



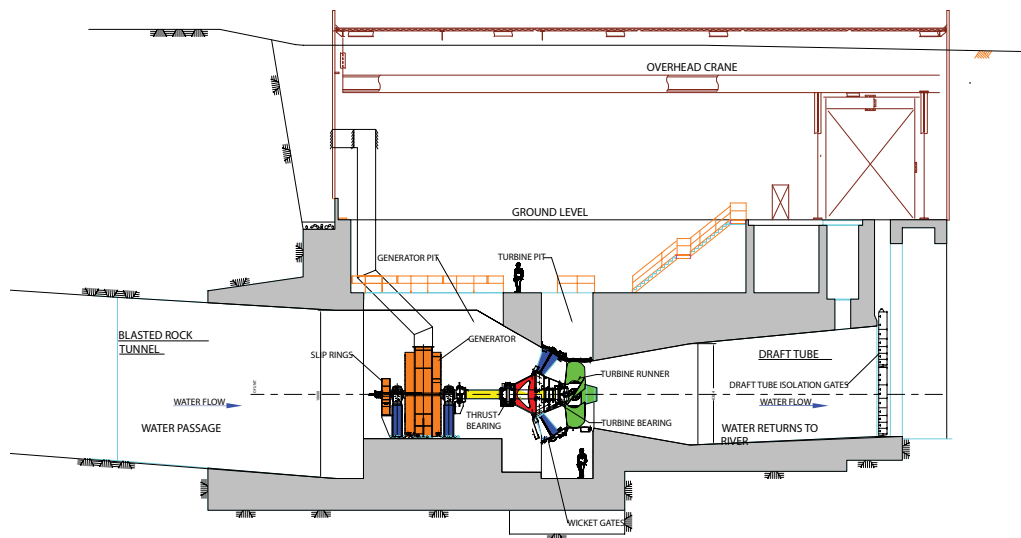
Construction



- Construction of the project started in January 2006 with site clearing and blasting for the powerhouse site. The generating unit was watered up and first operated on December 3, 2008. The unit was synchronized to the grid on December 8, 2008. Following the completion of the commissioning phase of the project, the unit was made available for commercial operation on February 18, 2009.
- The general contractor was SNC Lavalin Power Ontario Inc. The principal generating equipment was supplied by Andritz Hydro Canada Inc. (VA Tech Hydro).
- During construction, the station employed in excess of 140 workers at its peak and over 600,000 person hours were performed on the project site, meeting OPG's high standard for safety.
- Approximately 10,000 cubic metres of concrete was poured on the site between the powerhouse and intake construction.
- The new tunnel under the highway is 68 metres long and was blasted from the natural bedrock formations. The tunnel is an inverted D shape with the base width of 8 metres and a height of 10 metres. The tunnel is unlined with the exception of the floor which is concrete lined to facilitate access and maintenance of the unit. To stabilize the rock tunnel over the life of the plant, hundreds of rockbolts have been installed.



Cross section of Obishikokaang Waasiganikewigamig Lac Seul Generating Station



Environmental Features

- An oil containment system was built around the main output transformer with all drainage from this area being discharged through a Ministry of the Environment approved oil-water separator to help prevent environmental contamination in the event of a spill or leak from the transformer.
- The main powerhouse sump for all powerhouse water drainage has been equipped with a Ministry of the Environment approved oil trap and oil detector in the sump to monitor discharge for oil contamination.
- The new generating unit utilizes oil lubricated shaft bearings but all in-water components use greaseless technology to prevent contamination of the English River.
- A high efficiency powerhouse lighting system, utilizing products such as low pressure sodium and fluorescent fixtures, will help to minimize station service electricity consumption and help OPG meet its commitments for greenhouse gas reduction.



- Monitoring of bald eagles occurred throughout the construction phase of this project. Despite the activities at the site, adult eagles were observed in the area almost continuously throughout the construction period. A nest adjacent to the construction site laydown area was used and juvenile eagles appear to have been raised successfully each year.
- A new 6,000 square metre fish spawning area has been created in the tailrace of the station. This new fish habitat design was a joint effort between the Department of Fisheries and Oceans, the Ministry of Natural Resources and OPG, and is subject to testing with the plant operating to determine its effectiveness. It was constructed using blast rock and round cobble rock.

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