Will Bala Falls be operated as a run-of-river dam?

by Louis Tam

MUSKOKA LAKES - The proposed Bala Falls hydroelectric plant could be changing the Moon River's water flow rates in the future, an agreement between Swift River Energy Limited and Ontario Power Generation suggests.

Finalized between SREL and OPG in January, the agreement says the dam will be operated as a "run-of-river" dam once completed — one that does not slow a river significantly to build a large pool of water (a process known as cycling or peaking). But the agreement also allows SREL to change its mind and cycle water if OPG's dams downstream and the province agree in the future.

However, even if the dam cycles, SREL project manager Karen McGhee says it will still be classified as a "run-of-river" dam.

"The definition of run-of-river can include minor cycling, until you get into something significant in terms of (water) storage," she said. "We're not getting anywhere near that kind of threshold."

According to McGhee, run-of-river dams don't significantly manipulate water flows, but other dams — known as peaking or cycling dams — deliberately slow a river's flow to retain large pools of water, which in turn can be released to generate more electricity later.

Even if the agreement with OPG goes through, McGhee says the Bala dam would still be classified as run-of-river, because the amount of water it could control and store isn't large enough to be considered otherwise.

"If you're holding water for more than a day, it would be a cycling or peaking plant," she said. "(At Bala) it won't be anywhere near a day — it will be more on an hourly basis, so it won't hit that kind of threshold."

The cycling issue was initially brought forth by OPG as an elevation request — a request from public stakeholders for changes to be made to SREL's environment assessment plan.

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SREL is seeking approvals to construct a 3- to 5-megawatt hydroelectric power facility near the south end of Bala's existing north dam.

Initially, OPG was concerned that cycling by SREL could affect its dams downstream on the Moon River.

However, that request was later withdrawn when both utilities, with the approval of the Ministry of National Resources and the Ministry of the Environment, agreed that allowing SREL the option to cycle would not require changes to the environmental assessment report.

"In order not to impact OPG, we didn't need to study it anymore, we just needed to operate the dam in a way that would not impact them," said McGhee.

McGhee said the effects of cycling would be "imperceptible" downstream, and that they would not infringe on the water management plan outlined in the environmental assessment report.

However critics of the project aren't convinced.

Muskoka Lakes Mayor Alice Murphy said she's concerned SREL's environmental assessment report was completed without with the possibility of cycling in mind. The report was recently endorsed by the Ministry of the Environment.

"The Moon River will be compromised with the starting and stopping of the turbines — these issues are just completely not addressed," she said. "When that happens in conjunction with recreational activities like swimming or scuba diving, there is a significant safety issue."

Save the Bala Falls member Mitchell Shnier says cycling may also put local wildlife in danger.

"If the water level of Lake Muskoka was to go up and down by a couple of inches each day to suit the operation of the power station, it would have a huge impact on the shoreline waterfowl," he said. "If a loon's trying to have a nice nest on the shore and the water goes up by two inches, it might move the shoreline up by three feet ... and sud-

denly their eggs are underwater."

Shnier says the province's feed-in tariff program incentives for renewable energy power companies are driving SREL and OPG to keep the cycling option open.

"What it means is that it's in their interest to sometimes stop the water and let it build up to let the water out later on," he said. "They get a 50 per cent increase in the revenue they receive for the same amount of electricity if they can generate it during peak demand periods of the day."

According to McGhee, the electricity produced garners an average of 13 cents per kilowatt hour. She dismissed Save the Bala Fall's criticisms about the project's handling of water flow levels as a series of "irresponsible statements" meant to pander fear.

"For them to be making statements like these — it's to get the community excited about something that has no basis," she said.