

## 32. MORE THAN ELECTRONS: DESIGNING SMALL HYDRO PROJECTS TO BENEFIT FIRST NATIONS, RECREATIONAL USERS, AND THE LOCAL ENVIRONMENT

Colleen Giroux-Schmidt, Senior Director, Innergex



### PRESENTATION

The session leader, Colleen Giroux-Schmidt, welcomed a diverse group of participants to this workshop. She began by delivering a presentation on her experience working on small hydro projects (run-of-river) in BC. Giroux-Schmidt explained that project development was traditionally all about how to get the most energy for the least investment, and building as cost effectively as possible. The project development process has evolved to incorporate environmental considerations and assessment, as part of project development. Tradeoffs between the physical location of a plant, and environmental values are part of redefining projects to get the right balance.

The trend is now towards increasing the social benefits of projects; for example, Innergex is a leader in developing sustainable energy while taking into account the triple bottom line.

### GROUP WORK

After her introductory presentation, Giroux-Schmidt explained the first small group activity: A hypothetical scenario with a community that is considering a small hydro energy project. She divided the participants into small groups and handed out worksheets with details of key values and a scoring system. Giroux-Schmidt then asked the groups to talk about the values of community and potential tradeoffs and to fill in the score sheet as a basis for further discussion. After the discussion, groups then compared the scenarios they had built and how they had scored the activity. Notably, one group developed a project proposal that included partnering with First Nations, building a platform for tourism to increase revenue, developing a hatchery for fish on the river, and providing support for grizzly bear habitat in the region.

Giroux-Schmidt then revealed that the

scenario was based on a real example and presented the details of the Ashlu Creek run-of-river hydroelectric generating power plant in BC. This project site has high interest and value for kayaking, serves as grizzly bear habitat, and is within the traditional territory of the Squamish First Nation. Giroux-Schmidt gave an overview of how Innergex was able to balance a multitude of interests—from recreational to community to environmental—while developing the project. She emphasized the importance of engaging the community early on in a project to determine what it needed to support the project, and how the plant should be designed and managed on an ongoing basis. Participants asked Giroux-Schmidt some pointed questions about how to deal with NIMBYism and onerous environmental assessment processes, and how to communicate the greater social good of sustainable energy projects, while reconciling local impacts.

Giroux-Schmidt then presented a second case study, the Hydro Ottawa's Chaudière Falls Hydroelectric expansion project in Ontario.<sup>3</sup> She provided specifications for the scenario and detailed social and environmental constraints on the project,

including statements from the Algonquin First Nations. Based on this case study, participants worked in small groups through an in-depth exercise on the real trade-offs involved in the Chaudière project. The groups then shared their solutions for developing a social license for the project with each other, including:

- Redesigning the engagement process to build trust with the local First Nations
- Developing affordable housing options on the land
- Developing a multi-stakeholder consensus process to steer the project
- Considering lessening the impact through submerged marine current turbines for power generation while reconstructing the falls
- Assessing the full cost of legacy hydro in comparison to new hydro, which needs to take into account social and environmental aspects
- Adopting the consumer power model where energy users pay a little more to get sustainable, ethical electricity

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<sup>3</sup> This case study was developed by Chris Henderson, President, Lumos Power