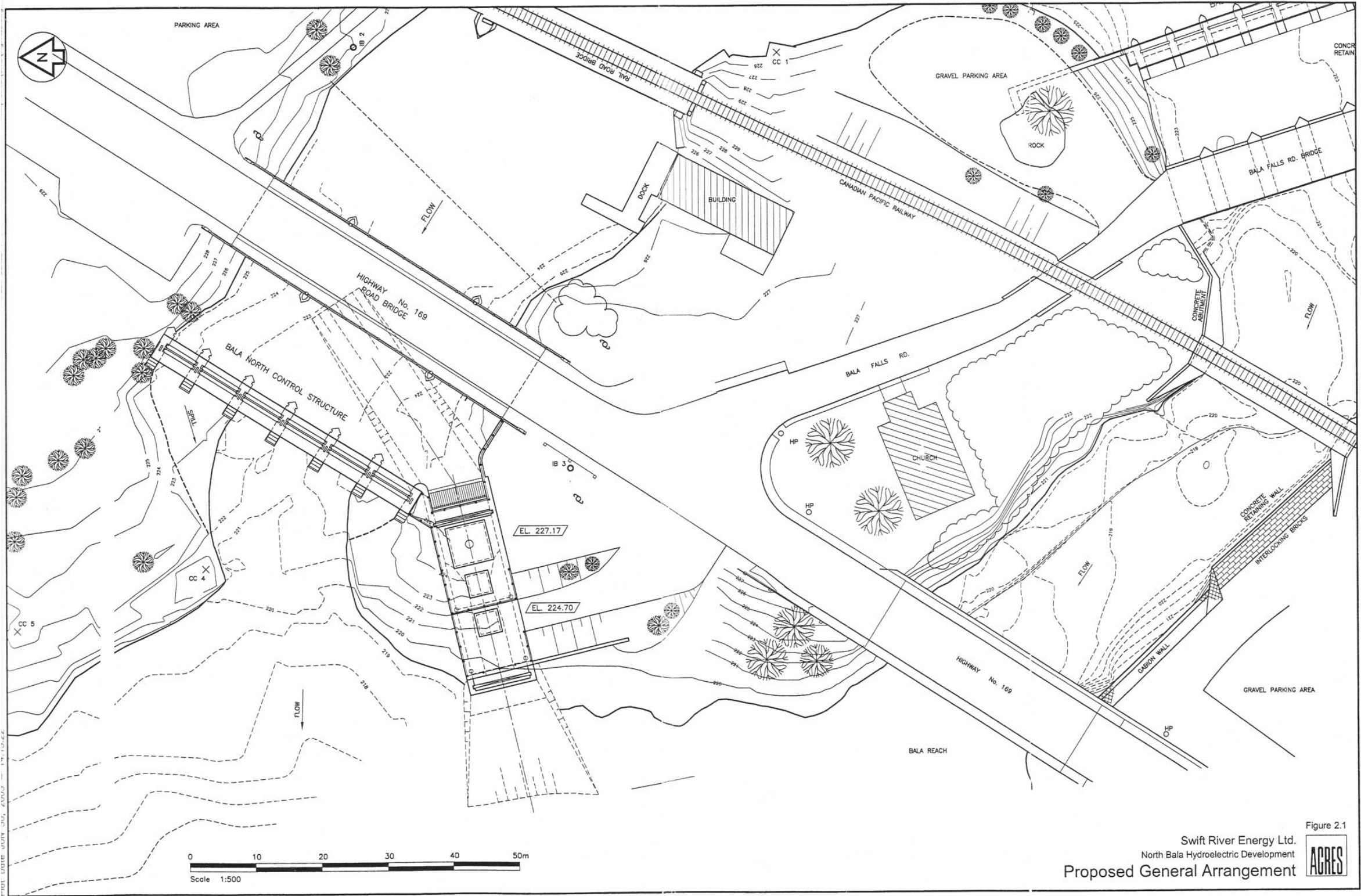
The approach channel would be coincident with the approach channel leading to the existing dam. To accommodate the needs of the proposed power facility, it would be necessary to modify the underwater configuration of the existing channel by excavating bedrock to create a vertical transition to the invert of the intake portion of the powerhouse. The slope of this transition must be gradual so that flow velocities sudden changes in flow velocities, and the associated head losses, would not occur.

Powerhouse

The powerhouse would consist of three portions:

- intake
- turbine/generator room
- draft tube and electrical room.

The central portion of the powerhouse would contain the turbine and generator and some of the ancillary equipment such as lubrication and



Swift River Energy Ltd.
 North Bala Hydroelectric Development
 Proposed General Arrangement

Figure 2.1

ACRES

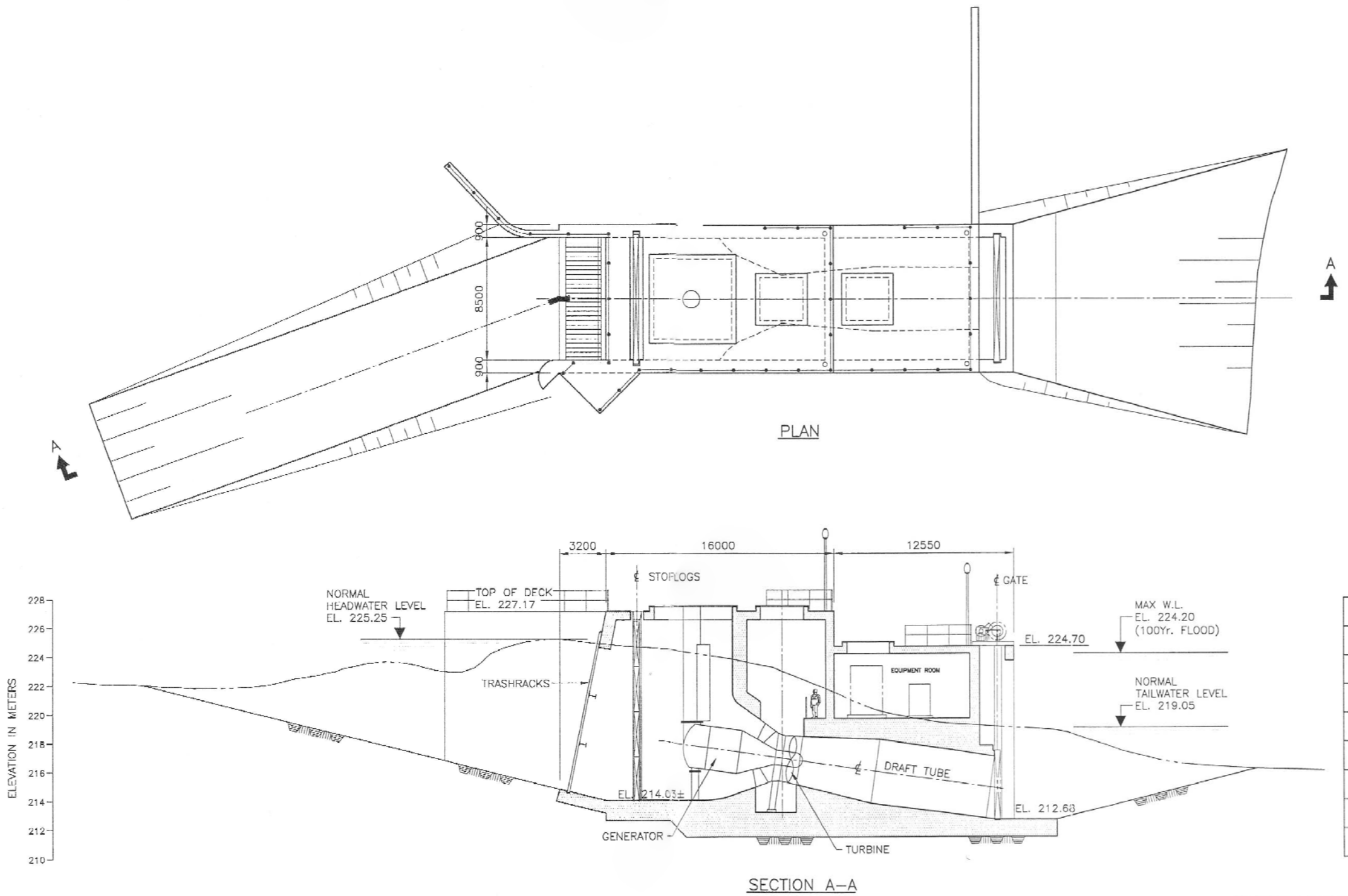


Figure 2.2

drainage systems. Figure 2.2 is based on an 'EcoBulb' type turbine/generator set. Other types of units could also be used in this development. Meanwhile, the 'EcoBulb' unit, an 'open-pit' type unit, provides the greatest opportunity to minimize the visual impact and maximize the security and public safety associated with the proposed powerhouse.

The intake would be configured to accommodate the trashracks, which must have a much larger area than the turbine so that the flow velocity and head loss associated with the flow of water through the trashrack is minimized. The trashrack would be required to prevent large objects from entering the water passage downstream and damaging the turbine. A slot to accommodate a set of stop-logs guides would be constructed just upstream of the turbine. The stop logs would be used to dewater turbine for maintenance purposes.

The 'EcoBulb' unit would consist of a double-regulated Kaplan turbine downstream of a structural steel bulb in the center of the water passage upstream. A Kaplan turbine would be used to make it possible to generate power during the relatively low-flow months in the summer. The bulb would contain a direct-driven generator. The generator in this type of unit would produce power at 2300 V.

The remainder of the powerhouse would consist of a draft tube and a room above that would contain the major electrical equipment such as the switchgear and the transformer. Other electrical equipment associated with power generation (controls, etc) would be in the space upstream of the draft tube along with ancillary mechanical equipment such as drainage pumps, heating and ventilating systems, etc. All of the electrical and mechanical equipment would be completely enclosed to eliminate any concerns about public access and improve on the appearance of the development.

The draft tube would serve to provide a gradual hydraulic transition for the discharge from the turbine into the tailrace, thus avoiding most of the head loss that would occur if the sudden velocities changes were built into the flow.

Tailrace

The tailrace is simply an excavation in the bedrock shaped such that the rate of change in flow velocity continues to be gradual, thus minimizing the overall head loss throughout the facility.

2.2.3 Major Technical Issues

The most significant technical issues associated with the proposed development are as follows:

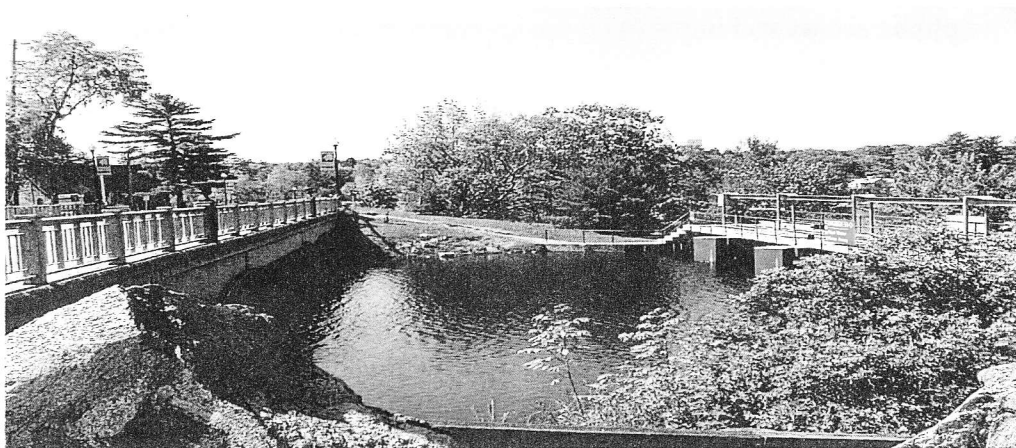
- approach channel hydraulics
- public safety
- boater safety
- operator safety
- operating within the terms of the WMP
- interconnection requirements
- sound levels
- load rejections.

Further discussion of these issues is provided below.

Approach Channel Hydraulics

Low-head generating stations such as the proposed development at North Bala dam require well-designed approach channels that will provide a uniform distribution of flow over the full height and width of the intake opening. This is essential to ensuring reliable performance of the turbine.

Another aspect of the design of the approach is the need to deal with the formation of a stable ice cover. If the flow velocities (and Froude number) in the channel are too high, an ice sheet might not form; or, an ice sheet might form during a cold snap when the powerhouse is shut down, and the powerhouse would be starved of the flow available for power generation. The approach channel should be designed to accommodate an ice cover, taking into account the reduction in water level in Lake Muskoka that occurs during the winter season.



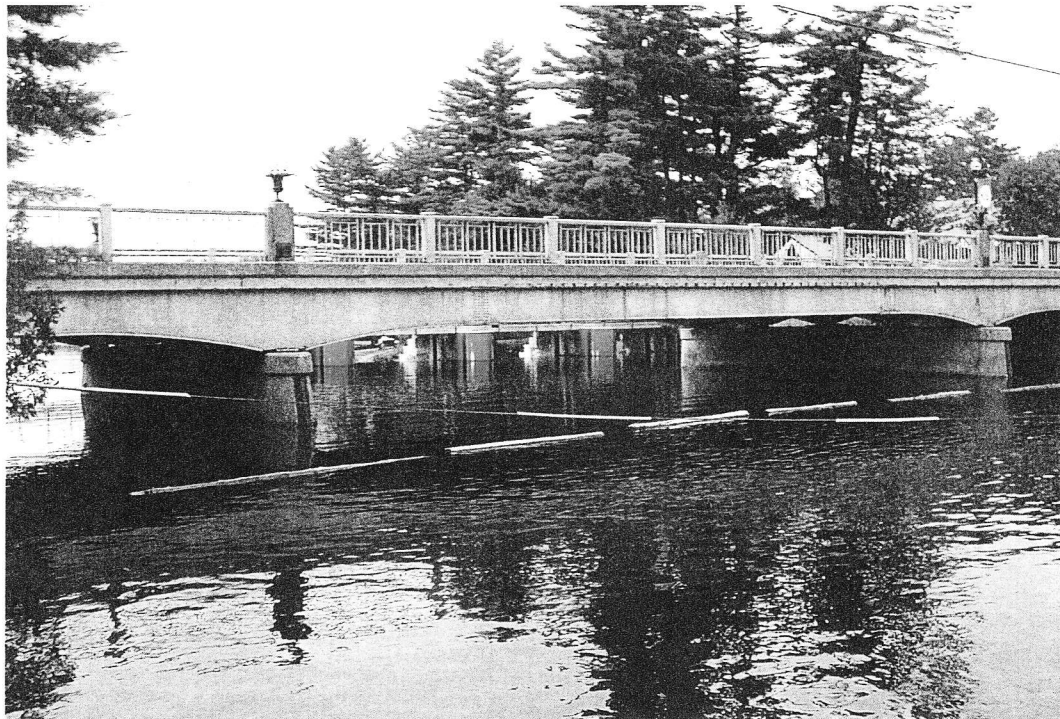
Public Safety

Public safety is paramount. At present, the public is permitted to walk across the existing dam at North Bala. This would not change. The proposed development would be equipped with all of the barriers (handrails) required by the Ontario Building Code for areas of public access. Signage similar to the signage presently on the main dam would be put in place to warn the public of the fast-flowing water in the approach channel. Suitable lighting would be provided wherever access is permitted.

Boater Safety

The technical solution to ensuring boater safety is to provide a safety boom so that a boater that strays into the approach channel after losing control would have the boom to catch the boat so that rescue measures could be enacted. The boom would be installed immediately upstream of the Highway 169 bridge, in an area that would be highly visible by passers-by.

Since the flow available to the proposed powerhouse during the prime boating season, June 15 to September 30, would be small relative to the rated discharge of the proposed development, the flow velocities and the potential for boating problems in the approach channel should be lessened significantly.



Operator Safety

The design of the proposed development would incorporate all of the up-to-date features required to create a safe working environment for the workers/operators.

Operating within the Terms of the WMP

In accordance with the Preferred Option for managing Lake Muskoka, the lake level will be kept constant to satisfy the needs of the cottagers surrounding the lake between June 15 and September 30. Consequently, the flow available for power generation will equal the amount of flow entering the lake, and no more. The option of passing more discharge through the powerhouse during the night time would be explored, taking into account the need to pass certain flows during certain hours to satisfy other aesthetic requirements.

Interconnection Requirements

The proposed facility would be connected to the existing transmission line that crosses the approach channel along the east side of the road bridge (Highway 169) upstream of the proposed development. According to a representative of HONI, it is rated at 44 kV, but, appears to be rated at 27.6 kV. It would not be subject to formal assessment by the IMO/IESO. It is anticipated that the interconnection would consist of an underground cable running approximately 40 m from the proposed powerhouse to an existing hydro pole just south of the intersection of Highway 169 and the original route of Highway 69 (see Figure 2.1). The anticipated construction requirements include disconnects and transfer switches (if the proposed facility represents more than 30% of the load on the existing transmission line). Meanwhile, surge capacity should not be an issue.

Sound Levels

Sound levels would be reasonable because the generator would be direct driven and operate at a relatively slow speed. Other types of units, such as an 'open-pit' unit would include a higher-speed generator and a speed increaser to step up the rotational speed of the turbine. Higher-speed generators are generally louder. Meanwhile, the sound emitted from either type of generator can be reduced significantly by using a water-cooled generator and by dissipating the sound within the building. These types of measures would be

investigated and the sound levels would be reduced to reasonable levels during final design.

Load Rejections

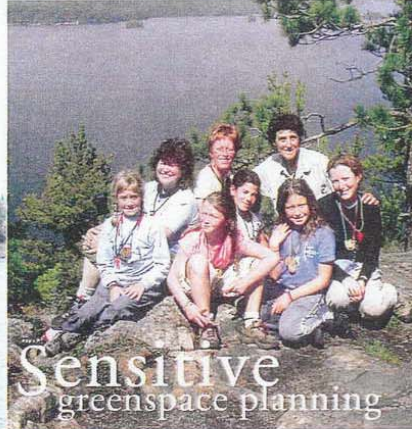
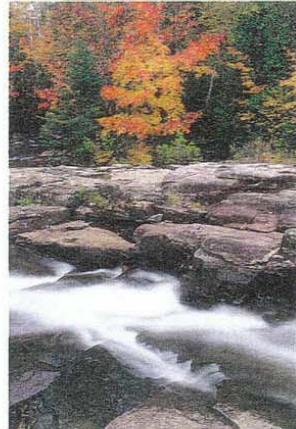
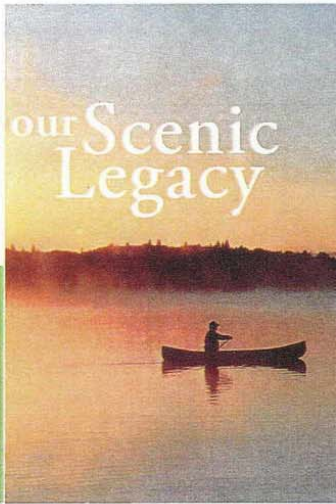
When the load that is being satisfied by a generating station suddenly drops to zero due to a mishap such as a transformer failure, the generating unit will start to run away and the flow through the turbine must be shut down as quickly as possible to avoid damage to the unit. A sudden shutdown of the flow will result in a pressure wave migrating in the upstream direction from the intake, with the height of the wave being greatest immediately upstream of the intake. Various precautions such as extended governor times and the exclusion of boaters from the areas most affected by this type of wave would be taken to prevent this wave from causing any harm.

NORTH BALA DAM

creating opportunities for recreation & eco-tourism

GREEN POWER GREEN SPACE IN HARMONY

preserving our Scenic Legacy



Community Sensitive greenspace planning

respecting our Cultural Heritage



a natural approach to Landscaping

HARNESSING THE POWER OF THE RIVER



2.2.4 Consideration of Socioeconomic Values

Swift River's philosophy with respect to the socioeconomic values of the Bala site is represented graphically in the preceding fold-out page (Figure 2.3).

In its RFP, Category 2, page 13, the Ministry requests the proponent address, "Consideration for scenic flows, traditional uses and continuity of business... aesthetic, recreational, social and economic (i.e., tourism) values in the area of development."

Acres and Forrec (a leader in landscape architecture and planning of tourist sites – see Annex 1) have been engaged to advise Swift River on North Bala Dam. Forrec currently works on design of the nearby Gravenhurst waterfront development.

Our Consideration for Aesthetic Values

We will employ today's most advanced engineering and design technologies to create a much more discreet facility than the original Bala Power House, (built in 1917 and demolished in the 1960's). Our intention is to harmonize the architecture of the new facility with the natural environment of the site by installing a low-profile power house built mostly underground (bunker-type). Its roof will be below road level and only some 5 ft above ground level, creating an excellent vantage point for visitors to view the surrounding lake, falls and parkland. Transformers will be hidden, cables buried and antique-style concrete work used to give the power house a more authentic look that will artfully blend with the historic and natural landscape of this vital waterway. We are providing two graphic representations of the site on the following pages showing the proposed new generating plant:

- Figure 2.4 – View from Downstream North Bank
- Figure 2.5 – View from Intake Channel Looking Downstream.

Our Considerations for Economic Values and Tourism

Our commitment extends beyond minimizing the visual impact of the facility. Swift River is keenly aware of the importance of this site as an outdoor recreation area for tourists and local residents. A key element in our development of the site therefore will be to enhance the natural landscape. Through tree plantings, improved maintenance of public green spaces and the

addition of floral gardens, walking trails and rest areas furnished with benches and waste receptacles, we will create an appealing, park-like environment that people will enjoy visiting.

We envision the establishment of a volunteer organization (i.e., Friends of the Falls) to be sponsored by Swift River and hopefully, local merchants and businesses as well, that will take the lead in the beautification of the site and its ongoing maintenance. Through these measures, the new North Bala Dam site will enhance the social and economic value of the site to the community.

Information plaques and display boards will be erected where appropriate to increase public awareness of the Bala area's rich natural, historic and cultural lore. These displays will feature bold graphics and easy-to-read text on such topics as the native peoples of the region and their traditions, flora, fauna, the story of electrical power generation (including a 'how-it-works' cutaway exhibit of the dam) and other subjects of interest to tourists and the community. We will work with local community groups to ensure the authenticity and relevance of these exhibits and displays. Periodic tours for visitors and tourists will be organized. When completed, the North Bala Dam and power plant will be a landmark of technological modernity, natural beauty and cultural preservation.

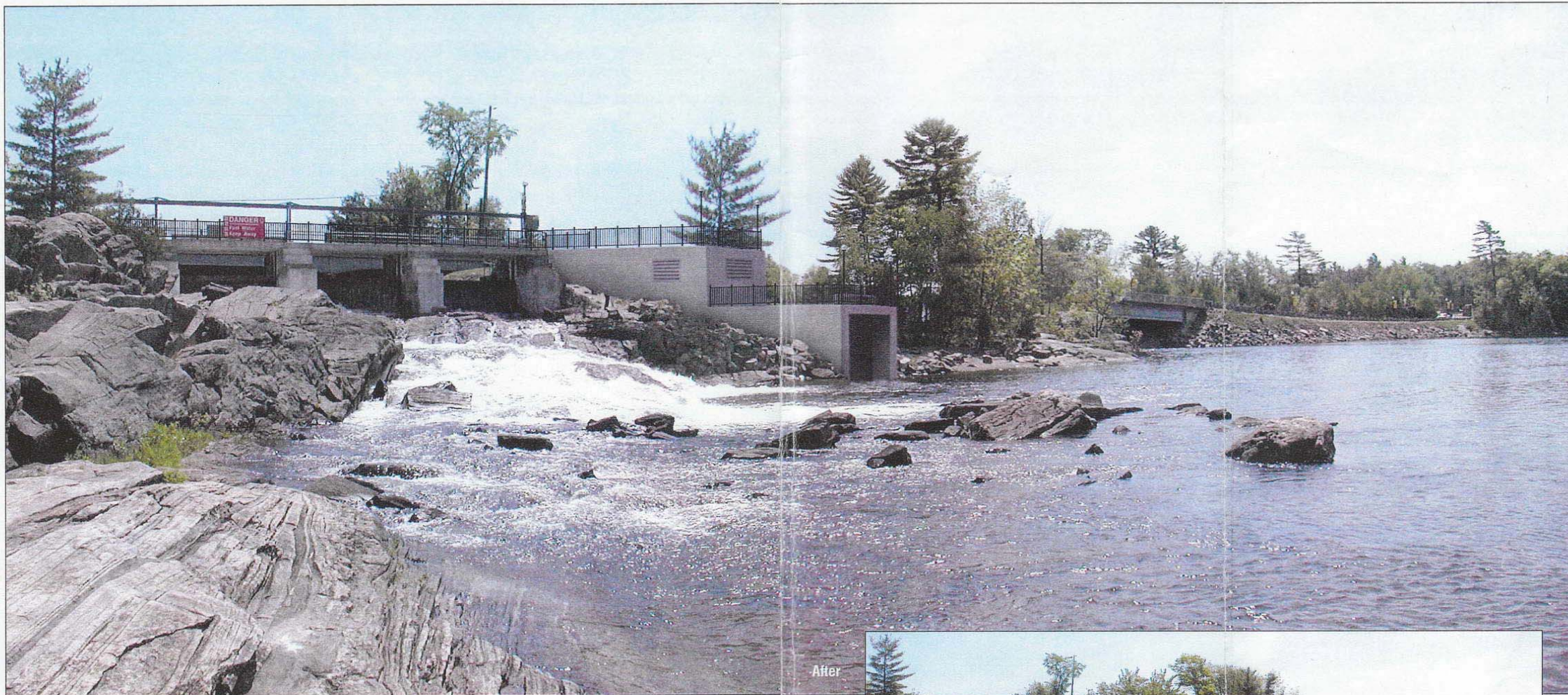
Our Consideration for Scenic Flows/Traditional Recreational Uses

Swift River will work closely with the surrounding community to address their concerns about the scenic waterfalls and other issues. We look forward to consultations with the Muskoka River WMP's public advisory committee, local politicians, and all the stakeholders concerned.

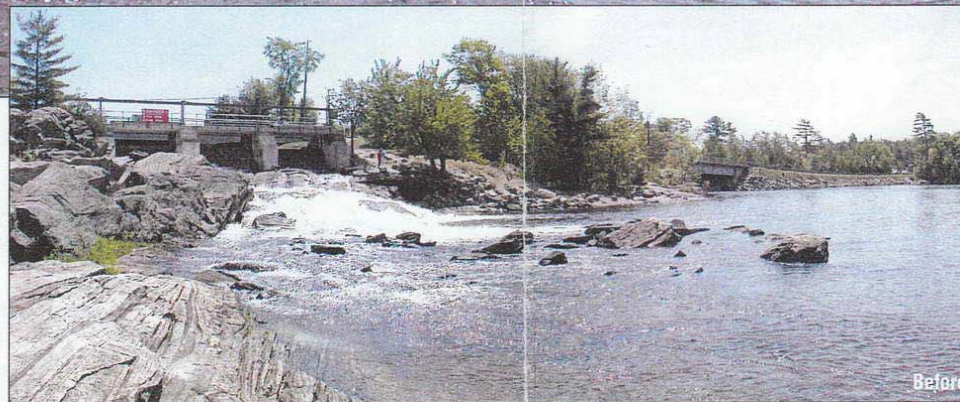
A key goal of our communications with the Bala community will be to dispel the public's perception that water is "lost" in producing electrical energy. The flow of water going over the Bala dams will remain sufficient to ensure the natural aesthetics of the waterfall will remain.

Similarly, the dams will be controlled properly and safely to maintain the water level and flow of the Muskoka River and Lake Muskoka and the Moon River to maintain their scenic value. Lake Muskoka is a large lake and has approximately 100 km² of lake water available to maintain continuous flow over the dam.

Figure 2.4
View From Downstream North Bank



After



Before

Figure 2.5
View From Intake Channel Looking Downstream



The goal of our communications will be to assure the community that the new generation facility will not effect their enjoyment of this natural asset. It is our hope that through cogent, accurate communications, the community will recognize that the new plant is a vital benefit to all.

Obviously for reasons of public safety, there will be some safety restrictions placed on public access near specific areas at the intake, powerhouse and dam. However, these restrictions will not generally diminish the public's enjoyment of the area for swimming, boating, fishing, picnicking and hiking. Indeed we will work with the local Board of Education to conduct field trips for their students to this site to learn more about local and provincial, history, geology, nature and environmental conservation.

Our Consideration of Social Values

Renewable energy is clearly the way of the future and we intend that the North Bala powerhouse and dam be part of that future, making the community's contribution to province-wide efforts to produce cheaper, cleaner electrical power at a local level. There are already many small hydro plants scattered throughout Ontario that collectively contribute a significant portion of the province's green power. Swift River believes it is important to foster community understanding and support of the benefits of producing energy from small, eco-friendly hydro sites rather than continue our total reliance on large generating facilities. Waterpower does not produce pollutants, smog or the emissions known to create health issues, including fatalities, that cost our society billions in healthcare costs. Ultimately, the North Bala power site will be a public asset in which we hope the community will take great pride.

Swift River knows that it is in our best interests to become a welcome and contributing member of the Bala community. If selected to develop the site therefore, we will build a relationship with the community. One part of our community relations program will be the sponsorship of local sports teams and other community service projects. Another is the establishment of an annual scholarship program that through the auspices of the local Board of Education, will enable deserving college or university students to pursue their studies.

Consideration of Continuity of Business

In summary, new technology, sensitive development of the site, proper and full consultation in the community will contribute much needed green power and community economic and social benefits. It is expected to be a win/win situation for all involved.

2.2.5 Project Schedule

The proposed schedule for Swift Energy's North Bala Dam hydroelectric project is shown in Figure 2.6 – Project Schedule. The schedule clearly indicates milestone dates from RFP award to in-service. The critical path for the project schedule will pass through the environmental assessment, and the supply, installation and commissioning of the water-to-wire equipment (turbines, generators, controls, etc).

2.2.6 Technical and Operational Details for the Site

2.2.6.1 Estimate of Installed Capacity

The proposed development is based on a preferred installed capacity of 4.0 MW. This capacity selection was based on the analyses described below and the desire by Swift River to take full advantage of any higher flows in the spring, winter and fall to compensate for the restrictions associated with generation during the summer season.

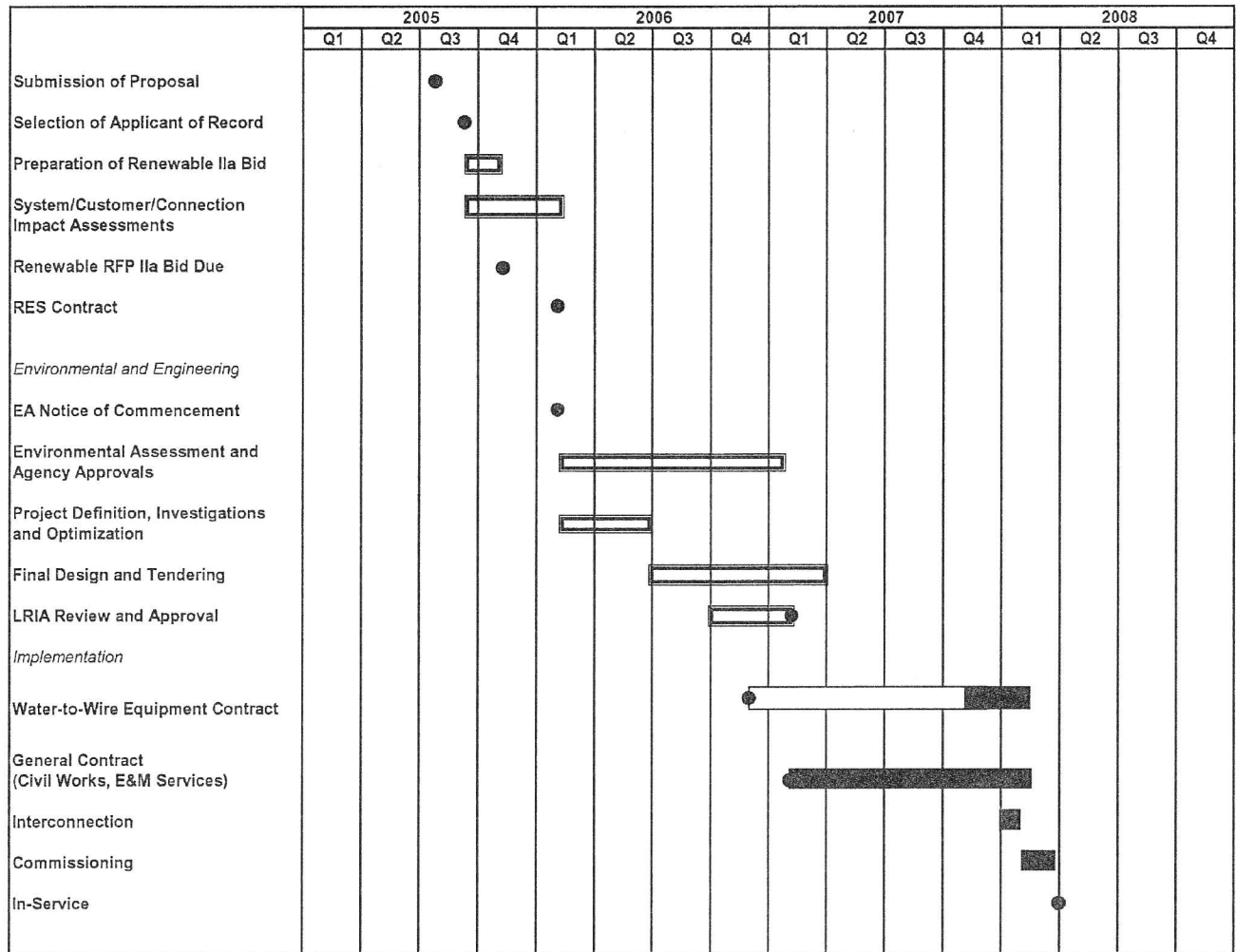
2.2.6.2 Estimate of Annual Energy Output

The estimated total average annual energy for the plant is 20.77 GWh/yr.

2.2.6.3 Methodology for Calculating Estimated Annual Energy Output

The power and energy capability of the proposed site was evaluated using the Acres Reservoir Simulation Program (ARSP). This daily simulation model was setup and calibrated in accordance with proposed regulation of flows and

Figure 2.6
Project Schedule



Legend
 ● Milestone Dates
 ▭ EA, Engineering & Tendering
 ◻ Design, Manufacturing & Delivery
 ■ Construction, Installation & Commissioning

water levels for the Muskoka River system as prescribed by the Muskoka River WMP¹.

The ARSP model uses 50-yr long, daily hydrology data to model inflow into the North, South, and Main Muskoka River branches, and to model local inflow between respective dams. The modeling is based on daily hydrology records for the Water Survey of Canada (WSC) stations in the Muskoka River basin as summarized in Table 2.1. Based on the flows at station 02EB006 (Bala Reach)², the long-term average stream flow of the watershed is approximately 76.7 m³/s. The maximum and minimum annual flow is 162.0 m³/s and 23.0 m³/s, respectively.

Daily Muskoka lake levels and outflows for the hydrologic period 1951 to 2000 (obtained from ARSP simulation) were used along with the tailwater rating curve for the Bala Reach, estimated head losses, efficiencies and rated flow for the proposed station, to estimate the energy at North Bala Dam. The flow duration curve (FDC) and data are shown in Figure 2.7 and Table 2.2, respectively.

The resulting power and energy model was used to evaluate a range of installed capacities from 2.5 to 4.5 MW. The 4-MW scheme was selected based on economic evaluations.

The rated flow for the 4.0-MW plant is 79.12 m³/s, or 41% exceedance (based on FDC). The plant minimum power flow has been selected as 20% of the rated flow, which would be 15.82 m³/s, or 88% exceedance level (based on FDC). The net head on the proposed plant is estimated as 5.86 m and an overall efficiency of 88.0% was adopted. As outlined in the Muskoka River WMP, a minimum compensation flow of 6 m³/s was accounted for, including a 4 m³/s allotment to the Burgess Generating Station.

¹ Acres, 2005. Muskoka River Water Management Plan - Draft Plan Report. Prepared for Ontario Ministry of Natural Resources, Ontario Power Generation, Orillia Power Generation Corporation, Bracebridge Generation, and Algonquin Power. April, 2005.

² Sum of flows at WSC Station No. 02EB011, Moon River at Highway 69 and 02EB012, Muskoka River (Musquash) at Highway 69, both downstream of North and South Bala Dams on Lake Muskoka.

Table 2.1
Summary of Water Survey of Canada (WSC)
Gauges for the Muskoka River System

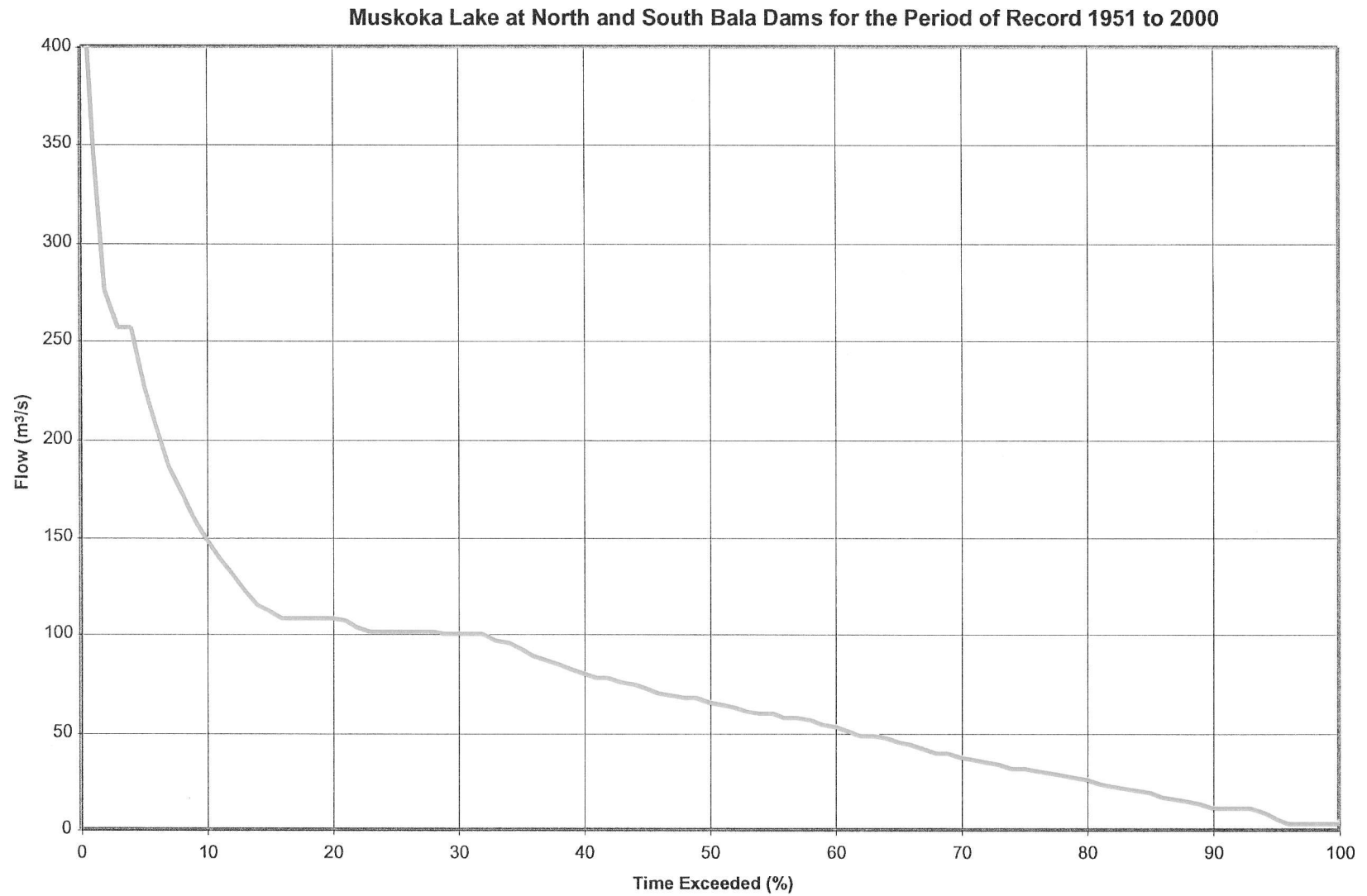
WSC River Flow Gauge	Total Drainage Area (km ²)	Mean Daily Flow ¹	Regulation	Period of Daily Record	Mean Annual ²	
					Maximum (m ³ /s)	Minimum (m ³ /s)
02EB013 - East River near Huntsville	593	11.3	Regulated	1973-1999	15.9	7.0
02EB004 - N. Muskoka River at Port Sydney	1390	24.1	Regulated	1915-1999	40.3	13.6
02EB014 - Oxtongue River near Dwight	601	10.6	Regulated	1981-1999	13.1	6.4
02EB008 - S. Muskoka River at Baysville	1390	24.8	Regulated	1941-1995	31.8	12.7
02EB011 - Moon River at Hwy 69	4707	22.1	Regulated	1965-1999	41.3	4.3
02EB012 - Muskoka River (Musquash) at Hwy 69	4724	53.8	Regulated	1965-1999	77.7	39.2

¹ Based on long-term WSC flood records

² Calculated from monthly historic records

Source: Environment Canada, 2001

Figure 2.7
Daily Annual Flow Duration Curve



Flow (m³/s)	Time Exceeded (%)
637.2	0.10
348.7	1.00
226.6	5.00
149.1	10.00
108.4	20.00
100.7	30.00
80.2	40.00
65.6	50.00
52.8	60.00
37.2	70.00
25.6	80.00
11.6	90.00
5.9	95.00
3.4	99.00
3.4	99.99

2.2.6.4 Interconnection Requirements

There is an existing HONI transmission line along the east side of the Highway 169 road bridge upstream of the proposed development. It is anticipated that the interconnection would consist of an underground cable running approximately 40 m from the proposed powerhouse location to an existing hydro pole just south of the intersection of Highway 169 and the original route of Highway 69 (see Figure 2.1).

If a proposed installation is greater than 10 MVA, or ties into an IMO/IESO controlled grid (all transmission lines rated 69 kV and higher), then a full IMO assessment, interfacing and control is required. The line is listed on the Ontario electrical power distribution map as 44 kV or less, and according to Mr. Bob Singh of HONI is rated at 44 kV. It may to be rated at 27.6 kV. The line is owned by HONI, the distribution branch of the old Ontario Hydro organization. While a formal IMO/IESO assessment is not required, a customer impact assessment study in accordance with HONI standards will be required, and permission must be obtained from HONI to interconnect.

According to HONI, it is most likely that the proposed output of 4 MVA can be easily accommodated by this line, but this will have to be formally verified by the interconnection study. It is also possible that the output of the North Bala station will, at times, exceed 30% of the existing load on this line and HONI may require transfer trip facilities, in addition to the usual protection requirements, to prevent islanding. Of course, the requirements for a visible break disconnect at the point of interconnection and the use of an IMO approved metering installation will apply.

A transformer required to transform the generator output anticipated as provided at 4.16 kV to the required line voltage, anticipated as 44 kV or less (27.6 kV) and the associated switchgear will be located in the electrical equipment room above the powerhouse draft tube.



2.2.6.5 Operating Strategy

The operating strategy for the facility will follow the restrictions identified in the Draft Muskoka River WMP. The Lake Muskoka operating strategy, which is implemented through operation of the Bala North and South Dams and Burgess Generating Station is as follows:

Target Operating Level Range	224.9 to 225.6 m
Normal Operating Zone Range	224.6 to 225.75 m
Absolute Range	224.55 to 225.97 m
Summer* Range (Typical)	225.35 to 225.25 m
Winter Drawdown	225.52 to 224.9 m
Flood Allowance (lake/river)	225.75 to 225.97 m/368.1 m ³ /s (spring)/283.0 m ³ /s (summer)
Maximum Discharge (predicted)	309.6 m ³ /s
Minimum Discharge	6 m ³ /s summer target
Natural Environment Constraints	Lake trout spawning shoals Flows for walleye spawning at Moon Falls
Social Constraints	Extensive high value shoreline development with infrastructure ranging from 225.64 to 226.44 m Potential for spring ice damage to infrastructure. Low level can impede navigation access at Port Carling locks. High lake levels and high flows from Port Carling dam can cause flooding of Marinas on Indian River Winter drawdown undertaken for downstream hydropower production.

*Summer period defined as June 1 to September 15.

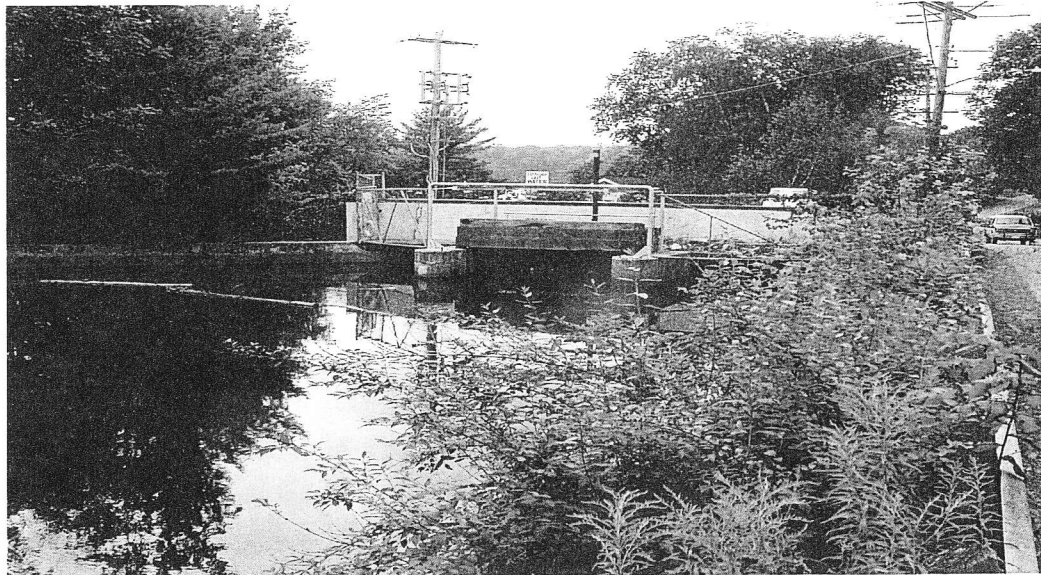
2.2.6.6 Flow Information

The ARSP model uses a 50-yr long (1951 to 2000), daily hydrology data to model inflow into the North, South, and Main Muskoka River branches. The modeling is based on daily hydrology records for the WSC stations in the Muskoka River basin as shown in Table 2.1. Based on the flows at station

02EB006 (Bala Reach)¹, the mean annual flow of the watershed is approximately 76.7 m³/s. The maximum and minimum annual flow is 162.0 m³/s and 23.0 m³/s, respectively. The design flow rate of North Bala Dam is 79.12 m³/s.

2.2.6.7 Interaction with Other Power Operators' Requirements

The power operators that might be affected by the operation of the proposed power facility at North Bala are OPG (Ragged Rapids and Big Eddy generating station downstream) and Algonquin Power (Burgess Generating Station at the most northern outlet of Lake Muskoka). The proposed Swift River development would take into account the amounts and distribution of discharges from Lake Muskoka expressed in the WMP. Meanwhile, to improve on energy production during the low-flow summer months, Swift River will consider operating the proposed facility at higher flows during the nighttime hours because the effect on water levels in Lake Muskoka would be negligible. Swift River realizes that this option could only be exercised if inflows to Lake Muskoka area can support such an approach. Part of this approach would be to assess the effect of this type of operating strategy on the existing OPG generating stations downstream.



¹ Sum of flows at WSC Station No. 02EB011, Moon River at Highway 69 and 02EB012, Muskoka River (Musquash) at Highway 69, both downstream of North and South Bala Dams on Lake Muskoka.

2.2.7 Existing Water Management Plan

We are aware that a new WMP for the Muskoka River will be coming into force. The plan was developed by MNR and the present hydropower producers in the Muskoka River basin. The WMP specifies flow and water level compliance requirements for the MNR and the hydroelectric power generation water control structures in the river basin. The new WMP is to extend until March 31, 2012, although amendments are possible during this period.

It is intended that operations for Swift River's proposed generating station will not adversely affect the operation of the Bala dams, or the Burgess plant, or the downstream OPG plants. In this regard Swift River will consult with MNR and the power producers to ensure compatibility with their operations.

Swift River has already entered into discussions with Algonquin Power (owner of the Burgess plant). Algonquin indicated that they would be happy to cooperate with Swift River and to negotiate a mutually satisfactory agreement if required.

The EA process will incorporate the requirements of the WMP Guidelines for Waterpower as required by MNR's new Site Release Procedures for Waterpower. It is anticipated that the results of this exercise will then require an amendment to the Muskoka River WMP. This is to be confirmed with MNR.

2.3 Category 3 – Consultation, Permitting and Approvals

This section lists the permits, approvals and permissions that are anticipated to be required for the proposed facility and indicates how the permitting process will be integrated. The proposed public and agency consultation strategy to be undertaken in support of these permits/approvals/permissions is also outlined.

2.3.1 Overall Approach

2.3.1.1 Project Plan

The overall approach for completion of the federal/provincial environmental assessment requirements and associated public/agency/First Nation consultation is depicted in Figure 2.8.

To ensure that the timeline requirements identified in Section 2.2 of the RFP (as per Addendum 1) are met, the EA process will commence immediately, upon award of the site development opportunity, with the issuance of a Notice of Commencement, as per the provincial EA requirements. Commencement at this point will be required to ensure that the EA is completed within the 2-yr time frame, as indicated in Section 2.2 of the RFP (Addendum 1). The EA process may extend for approximately a 12-mo period, with completion anticipated early in 2007. Public, agency and First Nation consultation will be an integral component of the EA process. It is noted that the EA must be completed within 2 years of selection.

Other environmental permits and approvals and WMP requirements that will be required will be submitted following completion of the federal/provincial EA processes, and are anticipated to take 3 to 6 months. Agency involvement throughout the EA process will ensure that the permitting and approvals process proceeds in a timely and efficient manner. All permits and approvals should be obtained by early 2007 to allow construction to commence in late winter 2007.

2.3.1.2 Understanding of Environmental Assessment Requirements

Ontario Environmental Assessment Act

The construction of a hydroelectric facility with an installed capacity of less than 200 MW is subject to a Category B Environmental Screening Process (ESP) under the Electricity Projects Regulation (ON. Reg. 116/01) of the *Ontario Environmental Assessment Act* (EAA). This is a proponent driven, self-assessment process which will result in the preparation of an Environmental Screening Report documenting the anticipated environmental effects and proposed mitigation and monitoring measures for the project. Public, agency and First Nation consultation is an integral part of the ESP. The requirements of the EAA are considered to be satisfied upon successful completion of the ESP (as determined by MOE in consultation with other agencies) and the issuance of a Statement of Completion. As noted in the RFP (Addendum No. 1), the EA must be completed within 2 years of selection of the proponent.

It is noted that MNR's new Waterpower Site Release Procedures require that the EA also incorporate the requirements of MNR's Water Management Plan Guidelines for Waterpower.

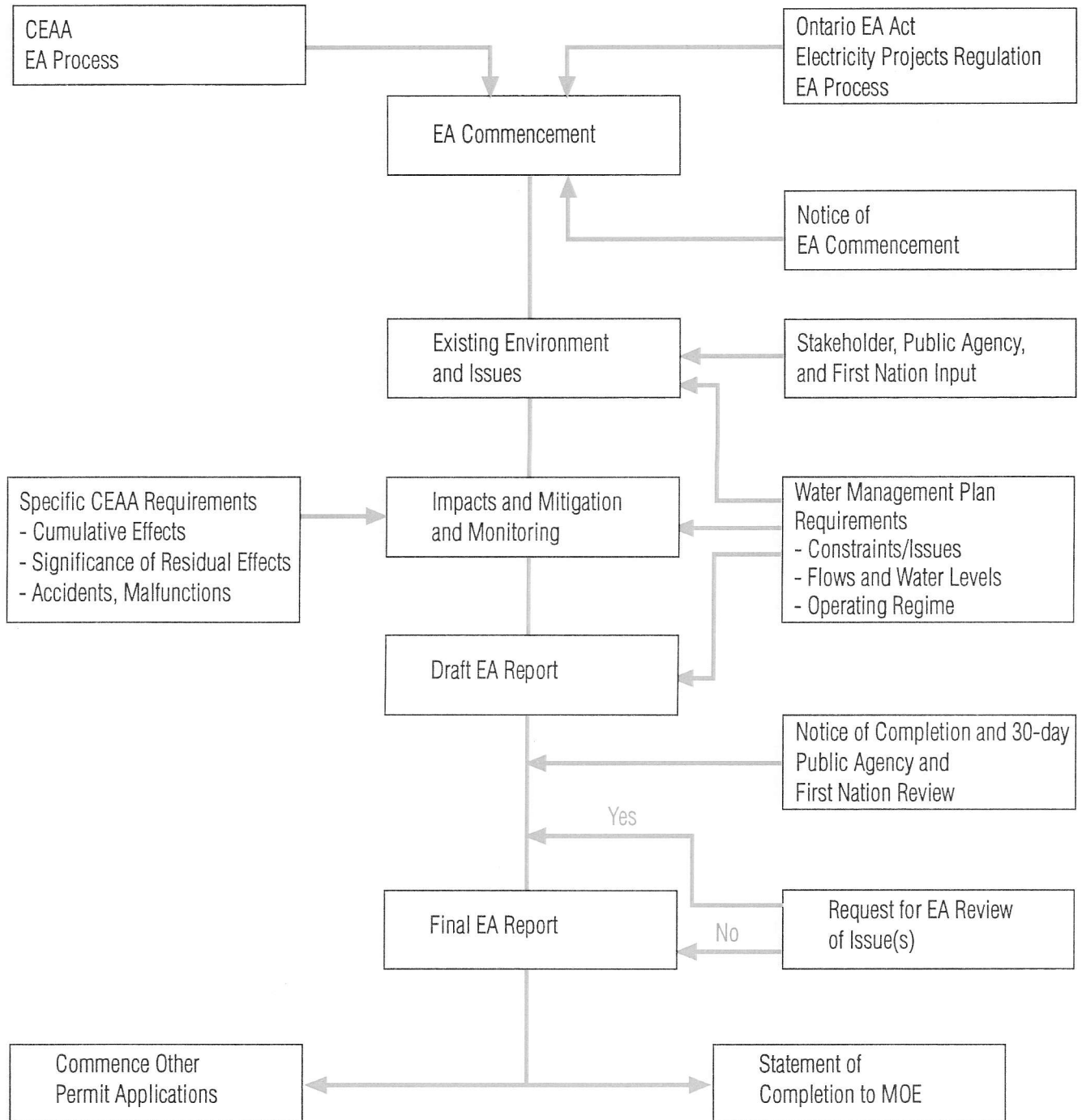
Canadian Environmental Assessment Act

The Canadian Environmental Assessment Act (CEAA) is triggered when a federal authority

- is the proponent of a project
- makes or authorizes payment or any other form of financial assistance to the proponent
- sells, leases or otherwise disposes of lands
- issues a permit, license or other form of approval pursuant to a statutory or regulatory provision referred to in the *Law List Regulations*.

Under the Canada-Ontario Agreement on Environmental Assessment Cooperation (November 2004), where both Ontario and Canada have an environmental assessment responsibility, they will cooperate to meet the requirements of both parties through a single environmental assessment process. As both levels of government will likely be involved in this project,

Figure 2.8
Environmental Assessment and Consultation Process



federal and provincial EA requirements will be satisfied through the production of one EA document.

2.3.1.3 Understanding of Other Relevant Provincial Environmental Legislation Requiring Approvals

Lakes and Rivers Improvement Act

The proposed works, including dam reconstruction, temporary cofferdam construction and installation of water power generating equipment will require approval under Section 16 of the *Lakes and Rivers Improvement Act* (LRIA). This will include the requirement for Plans and Specification Approval from MNR. Approvals under Section 16 of the Act (those for works conducted on existing dam structures) do not require the issuance of Location Approval unless the facilities are located on land outside the footprint of the existing dam. The approval process commences with the proponent's submission of a multiuse work permit application form and the project plans and specifications to the MNR. LRIA approval is not granted until successful completion of the EA process.

WMP requirements are identified in Section 23.1 of the LRIA. The EA will incorporate the requirements of MNR's Water Management Plan Guidelines for Waterpower. It is also anticipated that an amendment to the existing WMP for the Muskoka River will be required to incorporate this proposed facility.

Public Lands Act

During construction of the facility, a land use permit or Crown lease will be required to authorize the site. This land permit provides interim tenure until a water power lease agreement is formalized.

Authorization for works conducted on public land (e.g., forest clearing, access road construction, works on shorelands) requires the submission of a multiuse work permit application form to MNR. A work permit must be issued prior to start of construction of these activities on Crown land.

No additional flooding will be required so there is no need for any associated tenure.

A waterpower lease agreement (WPLA) will be required under Section 42 of the PLA in order to authorize the waterpower operations and the footprint of the facility, including the generating station, dam and ancillary buildings (as per MNR's Waterpower Site Release and Development Review Policy, November 2004).

Ontario Water Resources Act

A Permit to Take Water (PTTW) will be required from the Ministry of Environment (MOE), under Section 34 of the *Ontario Water Resources Act* (OWRA) for the diversion of water for hydropower generation and possibly, dewatering during construction. A PTTW is required when more than 50,000 L/d of ground or surface water is taken. In addition, if no previous PTTW had been obtained for the original dam (i.e., for the taking of water into storage), it is plausible that the MOE may request that such a permit is obtained for their files for the rehabilitated dam.

A Certificate of Approval for Industrial Sewage Works under Section 53 of the OWRA may be required if a temporary settling pond is used during construction to treat water from the construction site prior to discharge back to the waterbody.

Approvals under the OWRA will not be issued until the EA process is successfully completed.

2.3.1.4 Understanding of Other Federal Environmental Legislation Requiring Approvals

Fisheries Act

Section 35 of the *Fisheries Act* prohibits works or undertakings that result in the harmful alteration, disruption or destruction (HADD) of fish habitat. Section 35(2) of the act allows the Minister of Fisheries and Oceans to authorize a HADD provided that *No Net Loss of the Productive Capacity of Fish Habitat* occurs. No net loss is typically ensured by the use of mitigation measures to prevent the HADD and/or compensation measures to make up for the altered or lost habitat. Since this project will involve alteration to a watercourse that may directly affect fish habitat, it is anticipated that an authorization under the *Fisheries Act* will be required. Application for authorization typically occurs after completion of the EA process.

Navigable Waters Protection Act

Transport Canada (TC) Marine administers the *Navigable Waters Protection Act* (NWPA). Section 5(1) of the NWPA prohibits the construction of works that may interfere with the public right to navigation, without the approval by the Minister. Dams are named works under Part 1 of the Act and as such, formal approval under the Act may be required, although given that there is an existing dam, an exemption under NWPA may be possible. Formal approval requires that final plans and specifications be deposited with and approved by the Minister and that plans are deposited in the local land registry office for public inspection and advertisement of such deposit is placed in the Canada Gazette and two local newspapers. Application for NWPA approval typically occurs after completion of the EA process, once final plans and specifications have been prepared.

2.3.2 Integration Strategy

A schematic showing the integration strategy and interrelationship between various provincial and federal legislation is provided in Figure 2.9. The overall approach to obtaining all permits, approvals and permissions identified in Section 2.3.1 will depend on early identification of permitting requirements and efficient communication to and among the various agencies responsible for issuing permits/approvals. The goal will be to work with provincial ministries and federal departments to achieve a single, efficient and coordinated permitting and approvals process.

Successful integration of the provincial and federal EA processes in accordance with the Canada-Ontario Agreement on Environmental Assessment Cooperation (November 2004) is the first step in the overall permitting/approvals process. Approvals under the provincial *Environmental Protection Act, Lakes and Rivers Improvement Act* and the *Ontario Water Resources Act* are not issued until the Environmental Screening Process under the Electricity Projects Regulation of the *Ontario Environmental Assessment Act* has been successfully completed and a Statement of Completion has been issued.

As required in the Water Power Site Release and Development Review Procedure (PL4.10.05), the EA process will be carried out in such a way as to meet the substantive requirements of MNR's Water Management Planning

Guide (WMPG) for water power. For this project, it is also anticipated that an amendment to the existing Muskoka River WMP will be required. The flow and water level requirements for the facility will be assessed and determined as part of the EA, in accordance with the WMPG.

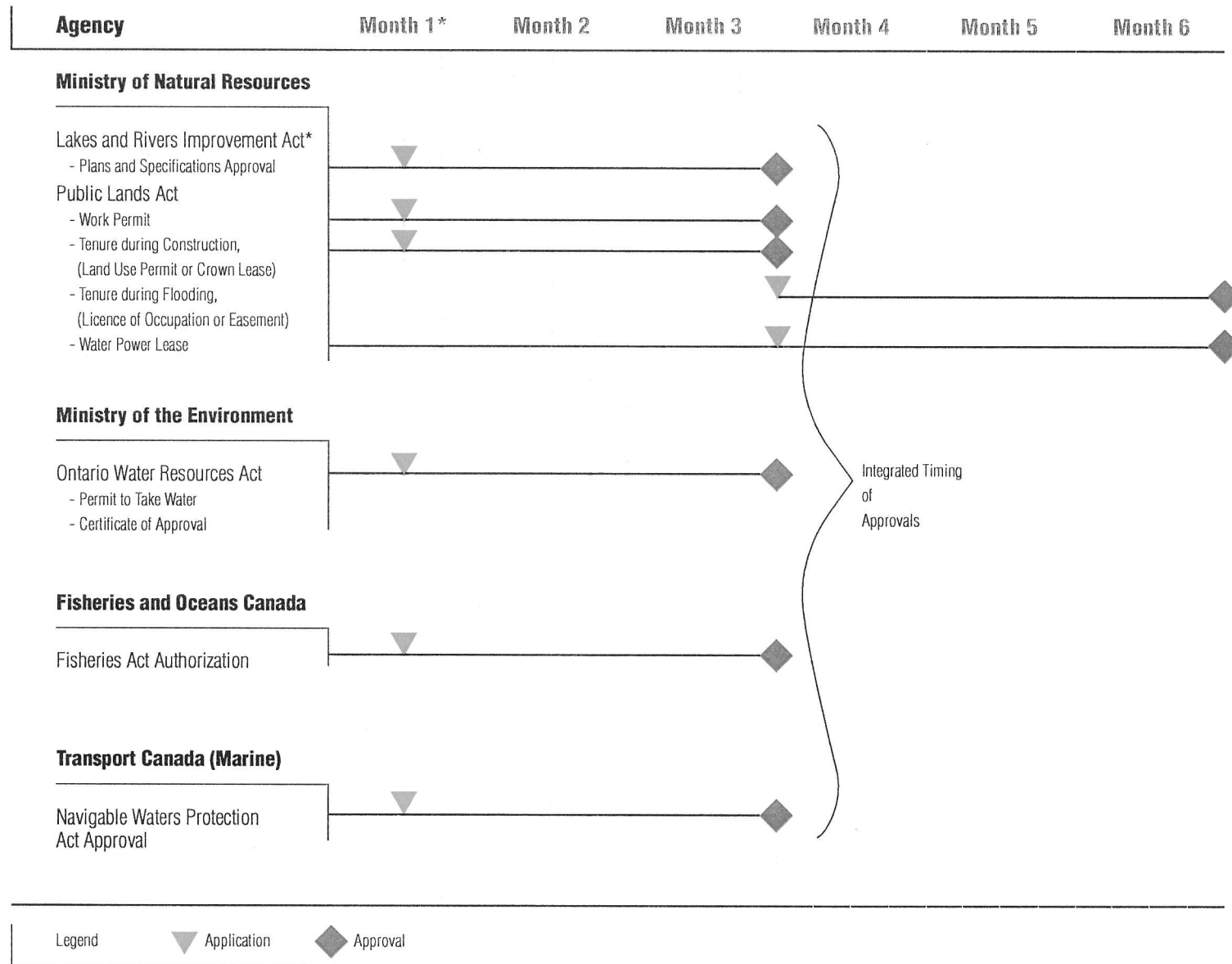
The first step in the EA process will be to meet with District MNR staff to discuss

- MNR's mandate with respect to the project
- coordination process to integrate provincial/federal EA requirements and the WMPG for water power
- approvals required
- values to be considered
- data and information collection program
- expected timelines and tasks associated with various stages of the project.

It is anticipated that representatives from other provincial and federal agencies will be in attendance of this meeting to ensure that coordination of the interests and requirements of all agencies is achieved.

The provincial EA process is proponent driven, so it will be up to the successful applicant to commence the Environmental Screening under the Ontario EAA within the time frame identified in RFP (i.e., issuance of Notice of Commencement within 6 months of award). Upon commencement of the provincial EA process, a Project Description report, prepared as per the federal guidelines for preparing project descriptions under the CEAA, will be submitted to the Canadian Environmental Assessment Agency (CEA Agency) for distribution to potentially involved federal authorities. This will allow federal agencies to identify if they may have a trigger under CEAA (e.g., responsibility for issuing an authorization) and will identify the federal Responsible Authority (RA) and any other federal Expert Authorities that may provide advice to the RA. The federal review process will be coordinated by the CEA agency. Involvement of federal authorities early in the EA process will ensure that all federal EA requirements are met, thereby facilitating the issuance of required federal permits/approvals following completion of the EA process. It has been our experience that federal review of the Draft EA and public review under the provincial process can be undertaken concurrently.

Figure 2.9
**Interrelationship and Timeline of
 Relevant Legislation, Permits and Approvals**



*Month 1 is assumed to be after EA is complete and Location Approval received.

Following successful integration and completion of the federal/provincial EA process, other permits/approvals may be applied for. This will include provincial approvals under LRIA, work permits and tenure under PLA, OWRA permits and approvals (if required), Fisheries Act authorization and NWPA approval/ exemption. The Draft LRIA Technical Guidelines indicate that LRIA approvals will not be issued until authorization under the Fisheries Act is obtained from DFO. Therefore, it is proposed that applications for permits/approvals be submitted to the various agencies as soon as all information requirements can be satisfied in order to ensure as timely a process as possible. Several approvals, including LRIA Plans and Specifications Approval and NWPA cannot be issued until final plans and specifications for the facility are prepared.

2.3.3 Consultation Strategy

Consultation commencing early in the EA process and continuing throughout the EA process is a key strategy in our project plan. This will involve consultation with

- stakeholders in the community
- general public
- local First Nations
- relevant provincial and federal government agencies
- local interest groups.

The proponent's ability to mitigate environmental effects and effectively communicate with and respond to public feedback and concerns can minimize the possibility of a 'bump-up request' under the provincial EA ESP.

Consultation and information disclosure will consist of the following points of contact:

- **Notice of Commencement** – posted in the local newspaper and distributed directly to the relevant government agencies and potentially affected stakeholders. The Notice of Commencement must be issued within 6 months of selection of the proponent or the opportunity for site development will be withdrawn by MNR.

- **Public Open House** – two open houses are proposed to be held in Bala. The purpose of the first open house (planned for early in the project) would be to present preliminary plans, solicit background information, and identify any public issues. Advertisement of the open house would be placed in the local newspaper and mailed to potentially affected stakeholders.

A second open house is proposed toward the end of the EA process to present resolution of the issues, including impacts and proposed mitigation, and the proposed water management plan for the development.

- **Agency Consultation** – As already discussed a kick-off meeting with the relevant agencies will be held prior to formal commencement of the EA process. Relevant provincial/municipal government agencies will be included in the Notice of Commencement mailing list. A CEAA Project Description Report will be prepared, as per federal guidelines, and submitted to CEAA for distribution to relevant federal government agencies, such that they can determine the nature of their involvement. Agency consultation will occur throughout the EA and permitting/ approvals processes, with meetings at key stages. All agencies will also be sent a copy of the Notice of Completion. MNR, MOE, DFO, Transport Canada and Environment Canada will likely review copies of the Draft EA. A copy of MOE's Statement of Completion will be sent to the MNR district office to facilitate issues of other approvals or dispositions.
- **First Nation Participation** – Local First Nations will be included on the stakeholder mailing list for the Notice of Commencement and will be invited to the Open House. In addition, a direct meeting with local First Nations will be requested and MNR will be invited to be in attendance.
- **Stakeholder Meetings** – meetings with individual stakeholders or stakeholder groups may be conducted if dictated by response to other points of contact.
- **Notice of Completion** – on finalization of the EA Report a notice will be posted in the local newspaper and mailed to directly affected stakeholders indicated that the EA Report is available for a 30-day review period.

A record of all public, agency and First Nation consultations periods will be made and included in the EA. Issues will be dealt with as quickly and efficiently as possible. Consultation requirements of the EA will be integrated with consultation requirements of the water management planning process.

This coordination and the associated consultation requirements will be discussed with MNR and the WMP standing committee at the beginning of the EA process.

2.3.4 Permitting/Approach Strategy

A preliminary listing of permits and approvals for this development project is provided in Table 2.3. Our approach/strategy for acquiring permits is based on timing, whereby the EA is first completed followed by submission of applications for all other permits/approvals. The timing of the latter requires at least 3 to 6 months lead time prior to the anticipated start of construction activity. More details on our approach for each specific permit under each piece of relevant legislation is described under the 'Timeline for Attainment' and 'Comments' columns in Table 2.3.

Table 2.3 Permits and Approvals			
Regulatory Agency	Permit/Approval	Timeline for Attainment	Comments
Federal Government			
CEAA	Environmental Screening	In conjunction with provincial EA. Commence 1 to 1.5 years before construction	Triggered by requirement for Fisheries Act and NWPA approvals
Fisheries and Oceans Canada	Fisheries Act approval for the Harmful Alteration, Disruption or Destruction of Fish Habitat	Following completion of EA, prior to start of construction	Will require preparation of a Fish Habitat Compensation and Mitigation Plan CEAA Trigger
	Fisheries Act Approval for the Destruction of Fish by Means other than Fishing	Prior to initiation of blasting activities	Required if blasting in/around water CEAA Trigger
Transport Canada (Marine)	Navigable Waters Protection Act Approval	Following completion of EA and production of final plans, prior to start of construction	CEAA Trigger
Natural Resources Canada	Temporary Magazine License, Purchase and Possession Permit	Required prior to purchase and storage of any explosives required	

**Table 2.3
 Permits and Approvals**

Regulatory Agency	Permit/Approval	Timeline for Attainment	Comments
Provincial Government			
Ministry of the Environment	Environment Assessment under the Electricity Projects Regulation	Prior to LRIA approval and initiation of construction	Satisfactory completion of EA requirements is a prerequisite for obtaining most other approvals
	Permit to Take Water	Prior to water taking from ground or surface water sources	Required if >50,000 L/d of surface or groundwater taken, includes temporary during construction (e.g., dewatering) and for impoundments
	Certificate of Approval for Industrial Sewage Works	Prior to construction	Required if settling pond used during construction
Ministry of Natural Resources	- Plans & Specs Approval	- Following completion of engineering plans and specs	Required under the <i>Lakes and Rivers Improvement Act</i>
	Work Permit and Sustainable Forestry License	Prior to tree clearing for access roads, transmission lines and site facilities	
	Aggregate Permit	Prior to use of aggregate materials from Crown lands	Required if obtaining borrow materials from Crown Lands
	Burn Permit	Prior to any burning of slash/timber	
	Waterpower Lease	Prior to initiation of power generation	Required under Public Lands Act
	Tenure during construction (Interim LUP or Crown Lease)	Prior to construction	Public Lands Act

Annex 1

Company Profiles



Profile

Swift River Energy Limited (SREL) is a new company in the energy field in Ontario. The company was formed to develop, own and operate new small hydro facilities in Ontario. SREL has its registered office in Toronto.

The firm was incorporated in 2004 primarily to enter the power market in Ontario, which has been spurred on by the Ontario Ministry of Energy's Renewables RFP and the recent Ministry of Natural Resources Waterpower Site Release process. The company founders are John Wildman and Paul Fisher. John Wildman is President and a director and shareholder. Paul Fisher is Secretary and a director and shareholder. Messrs. Wildman and Fisher will manage the operations of SREL as co-chief executive officers.

Small hydro is the main area of interest for SREL. The company plans to out-source engineering and environmental services, construction management and construction work, and plant operation. The co-chief executive officers are responsible for the proper management of all company operations and activities. SREL is working together with Acres International Limited, a leading Canadian engineering firm that has provided engineering and management services for small hydro developments for 80 years, and Bracebridge Generation Limited, a licensed generator and operator of existing small hydro plants in the Muskoka area of Ontario. These consultants/advisors are directly accountable to the co-chief executive officers, who will chart these working relationships in accomplishing the objectives for plant design and construction, generation, operations and sales of power. In addition, Messrs. Wildman and Fisher will

- insure proper community and public relations and communications are followed
- maintain contact with relevant government agencies and ministries on projects
- execute banking, borrowing and investment policies
- approve all budgets, reports, studies, specifications and recommendations for the purchase of major generating equipment and services.

BACKGROUND

For over 40 years, clients have entrusted Horizon Legacy with managing the largest financial commitments in their corporate life: the construction, finance and operation of their premises.

Our clients include: National Trust, Ministry of Energy and Environment, Ontario Hydro, Ontario Pension Board, Standard Broadcasting, Ministry of the Solicitor General, Travellers Insurance, University Health Network.

We have built and financed many of Toronto's major landmarks for our own account. This means, we have built and financed major buildings for ourselves as the long-term owner, wherein, we have then had to live with the operational ramifications of design, construction and financial decisions made at the development stage for the over 20 years life of a building. This is a perspective very distinct from that of the traditional contractor or lender. Both the present and long-term implications of construction design decisions are very important. Projects we have completed and owned include the Yonge-Eglinton Centre, Atrium on Bay, National Trust and One Financial Place.

We have created over 6 million square feet of Toronto's major developments. This required completion of over \$500 million of financings and construction project administration.

OFFICE DEVELOPMENTS

<u>Address</u>	<u>Location</u>	<u>Size Sq. Ft.</u>	<u>Completion Date</u>	<u>Major Tenants</u>
55 Yonge Street	King & Yonge Toronto	151,000	1957	Price Waterhouse Falconbridge Inc. Inco Limited
4 King Street West	King & Yonge Toronto	285,000	1959	Prudential Insurance Templeton Management Bank of America Noranda Minerals Inc.
48 Yonge Street	King & Yonge Toronto	108,000	1960	Sun Alliance Insurance
21 King St. East	King & Yonge Toronto	320,000	1961	National Trust Company
2 St. Clair Avenue W.	Yonge & St. Clair Toronto	230,000	1965	Ministry of Environment Standard Broadcasting Ted Bates Advertising
40 St. Clair Avenue W.	Yonge & St. Clair Toronto	125,000	1967	Ministry of Environment
18 King St. East	King & Yonge Toronto	232,000	1968	Solicitor General of Ontario Unum Insurance Boiler Inspection Insurance Agency
CN Towers	197/205 York St. London, Ontario	165,000	1970	Canadian National Railways
Travelers Tower	400 University Ave. Dundas & University Toronto	365,000	1971	Travelers Insurance Company

OFFICE DEVELOPMENTS
(continued)

<u>Address</u>	<u>Location</u>	<u>Size Sq. Ft.</u>	<u>Completion Date</u>	<u>Major Tenants</u>
London City Centre Company	275 Dundas Street London, Ontario	520,000	1972	Canada Trustco Mortgage
Yonge-Eglinton Centre	Yonge & Eglinton Toronto	1,000,000	1974	Stone & Webster Famous Players Ministry of Environment Triathlon Leasing Indigo Pickle Barrel Eclipse Fitness Club
Atrium on Bay	Yonge & Dundas Toronto	914,000	1981	MacLaren-Lintas Advertising Province of Ontario Ontario Hydro Massey Ferguson Easton Bay Financial
One Financial Place	Yonge & Adelaide Toronto	853,000	1991	OMERS Realty Corporation National Trust Company Continental Insurance Ontario Pension Board Chubb Insurance Company Noranda Minerals Inc.
Horizon Heritage Plaza	Northwestern Hwy. Detroit, Michigan	185,000	1972	MCI Telecommunications Compu Cheque

CONSTRUCTION CLIENTELE

OFFICE

<u>Client</u>	<u>Scope of Work</u>
Muck Research Station	15,000 sq. ft. renovation
Trellis Gardens Housing Initiative	28,000 sq. ft. new construction
Yonge Eglinton Centre	Redevelopment of 250,000 sq. ft. of retail
Cybersurf	Renovations to 6,000 sq. ft. of office space
Ontario Science Centre	Renovations to 3,500 sq. ft. of office space
Ministry of Community & Social Services	3,800 sq. ft new construction
Cobalt Pharmaceuticals	3,500 sq. ft new construction
SWI Systemware	16,500 sq. ft. turn key complete with data centre
ePod.com	12,058 sq. ft. new build out
Canadian Gas Association	9,000 sq. ft. new build out
P. Lawson Travel	Renovations to 4,000 sq. ft. of office space
Ontario Energy Board	Renovations to 35,000 sq. ft. of office space
Ontario Waste Management	5,500 sq. ft. new build out
Maritime Life	16,500 sq. ft. turn key complete with data centre
Solicitor General	26,500 sq. ft. turn key
Unum Insurance	Alterations to existing floors: 9, 10, 11, 12 & 14
C.A.R.E.	14,000 sq. ft. turn key
Boiler Inspection & Insurance	21,000 sq. ft. turn key

CONSTRUCTION CLIENTELE
(continued)

OFFICE

<u>Client</u>	<u>Scope of Work</u>
Columbia Health	28,000 sq. ft. turn-key
PR Response	Office renovations to 3,000 sq. ft. space
Bonavista Asset Mgmt.	2,500 sq. ft. of new build out

RETAIL

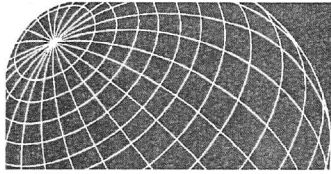
Yonge Eglinton Centre	250,000 sq. ft. retail mall rejuvenation and redirection
Eclipse Health Fitness Club	12,000 sq. ft. health club installation
Pickle Barrel	10,000 sq. ft. restaurant installation

Coordinated with Landlord's construction work at Yonge Eglinton Centre:

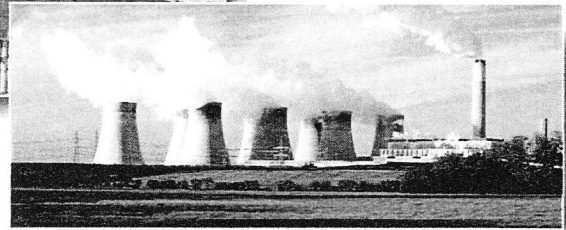
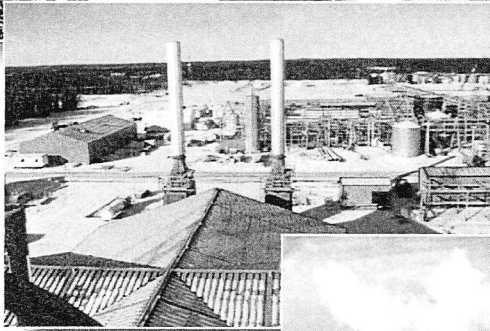
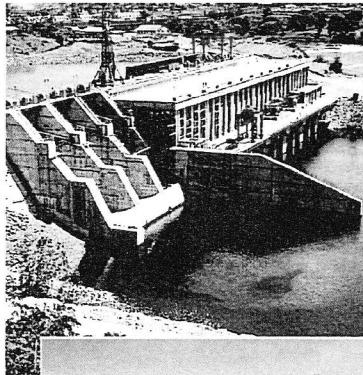
Toy's R Us	25,000 sq. ft. retail
Indigo Music & Books	33,000 sq. ft. bookstore
Famous Players	Silver City Multiplex

INFRASTRUCTURE PROJECTS

Ontario Science Centre	Restoration of surface parking
Zurich Centre	Environmental abatement of asbestos
Yonge Eglinton Centre	Gas conversion of heating system
CJOJ (Belleville Radio)	Transmission tower erection & foundation
Ontario Science Centre	Water fountain rehabilitation



Acres Group of Companies



Acres was established in 1924 and is a leading North American infrastructure engineering, planning and management company with a staff of about 800 which includes engineers, scientists, economists, technicians and administrative personnel. From offices across Canada, the United States and around the world, Acres carries out assignments for public utilities, private developers, industry, governments, and financing institutions. Assignments have been completed in 124 countries.

The parent company, Acres Incorporated, manages a portfolio of investments which includes engineering, management consulting and facilities management companies. In 2004, Acres accepted an offer of purchase from Hatch and is now a member of The Hatch Group.

Engineering

Acres International provides consulting engineering services for the planning, engineering and delivery of physical infrastructure in the power and energy sectors. Profit-oriented business units draw on the resources of technical departments which encompass the basic engineering and project execution disciplines: civil, electrical, geotechnical, hydraulic, mechanical, procurement and project services. Other specialties include economics, planning and environmental management.

Sectors

- hydroelectric and water resources developments
- thermal power generating facilities
- win power plants
- transmission and distribution
- nuclear power
- surface mineable oil sands, SAGD and thermal heavy oil facilities
- offshore oil and gas developments
- regional planning, infrastructure, manufacturing, buildings and environmental projects

Subsidiaries operate in regional markets, including Acres Manitoba and SGE Acres (Atlantic Canada).



A member of The Hatch Group

Management Consulting

Acres Management Consulting provides advice to decision-makers in the public and private sectors on ownership issues and changing ownership of physical infrastructure in the energy, electricity, telecommunications and urban infrastructure sectors. Services include

- strategic and business planning
- capitalization, mergers and acquisitions
- rates and regulatory affairs
- forecasting, economics and financial studies
- financing advice.

Enterprise Asset Management

Synexus Global provides management systems, processes and services for the management of physical infrastructure in the electricity generation and water resources sectors in North America and internationally.

Affiliates

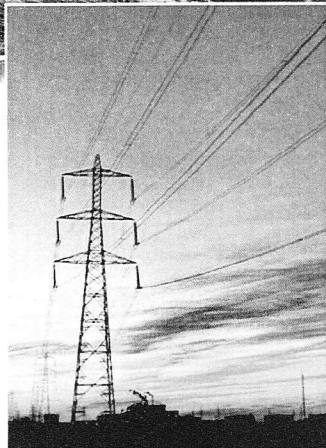
APEC Limited provides engineering, procurement and construction services for projects in the oil, gas, oil sands and petrochemical fields as well as on thermal projects.

AGM Program Managers Inc. is an equal ownership company formed by Acres, Giffels and Marshall Macklin Monaghan in 2003 to assist GO Transit with its 6-year rail infrastructure improvement program.

CIPM Canadian International Project Managers Ltd. offers services in the hydroelectric power and water resources sectors in the People's Republic of China.

Mahindra Acres Consulting Engineers Limited operates in India in the industrial, commercial and municipal business sectors.

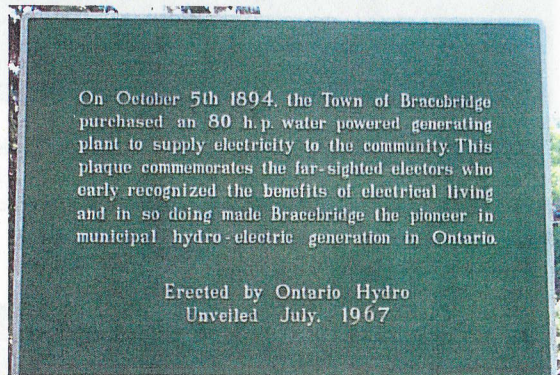
SGE Hatch Ltd. provides engineering services to mining and mineral processing clients in the Atlantic Provinces.



All plants use approximately 11 cubic meters per second of water at full load. Any excess water above the 11 cubic meters passes or spills over the dams. This is what is called a "Run of the River Operation" – whatever flow is in the river is passed through the turbines up to a maximum volume of 11 cubic meters per second and the excess is spilled, when flows are greater than our capacity. Bracebridge Generation Ltd. can produce approximately one-third of the power used in the old town proper in winter months and approximately one-half in summer months.

In 1911 the first Water, Light and Sewer Commission was elected. In 1972 it was changed to the Bracebridge Hydro-Electric Power Commission with sole responsibility for electricity distribution and affiliated services.

In the year 2000 these generation assets were incorporated under Bracebridge Generation Ltd., owned by the local municipalities and managed by a board of directors.



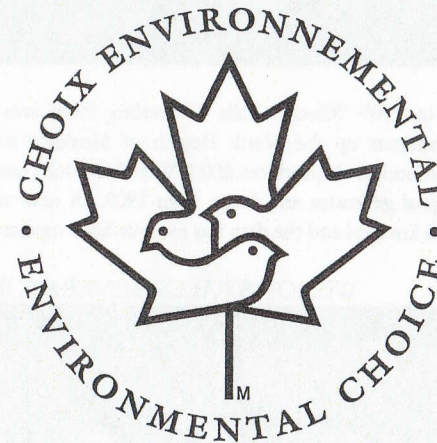
BRACEBRIDGE HYDRO MANAGERS

- W.C. Simmons 1895 – 1928
- E. J. Ball 1928 – 1955
- W. J. Page 1955 – 1972
- E. Keall 1972 – 1985
- R. Hogg 1985 – 1999
- C. Litschko 1999 - present

Bracebridge Generation Ltd. is a subsidiary company of Lakeland Holding Ltd. whose shareholders include the municipalities of Bracebridge, Burk's Falls, Huntsville, Magnetawan and Sundridge.

SERVICES

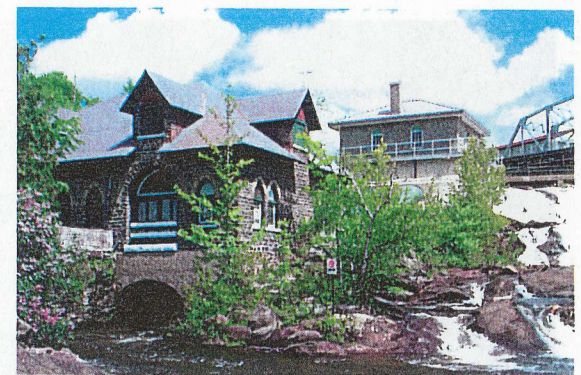
- Generate environmentally friendly local electricity.
- Promote the efficient use of electrical energy.
- Maintain safety and operating standards for electricity generation.
- Provide informative and instructional tours.
- Maintain the historic richness of the facilities.



Bracebridge Generation Ltd.
5 – 45 Cairns Crescent
Huntsville, Ontario
P1H 2M2
Phone 1-888-282-7711

BRACEBRIDGE GENERATION LTD.

Since 1894



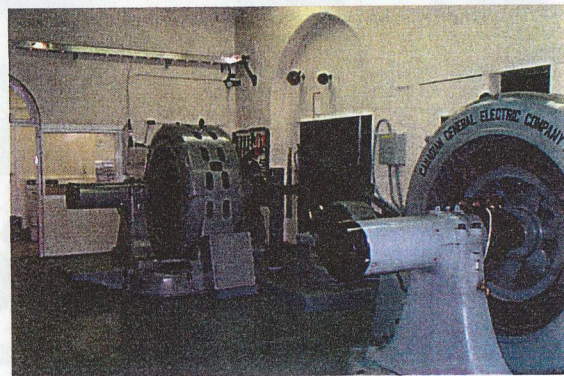
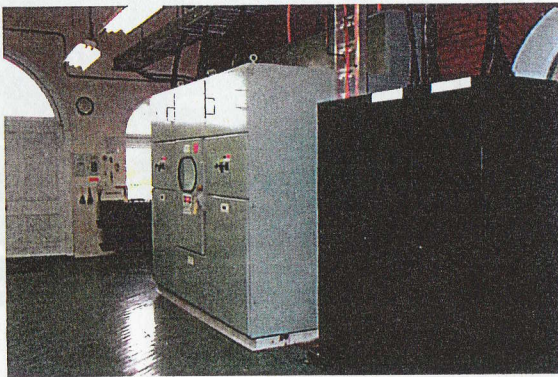
OVER 100 YEARS OF SERVICE

Building for the future...

On October 5, 1894, the Bracebridge Village Council purchased a water power generating plant to supply electricity to the community and in so doing made Bracebridge the pioneer in municipal hydro-electric generation in Ontario. The generator was 84 KW and was housed in the building which still stands at Bird's Bridge.

In 1900 the Bracebridge Generating Plant (stone building) at the bottom of Bracebridge Falls was built. One generator was installed that produced 300 KW at 2400 volts. In 1904 another generator was added that also produced 300 KW at 2400 volts. The generators and generator bearings are the same as when they were installed in 1900 and 1904. Turbines, flumes and the dam have been replaced.

BRACEBRIDGE PLANT & GENERATORS



One operator controls all three plants using a modern Supervisory Control and Data Acquisition system (SCADA).

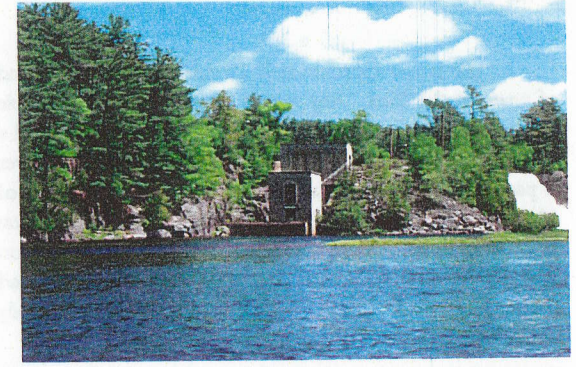
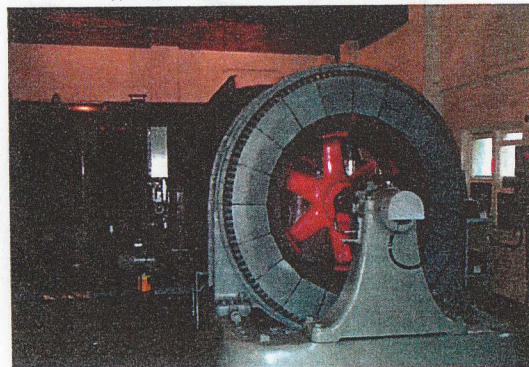


WILSON'S FALLS PLANT



In 1909 Wilson's Falls Generating Plant was built 2.4 Kilometers up the North Branch of Muskoka River from Bracebridge. It produces 600 KW at 2400 volts and uses the original generator and flume from 1909. A new turbine has been installed and the dam has recently been repaired.

WILSON'S FALLS GENERATOR

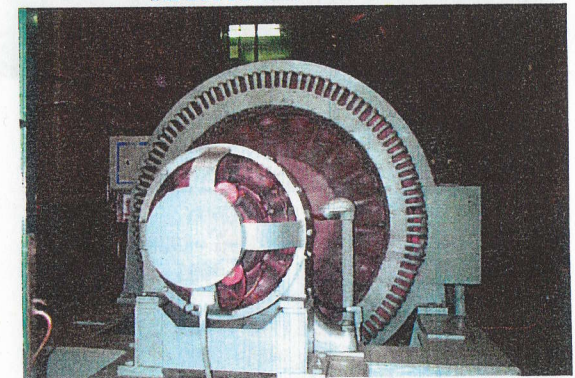


HIGH FALLS PLANT



In 1947 the third generating plant was built at High Falls, which is approximately 6.4 Kilometers up the North Branch of Muskoka River from Bracebridge. This plant produces 800 KW at 7200 volts. This original plant was built in 1947.

HIGH FALLS GENERATOR



Bracebridge Generation

Operations

Swift River has entered in to an understanding with Bracebridge Generation to operate the North Bala power project, including the power house and dam structure. Bracebridge will also provide such maintenance as necessary to both structures.

Bracebridge Generation is a locally owned and operated firm, based in Huntsville and with offices and generating plants in Bracebridge. They are owned by Lakeland Power Distribution which is the distribution company for the surrounding area.

While the Bala site is within Hydro One territory, Lakeland services neighboring communities and the Bracebridge sites are located in an adjacent town. Bracebridge Generation staff and management are well familiar with both the Bala site and the challenges of working in an area that has a high tourist component.

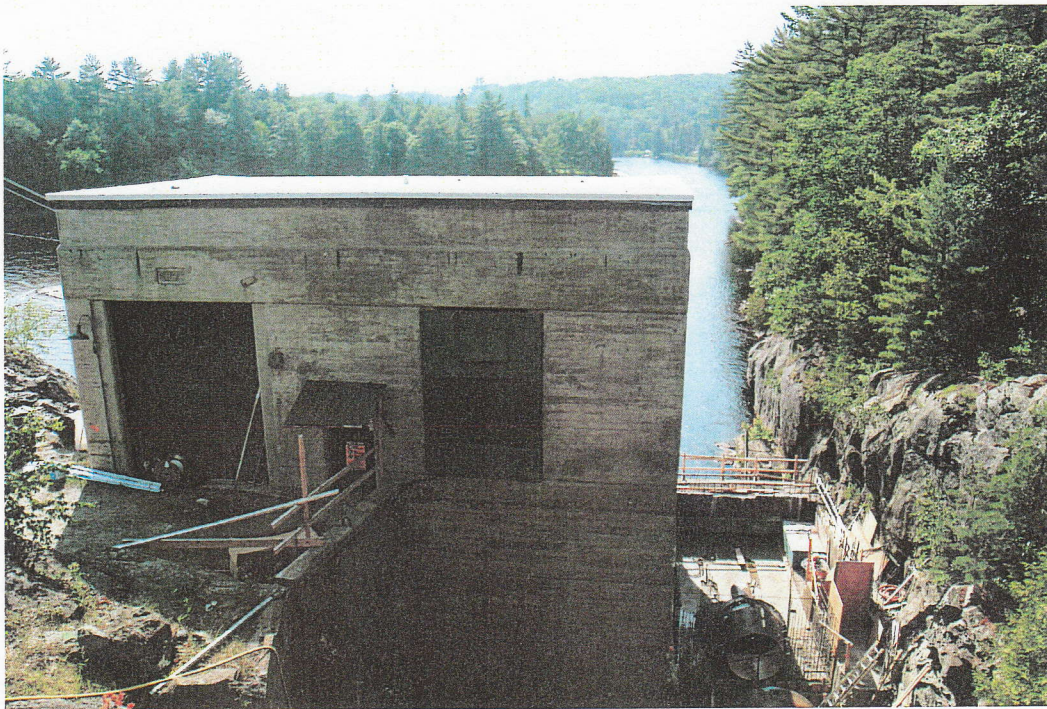
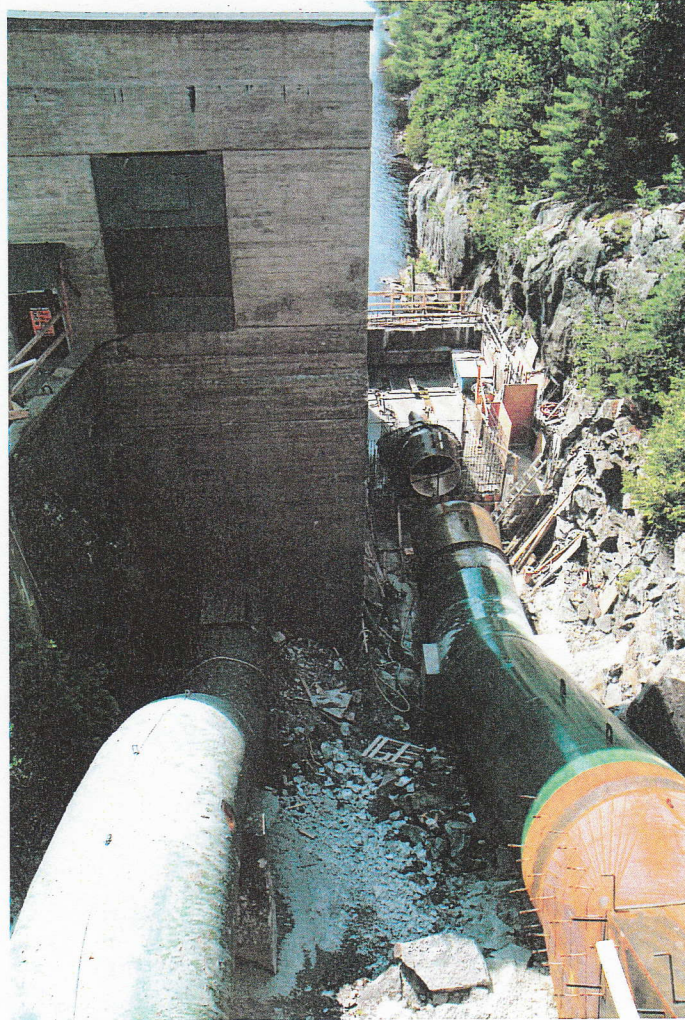
Bracebridge is in the process of upgrading its High Falls generating plant, from 0.8 MW to 2.3 MW capacity. Many of the same issues will surface at both High Falls and Bala. They went through a sensitive environmental screening process that involved local interests as well as seasonal residents. They have managed to blend the plant in with the many local uses of the site: Trans Canada trail, recreational bridge, scenic water fall, tourist resort, cottages, water level control structures, etc. The attached photos show how successful they have been.

Swift River has an understanding with Bracebridge that they will provide their services to our environmental and design engineers to advise what works in a sensitive area. We will utilize both their expertise and their good name locally to minimize adverse reaction. We will also listen to and act upon their advice about how best to fit the plant within the existing area.

Once constructed, the plant's operation will become the responsibility of Bracebridge Generation. The company and their parent maintain 24-hour operational and emergency staff to deal with running three generation plants and a utility. They are sensitive to community concerns and have a reputation for reacting to residents' worries and incorporating both good operating practises in their projects. The spectacular beauty of Wilsons Falls, High Falls and the downtown Bracebridge plant attest to their ability to run hydro generation in a highly visible environment.

Swift River realizes the value of showing renewable energy in action. We intend to conduct regular tours of the Bala facility and will encourage the Bracebridge operators to let visitors see the plant whenever they are there.

Bracebridge Generation will act as a common focus for the MNR, Hydro One and residents when dealing with the impact of this project's operations. We are proud to have them as our operating partner and expect that this will be a permanent relationship.





FORREC CORPORATE BACKGROUND

Forrec Ltd. is a world-recognized leader in the planning and design of themed attractions and themed environments.

Forrec has particular expertise in design, construction and operations. Even on projects where Forrec provides design services only, the background and experience of the other divisions is clearly a part of the focus of the design team. As one of the largest companies specializing in the development of leisure and entertainment facilities, Forrec is well qualified to undertake complex, high profile projects.

Forrec is able to provide a complete service to create and operate successful and unique entertainment facilities. This service would include:

- Master Planning
- Conceptual Development
- Economic Feasibility
- Detail Design
- Construction Documentation Coordination
- On-Site Design Supervision
- Pre-Opening Management (if applicable)
- Operations Management Support (if applicable)

Thirty years of international experience has given the Forrec team a thorough understanding of theme parks, festive retail and entertainment developments, themed environments, family entertainment centres, water parks, and leisure developments. We have a unique ability to create and interpret new themes, both physically and programmatically, to suit the client's specific needs appropriate to the location and budget. We are also well experienced working closely with the client's overall consulting team.

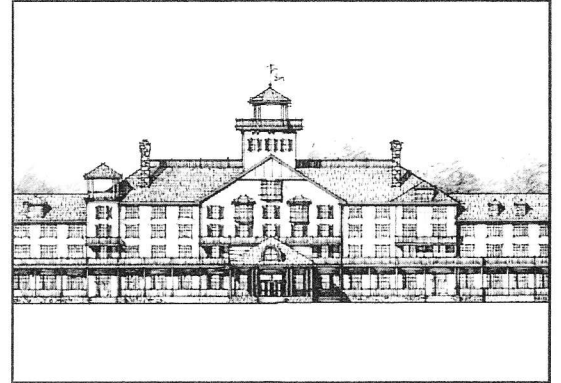
Our professional input to projects continues with an increasing and varied project portfolio and our history includes projects in Canada, United States, Mexico, Brazil, Argentina, Colombia, United Kingdom, Germany, France, Norway, Holland, Spain, Italy, Portugal, Finland, Australia, Indonesia, Singapore, Thailand, Malaysia, the Philippines, China, Hong Kong, Korea, Japan, Iran, Egypt and the United Arab Emirates.

Forrec's comprehensive experience and understanding of the strategies required to attract and entertain large numbers of people, combined with our thorough knowledge of master planning, detail design, special effects and products available world-wide, enables us to approach projects from an unconventional perspective, giving us the vision to identify and exploit new opportunities.

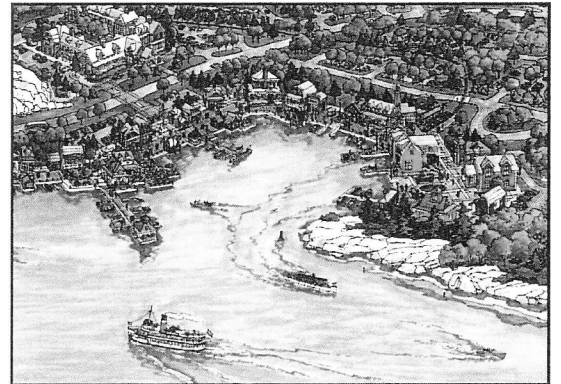
Forrec Approach

For over a quarter of a century, Forrec has been creating unique and engaging environments for people to live, work or play. And during that time, our most innovative thinking has been inspired by the need to harmonize our clients' visions with the environments created by Nature herself. For our designers, a natural environment is a gift, the only challenge being how to touch it as lightly as possible. We firmly believe that the more naturally pristine a project's location, the more sensitive its design must be to that location, an approach clearly evident in the following five Canadian projects:

1. The Grandview Resort – Located in Huntsville, Ontario, this resort is famed for the eco-friendly manner in which its original 1920's vintage buildings were integrated into the picturesque landscape of Canada's famed Muskoka tourist region. Forrec's plans for transforming the original inn into a much larger, all-season golf and waterfront resort were applauded for the degree to which it preserved the natural environment, one of the resort's strongest attractions.



2. Muskoka Wharf in Gravenhurst, Ontario is a landmark development on Lake Muskoka, the gateway to Ontario's most renowned vacation and tourism playground. The \$62 million revitalization of the Lake Muskoka waterfront that will include a heritage museum celebrating Muskoka's past, present and future, public moorings, and retail and restaurant facilities all set against the region's picturesque pine and rock landscape.



3. Port Carling Heritage Mosaic – To help this small Ontario town celebrate its 100-year history as a hub of the Trent-Severn waterway, Forrec developed the idea of creating the largest picture mosaic in North America. Over 1,000 historical photos and postcards were collected and assembled into a 100' X 45' image of the Port Carling lock at the turn of the 20th century.



Gowlings Energy

The power of experience. The energy sector is dynamic and evolving at an accelerated rate. Trust the experience of Gowlings Energy Group to address all your legal needs and to help you generate new opportunities.

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Barristers & Solicitors | Patent & Trade Mark Agents

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A TIME OF GLOBAL CHANGE FOR THE ENERGY INDUSTRY.

Worldwide, the energy industry is in a period of far-reaching change. In recent years, competitive electricity markets have been introduced in many countries, such as the United States, Britain, the Nordic nations, Australia and Canada.

Environmental and long-term supply concerns have led to massive spending on the development of alternative energy technologies, systems and services – ranging from fuel cells and photovoltaics to distributed generation.

Mounting concerns about security and the availability of supply is leading to major increases in oil and gas exploration in North America and a new interest in the future potential for nuclear power.

Amid all this change, the energy industry is witnessing significant rationalization and consolidation.

Members of the Gowlings Energy Group have been at the forefront of all these major developments.

We have been intimately involved in the implementation of new electricity markets; the development of alternative energy technology and systems; the launch of oil and gas exploration and delivery projects; the renewal of the nuclear sector; and the restructuring of the energy industry Canada-wide.

It's experience you can trust as you strive to excel in this constantly changing competitive environment.

THE GOWLINGS TEAM.

The Gowlings Energy Group has the capability to service energy clients from coast to coast in Canada.

While the Gowlings Energy Group focuses on the energy industry, the firm is able to provide the wide range of legal services you require.

By combining our hands-on industry involvement with proven professional experience across the energy sector, Gowlings Energy Group is powered-up to serve your unique needs.

Gowlings Energy Group has extensive experience working for clients in:

- The distribution, marketing, transmission and retailing of electricity, oil and gas
- The generation of power employing fossil fuels, biomass, water, wind and nuclear
- The development of alternative energy technologies, systems and services
- The manufacturing of energy generation equipment
- The financing of distribution, transmission and generation of energy
- Demand-side management and other energy efficiency initiatives

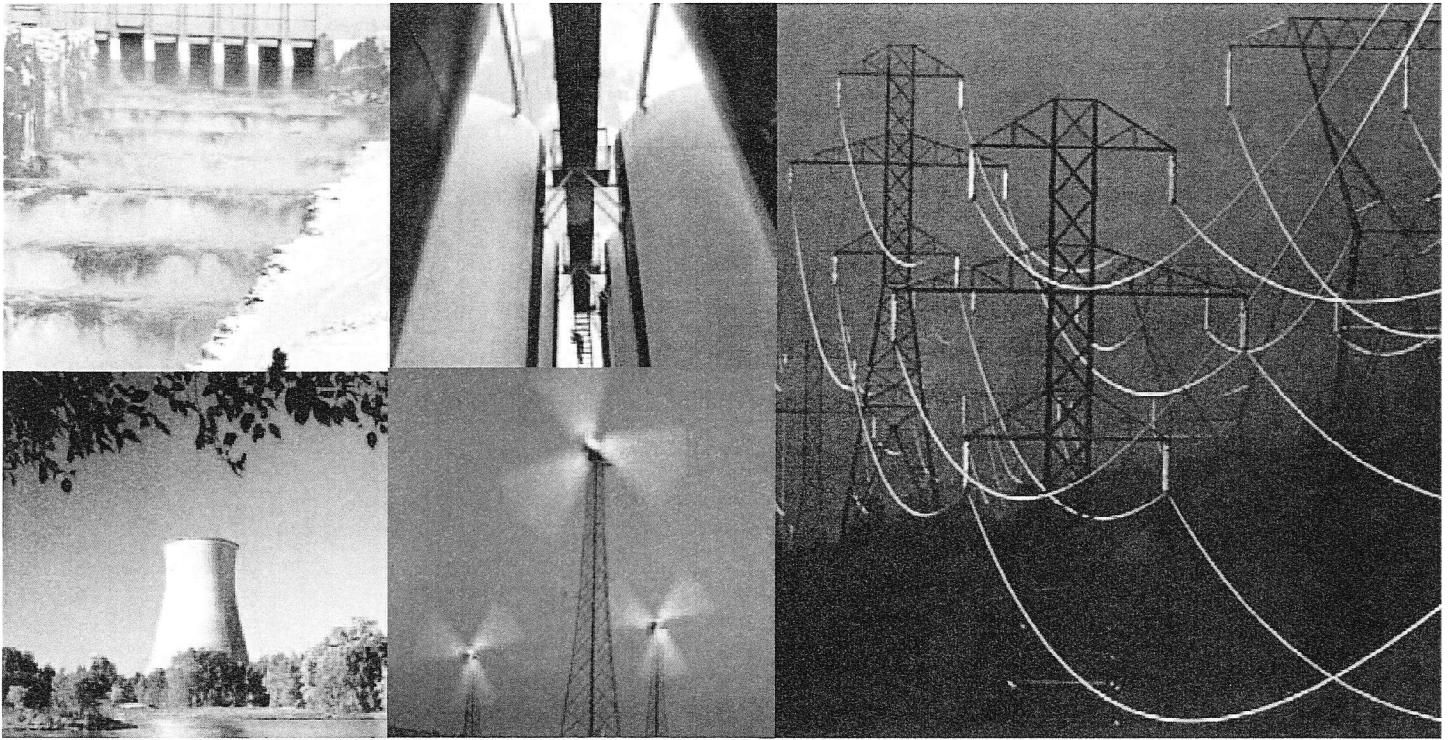
We also represent a broad range of industrial, institutional and commercial consumers in energy contracting and regulatory matters.

At the forefront of change.

Gowlings Energy Group has played a central role in some of the most significant energy industry transactions and litigation in recent memory.

For example:

- The first acquisition for control of a nuclear power plant in Canadian history
- The conversion of major generating facilities
- Foreign utilities diversification initiatives
- Mergers and acquisitions – both domestic and international
- Municipal Utility Restructuring – advising local governments and municipal electric utilities on the reorganization, licensing, financing, purchase and sale of distribution assets in Ontario
- Regulatory proceedings for gas commodity sales



Depth of experience in the purchase and sale of energy.

Gowlings has extensive experience in the negotiation and preparation of purchase agreements for both the electricity and gas sectors. Our energy team has the skills and experience to act effectively for both buyers and sellers. In addition, we have worked extensively with generating companies, plus industrial, commercial and institutional consumers.

Regulatory representation.

The Gowlings Energy Group also has many years of experience representing clients before both federal and provincial regulatory agencies. Our regulatory work has involved everything from distribution rate cases – to the licensing of power generators – to the approval of energy exports and proceedings for natural gas and electricity restructuring.

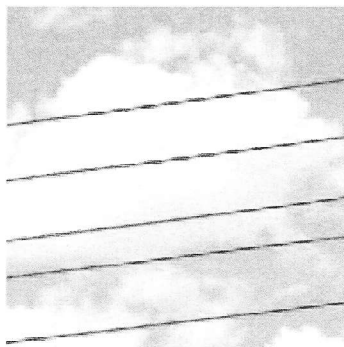
Recognized leadership and unrivaled expertise.

The Gowlings Energy Group is a recognized leader in the energy field. We have successfully managed a host of significant and complex transactions, both domestic and international.

Members of our team are regularly key advisors to government on energy policy and play leadership roles in energy industry associations.

Our lawyers have served in several prominent roles, including President of the Independent Power Producers' Society of Ontario, Chair of BC Hydro, Chair of the Stakeholders Alliance and as President of a major equipment manufacturing company.

In addition, our lawyers have served as members of the Ontario Government's Electricity Supply and Conservation Task Force and on the Electric System Working Group of the U.S.-Canada Task Force which investigated the massive August 2003 Power Blackout.



CONTACT US TODAY.

For details on how the Gowlings Energy Group can assist you with legal needs specific to the energy sector – and beyond – please contact us today.

David J. McFadden, Q.C.
Chair, Gowlings Energy and Infrastructure Group
416-369-7243
david.mcfadden@gowlings.com

J. Thomas Brett
416-369-4628
tom.brett@gowlings.com

G. Henry Ellis
604-891-2250
henry.ellis@gowlings.com

Edith M. Gillespie
403-298-1059
edith.gillespie@gowlings.com

Gary D. Graham
905-540-3255
gary.graham@gowlings.com

Paul H. Harricks
416-369-7296
paul.harricks@gowlings.com

John N. Iredale
403-298-1850
john.iredale@gowlings.com



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