

Ontario Power Generation Inc. (OPG) is proposing to develop approximately 100 megawatts of renewable hydroelectric power through the construction of two generating stations on the Little Jackfish River (see map below). This is part of Ontario's plans to generate more clean renewable hydro power within the Province. The generating stations would produce enough power to supply electricity to about 100,000 households.



## Project History and Description

The Little Jackfish River flows south from the Ogoki Reservoir into Lake Nipigon, about 250 kilometres northeast of Thunder Bay. The Little Jackfish River was originally a small creek with an average flow of about 4 cubic metres per second (cms). In 1943 the Ogoki Diversion was created to divert flow from the Ogoki River (flowing towards the Arctic Watershed) into the Great Lakes System via the Little Jackfish River. Flows in the Little Jackfish River increased significantly, averaging about 120 cms for the past 65 years. This has created an opportunity for hydroelectric development.

The proposed Little Jackfish River Hydroelectric Project (Project) will consist of two generating stations. The smaller Upper Site will be located at the outlet of Moule Lake. The larger, Lower Site would be located approximately 16 kilometres downstream in the vicinity of an existing forest access road. Each generating station will include a dam with a water intake and by-pass structures, powerhouse and tailrace channel. This conceptual scheme was developed in order to minimize the requirement for inundation or flooding.

Associated facilities will include access roads, borrow areas for construction materials and a large temporary construction camp. Transmission facilities connecting the generating stations to each other and then to the proposed Hydro One transmission line will also be required. All of these components will be included in OPG's environmental assessment (EA). A separate EA process will be undertaken by Hydro One for the Northwest Transmission Expansion Project.



Construction on the Little Jackfish River in 1943.

OPG is undertaking a number of studies to assess engineering, dam safety and environmental issues associated with the Project. The Project will have a number of benefits for the people of Ontario including:

- Addition of more clean and renewable energy in Ontario;
- Local and regional socio-economic benefits associated with the construction and operation of the Project;

- Establishment of a physical barrier to prevent invasive species such as smelt from getting into the Arctic Watershed; and
- Creating a more stable flow regime in the river.

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## Ontario Promotes New Renewable Energy

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The Ontario government recognizes the importance of hydropower in providing clean, reliable and renewable electricity for future generations in Ontario. OPG has been given a mandate to move ahead to explore new hydroelectric opportunities, such as this Project. As the Little Jackfish River is located away from the existing transmission network, the Ontario Power Authority has also asked Hydro One, a separate company, to proceed with planning and implementing the Northwest Transmission Expansion Project. If approved, this new line would improve reliability, increase capacity, facilitate hydroelectric and wind generation, provide opportunities in the future for First Nations and other communities to connect to the grid and create jobs and a new era of economic development across the region.

**You are invited to attend one of our Open Houses in Armstrong or the Town of Nipigon. Details about the Open Houses and the Project in general are included later in this newsletter.**

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## Building Strong Relations with First Nation, Métis and other Aboriginal Communities

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OPG recognizes and respects the roles that First Nations, Métis and other Aboriginal communities play in hydroelectric development projects. As part of its Aboriginal focus, OPG has signed several past grievance settlements with the First Nations around Lake Nipigon and will be supporting meaningful participation of potentially affected communities in the planning process.

On November 3, 2008 OPG and the Chiefs of the six Lake Nipigon First Nations (Animiigoog Zaagi'igan Anishinaabek, Bingwi Neyaashi Anishinaabek, Biinjitiwaabik Zaaging Anishinaabek, Kiashke Zaaging Anishinaabek, Red Rock Indian Band and Whitesand First Nation) signed a Protocol Agreement related to the proposed Project. This

Agreement commits OPG and the Lake Nipigon First Nations to work cooperatively over the next few years to define and assess the environmental, cultural and socio-economic impacts of the Project prior to either party making any decisions about formally proceeding to construction.

OPG's relationships with Ontario's Aboriginal communities also include corporate citizenship support for educational programs, scholarships, cultural initiatives/events, and in specific cases, partnership opportunities.



David Stanley of OPG and Sam Sobush of Red Rock Indian Band conducting fisheries field work on Zigzag Lake, August, 2009.

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## Environmental Assessment and Water Management Planning Processes

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Under the provincial *Environmental Assessment Act*, (EA Act) the Project is subject to review under the Class EA for Waterpower Projects as a new project on a managed waterway. The Class EA planning process requires OPG to evaluate the positive and negative environmental effects of the Project and prepare an Environmental Report that includes impact and issue management strategies.

The Project also requires changes to the Nipigon River System Water Management Plan (WMP) which will be pursued in accordance with Ontario Ministry of Natural Resources' (MNR's) planning requirements.

OPG further expects that the Project will be screened under the Canadian EA Act. Over the next two years, OPG will use the Class EA process as a basis for coordinating all future consultation required for the planning stage of the Project.

## Environmental Assessment Update

While the EA for the proposed Project formally commenced in the spring of 2009, some preliminary field work was completed in 2008. Throughout 2009 OPG has carried out comprehensive field studies. Extensive work has been undertaken on fisheries and the aquatic ecosystem. This has included: a large telemetry program to better understand current fish movement; fish habitat assessments; and sampling programs for fish, water, sediment and soil.



Environmental consultants surgically implanting a sonic tag in a Little Jackfish walleye.

Terrestrial environment studies have included: studying habitat; inventorying species at risk; and the presence of various animal, bird, plant and tree species. Archaeological work was conducted in conjunction with the Lake Nipigon First Nations on areas potentially impacted. Human socio-economic use has also been studied through fieldwork and documentation. A large geo-technical investigation has also been initiated to better understand the soils and geology in the area of the proposed generating stations. Over the winter of 2009 the data and information will be further analyzed with some field work continuing in 2010. A second round of Open Houses is expected to occur in mid-2010 to obtain more feedback on potential environmental effects and proposed mitigation measures, with an objective of preparing the Environmental Report in the latter part of 2010.



Pat Donio of SENES Consultants is preparing to install one of the several underwater acoustic receivers that will record fish movement in the river.

## Water Management Plan Update

OPG is proposing that the most efficient method of incorporating the Project into the WMP is to seek an early renewal of the WMP, well before its expiry date of 2015. The planning process would be broadened so that the requirements for incorporating the Project into the WMP would be fulfilled through the EA process, and a single body of documentation would be prepared for review and comment. OPG further proposes that the Environmental Report be sufficiently detailed so that should the Project proceed, and upon completion of construction, the EA process and documentation will be sufficient to support an amendment for the Project as part of a renewed WMP.

The key steps towards renewing the WMP are as follows:

- planning organization and commencement;
- developing a planning approach;
- management options development;
- preparation of a draft WMP; and
- government review and approval of WMP.

OPG, with MNR assistance, has initiated the first step in the early renewal process and is currently developing a draft Terms of Reference. The Terms of Reference, once finalized, will guide the renewal

process by setting out such items as guiding principles, methods of participation, roles and responsibilities and a schedule of activities. Consultation for the WMP and EA processes will be coordinated as much as possible.



OPG staff, environmental consultants and First Nations representatives collaborating during field investigations on the river, August, 2009.

### Operation of the Generating Stations

The final operating regime for the Project will be assessed during the EA and water management planning processes. As a starting point, OPG proposes to operate the two generating stations in unison as a carefully managed run-of-river operation. This type of operation minimizes the amount of flooding required, yet allows for some storage of water and time shifting of flows from a low demand period to a high demand period to better match the electrical load demand in Northwestern Ontario.

### OPG is Seeking Public Input as Part of the Planning Process

OPG is committed to engaging all interested people in the planning process. Your input and comments will be considered, documented and included in the preparation of the Environmental Report.

To encourage public participation, OPG will be holding public Open Houses. Stakeholders will have the opportunity to speak directly with representatives of OPG and its environmental consulting team.

OPG will be carrying out two rounds of public Open Houses. The first round of public Open Houses is planned for Armstrong and the Nipigon.

**The Open House in the Town of Nipigon will be held on November 24, 2009 at the Royal Canadian Legion, from 3:00pm – 8:00pm.**

**The Open House in Armstrong will be held on November 25, 2009 at the Lions Hall, from 3:00pm – 8:00pm.**

### For More Information

For more information or to be put on our mailing list, please contact **Heather Brown**, Senior Environmental Advisor, OPG, 700 University Avenue, H18, Toronto, Ontario, M5G 1X6, phone: 416-592-6818, e-mail: [heather.brown@opg.com](mailto:heather.brown@opg.com); or **Phil Shantz**, Manager – Aboriginal, Land, Resource and Northern Projects, SENES Consultants Limited, 121 Granton Drive, Richmond Hill, Ontario, L4B 3N4, phone: 905-764-9380, e-mail: [pshantz@senes.ca](mailto:pshantz@senes.ca). Please visit us at: [www.littlejackfish.com](http://www.littlejackfish.com)

If you wish to find out more information about Hydro One's proposed transmission line from the Nipigon area to Pickle Lake, please contact: **Enza Cancilla**, Manager, Public Affairs, Corporate Communications, Hydro One Networks Inc., E-mail: [Community.Relations@HydroOne.com](mailto:Community.Relations@HydroOne.com). Project Hotline: 1-877-345-6799 or 416-345-6799. Web site: [www.HydroOne.com/Northwest](http://www.HydroOne.com/Northwest)



Under the *Freedom of Information and Protection of Privacy Act* (1987) and the *EA Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number, and property location included in a submission will become part of the public record files for this proposed Project and will be released if requested, to any person.

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