STUART DAVIS/VANCOUVER SUN

This crumbling building once housed generators that powered the copper mine and smelter at Anyox, abandoned in 1935. To the right is Anyox Creek.

Hydro's green scheme

ENERGY Megaprojects are out. What's wanted are small, environmentally benign ways of generating power, Sun reporter **Derrick Penner** writes

Last in a series

Hydroelectric dams don't evoke thoughts of environmental friendliness these days but a small Vancouver-based firm is confident its proposal to resurrect two old facilities in remote northwest B.C. fit the definition of "green power" set by B.C. Hydro.

Anyox Hydroelectric Ltd. owns two abandoned dams about 160 kilometres north of Prince Rupert and wants to refurbish them to sell electricity under the utility's green and alternative energy program.

One is the 44-metre-high, 207-metre-long concrete dam on Anyox Creek built in 1924 to power a copper mine and smelter at Anyox. The facilities were abandoned in 1935.

Jeff Wolrige, CEO of Anyox Hydroelectric, said the waterfall at the mouth of Anyox Creek makes it inaccessible to salmon and while there might be trout upstream, he doubts fisheries studies the company has undertaken will find serious impacts from operating the dam.

Wolrige doubts that the provincial government would allow anyone to build a new, river-blocking dam these days because "dam building is sort of taboo." However, he doesn't think the negative image fits the dams his company is proposing to fix.

"None of the projects we're working on, particularly the two with storage dams, we don't believe have any fisheries issues," Wolrige said.

If that is the case, the proposals would fit the criteria set by B.C. Hydro for its green alternative energy program.

Brenda Goehring, manager of green and alternative energy, said the green energy program has been dominated by small hydroelectric projects, also known as micro-hydro, because the province has a wealth of water resources.

B.C. Hydro's criteria for acceptable "green" micro-hydro projects are that the proponent be able to meet federal and provincial standards for fish and wildlife protection, that they don't impound water and that they be "socially acceptable" to surrounding communities.

That usually means "run-of-river" turbines that use the natural flow of a stream to generate power. Goehring said existing dams fit into the green definition if they don't already have electricity-generating capacity and have no additional impacts either downstream or on upstream reservoirs.

Goehring said B.C. Hydro will open a call for energy proposals from independent power producers in October to supply up to 800 gigawatt-hours of electricity. That is enough to power 80,000 homes.

B.C. Hydro opened a similar call last fall and signed on commitments from independent projects to fill a similar block of power. The utility anticipates over-all demand for electricity to grow by about 800 gigawatt hours per year, which is about two per cent.

Goehring said that as demand grows, Hydro has committed to supplying 10 per cent of the year-by-year increase using green energy within 10 years. She said the utility has also changed its philosophy for meeting that demand.

"Historically, planning is [on a 20-year basis]," she said. "Now, we're looking at incremental growth, year-over-year."

Many green energy projects fit in well because they often take only a few years to develop and build. Goehring said that adding small projects every year makes for "a less bumpy supply surge" than hydroelectric megaprojects of the past.

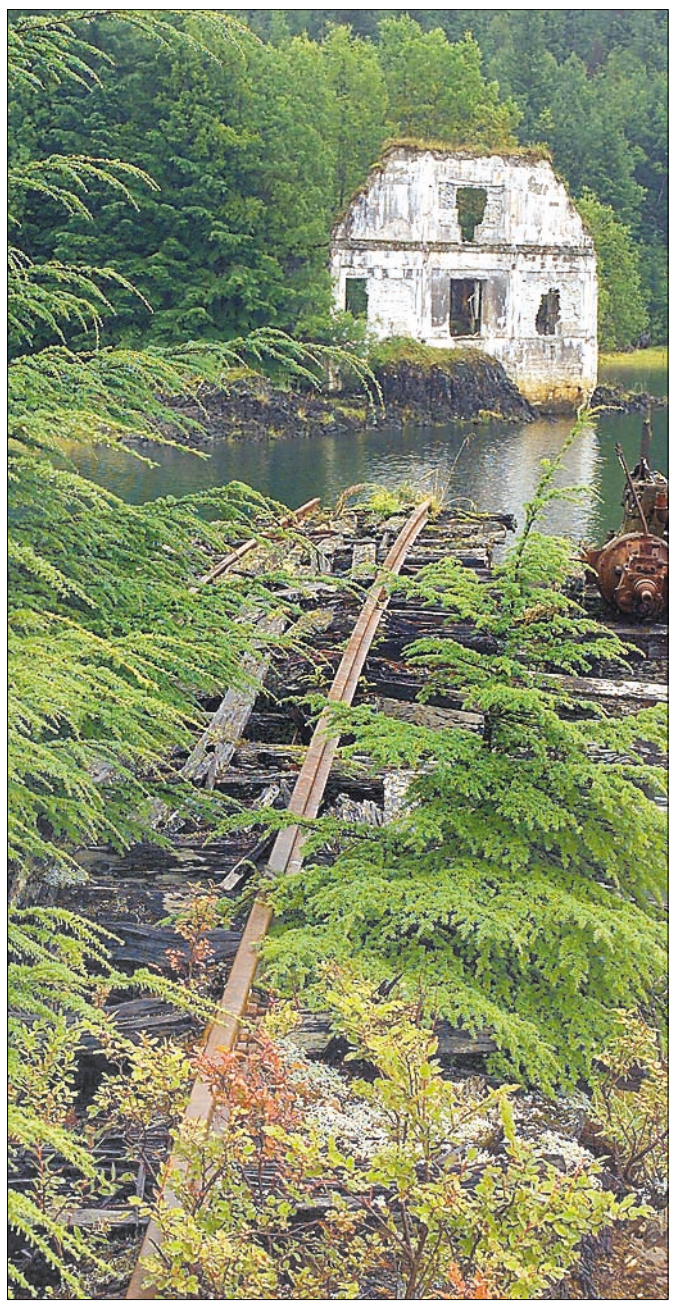
The corporation has tried to make the requirements as transparent as possible for applicants. Goehring said B.C. Hydro has also tried to be predictable by making it known it will be fulfilling its green power commitments over a number of years, so applicants know they haven't missed out if they can't complete an application in a given year.

She added that the program has been successful and the utility might be able to meet its 10-year, 10-per-cent green target within four years.

Hydro has also come up with a standard pricing system for applications, which Goehring said is also intended to simplify the process. In the last round, it was $49 a megawatt hour, with certain bonuses for things such as having greenhouse emission offset credits, being able to operate during peak demand or being close to the Lower Mainland, which has the largest demand for electricity in B.C.

The price can be docked, however, for being too far away from the load and where hydro transmission lines are congested.

"We have a strong desire to see more players and a lot more smaller operators," Goehring said. "And by having it as a set price, everybody knows what [others] are getting and they don't have to spend a lot of time [worrying about] that."



STUART DAVIS/VANCOUVER SUN

Abandoned railway tracks and the old general store still stand at Anyox. More importantly, so do the site's two dams.

The price is based on what it would cost B.C. Hydro to add a megawatt hour of electricity by building a natural-gas-fired power plant to serve the Lower Mainland. She expects the price for this year's call for green power, which is to be released Sept. 15, will be slightly higher.

The call for proposals this fall, however, will be different. Goehring said proponents will be asked to take Hydro's set price as a cap, and then write their own price as a bid to make the process more competitive.

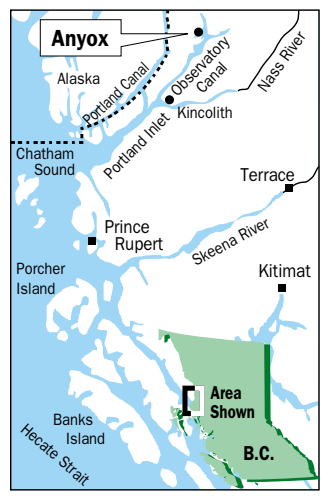
The bidding process is one aspect of the green energy initiative that raises questions. Energy lawyer David Austin said the process of the regulatory studies and design work that goes into establishing a firm price can cost up to $1 million for a small project.

"If Hydro is saying 'We all want you to enter a competitive bid process,' developers haven't spent $1 million to bid [a price]," he said. "They're not small hydro projects for nothing."

Austin also questions whether B.C. Hydro is abiding by the same rules that it is asking independent power producers to follow with its base price. He said the natural-gas turbine the utility has proposed to build at Duke Point near Nanaimo on Vancouver Island has ballooned in cost from an initial estimate of $300 million to $370 million and the independent power producers' association has estimated its electricity could cost up to $80 a megawatt hour.

Brenda Goehring heads Hydro's green team.

"So, Hydro's saying to IPPs that to put a cap on what they're proposing to pay, and [to ask producers] to go into a competitive bid process . . . that's fair," Austin said. "Yet when they build Duke Point, and its [cost] is $80 a megawatt hour, that's fair, too."



David Kiess, secretary of Rockford Energy Corp., which is building a seven-megawatt run-of-river generator on Brandywine Creek near Whistler, doesn't think using a gas-fired gas plant in the Lower Mainland is a fair comparison, either.

"We've seen the opposition to [the Sumas 2]," Kiess said. Protests over construction of that plant on the Washington state side of the Fraser Valley lead him to believe that "the likelihood would be very low" that such a plant would be built in the Lower Mainland.

He is also bothered that B.C. Hydro won't consider offering its customers the option to buy environmentally friendly electricity at a premium price. Kiess thinks there would be a market for higher-priced green electricity.

Kiess would also prefer it if he could sell the greenhouse gas credits that go with his project on the open market, where they can trade for up to $10 US a megawatt hour, rather than being forced to include them in his contract with B.C. Hydro which pays $3 to $5 Cdn. The utility uses such credits to offset carbon dioxide emissions from its Burrard Thermal plant in the Lower Mainland.

He said B.C. Hydro is doing a good thing by setting up the green energy program and the new division set up to administer it does a good job. However, B.C. Hydro's transition from being the province's main power producer to one that takes on partners, has been a bit rough.

"It's still a monopoly, and is still very protective of its own system and and its own information," Kiess said.

Developing the Brandywine Creek project also proved more expensive than his company counted on. Additional navigable water studies for the department of fisheries and oceans and the price tag on agreements with local government and First Nations inflated costs to $14 million from $11 million and Kiess said that cut the project's profit margin in half.

Austin said the province has tried, without a lot of success, to reduce red tape for such small power producers. The companies, however, have had to meet increasing requirements from federal government departments and local governments.

Celluloid dreams keep on unreeling in Canada

MAURICE BRIDGE

INNOVATION

B.C. still ranks as one of the beneficiaries of an appetite for visual fodder

It's always good to hear something described as "the world's biggest." It provokes tingly feelings, and makes the rubes reach for their wallets.

The latest lead canary is the "largest shooting stage in the world," a privately financed soundstage and movie-production centre being touted in Montreal. It's being pushed by a couple of Los Angeles production houses looking to attract compatriots who wish to take advantage of the Canadian peso.

Noticeably outside the tent is Nick Barker, location manager of the Montreal Film and Television Commission, a municipal agency that helps promote Montreal's film industry. Barker sagely observes that "to announce a plan is not the same as to actually stick the shovel in the ground."

He unkindly compares it to last year's "world's largest" studio, an effort to convert a shuttered Hyundai automobile plant in Bromont into a celluloid dream-machine that was scrapped faster than a rusted-out jalopy when promoters failed to raise the necessary scratch.

B.C., of course, has a big stake in such things. We are prime beneficiaries of Hollywood's endless appetite for visual fodder to fill the movie houses and the home entertainment centres with stirring images.

The generally accepted figure is a billion or so dollars a year for our provincial economy which, while it pales in comparison to the annual dollar value of B.C. bud, it still ain't exactly hay. Many people, therefore, would like to take it away from us.

The Mexicans are also having a whack at that, with the administration of President Vicente Fox proposing to eliminate taxes on non-Mexican actors and rebate the national 15-per-cent sales tax to the movie companies. This tidy little package is supposed to go to the Mexican Congress this fall, which puts one in mind of the comment about plans and shovels.

Without getting too smug about, we have the scenery. It's hard to imagine Montreal or Baja California standing in for Chicago, the Bronx, Alaska or Billings, Montana, at the beginning of the 20th century.

Somewhat more mobile, but considerably more pricey, are the technical crews and acting talent. It's one thing to fly in box-office attractions from L.A.: it's altogether another to transport and house the hundreds of camera operators, grips, gaffers, gofers, extras and bit-part players that keep the wheels turning.

There's been a certain amount of hand-wringing lately about the local film industry, which is arguably not quite as robust this year as last. But as Lindsay Allen, acting head of the B.C. Film Commission, notes, there are more than 30 productions being shot this week in B.C., which is pretty good by any standard.

As for the billion-buck target, "I think we'll be reasonably close this year. We don't track dollars throughout the year, we track shooting days and numbers of productions, and those are both showing very well."

Don't turn off the popcorn machine just yet.

mbridge@pacpress.southam.ca

Join Clifford, the Great Canadian Goose Girl and the Taiwanese Puppet Performers, Heavenly Kid and Heavenly Prince at The Vancouver Sun Raise-a-Reader Booth at the Taiwanese Cultural Festival

Saturday, September 7, 11:00 am – 2:00 pm

The Vancouver Sun Raise a Reader

- Free Raise-a-Reader tattoos
- Autographed Clifford books available by donation!
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Scholastic Book Fairs

*$1 from every admission between 11 am - 2 pm will be donated to Raise-a-Reader for children's literacy programs and resources in BC. Beneficiaries: Vancouver Public Library, Literacy BC, & Canucks' for Kids Fund.

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