

Living on Borrowed Power

Has BC Hydro lost its spark?



By Ross Howard

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Critics who have waited years for Premier Gordon Campbell to make good on his promise to get politics out of power are feeling burned. When Campbell assumed power in 2001, he promised private-sector discipline for BC Hydro. Entrepreneurial power producers – being nimble and competitive – would present lower risks to the government than heavy public investment in traditional megalithic Hydro dam-building projects. A revived B.C. Utilities Commission, the gatekeeper of electricity rates, would protect BC Hydro from interference. But instead of cheap power, fresh private-sector cash and cleaner energy, critics say the beleaguered utility is misfiring in all directions – casting a dark cloud over a booming provincial economy dangerously addicted to cheap energy.

“There’s no energy security in B.C.,” says Steve Davis, president of the Independent Power Producers Association of B.C. (who so far aren’t producing much power). “We can’t fudge it anymore,” adds Jock Finlayson, VP of the Business Council of B.C. “There’s no clarity about what B.C. is to do about current and future demand.”

Guy Dauncy, president of the B.C. Sustainable Energy Association, also weighs in: “The province has failed to give policy direction to Hydro and now the economic development of the province is being jeopardized.”

In 2002, the government unveiled a master plan for energy, confirming “public investment is no longer needed” in electricity generation. It projected heavy reliance on new natural gas-fired power plants in B.C., along with private non-polluting projects such as small waterpower, wind, solar, geothermal and cogeneration plants. The plan endorsed the lucrative buy-low sell-high electricity exchange that Hydro conducted with the U.S., although it also warned against an over reliance on imports. But B.C.’s self-sufficiency was not considered necessary.

Today, the government and Hydro are mostly generating high-voltage criticism. A key flash point is the utility’s little-known reliance on imported power.

“We’ve got bad news coming... largely due to the cost of imports going up. Nobody knows what to do,” says Dan Potts, spokesman for the heavy industrial customers of BC Hydro. “There’s no excuse. We’ve got to do something,” adds Mark Jaccard, an SFU economist and former chair of the provincial Hydro regulatory commission.

Even premier Campbell’s economic advisors have joined the attack.

When Hydro’s CEO Bob Elton briefed business leaders last November about the province’s electricity supply, he declared that Hydro has all the electricity B.C. requires, and stressed Hydro’s great heritage of endless cheap waterpower (cited 11 times in his November speech to the Vancouver Board of Trade). He did not, however, dwell on the fact that Hydro has built no major hydroelectric power plant since 1984.

That same day, Campbell’s blue-ribbon BC Progress Board officially briefed the premier about Hydro. In an uncharacteristically strong report, the Board accused Hydro of sending out “confusing messages” that mislead the public about a worsening electricity supply situation in B.C.

The resultant public complacency is “unrealistic and potentially costly for every British Columbian,” said the board of top-flight business executives and leading academic analysts. “B.C.’s electricity surplus... becomes a large deficit in 2015” – or sooner. The province, it stressed, faces some tough choices if it wants to avoid soaring electricity costs or blackouts like those that plague Ontario, California and other energy-hungry jurisdictions.

The government failed to set clear directions for Hydro and monitor its compliance, failed to ease consumers off their fixation with cheap

waterpower and failed to address opponents of new power projects, the board said. A spectrum of critics agrees the premier's advisory board has never been so blunt. The Progress Board also rebuked the provincial government for neglecting its own 2002 energy plan and new realities, such as soaring natural gas prices, which made the energy plan a recipe for a decade or more of import dependency.

It's true. B.C. is an electricity-importing province, and if prices for that U.S. energy soar in the next decade anything like the surges of the last couple of years, it will be a costly reality for B.C. It works like this: BC Hydro has been importing energy since 2001. But it stayed in the black by easing California's huge blackouts with sales of astronomically priced B.C. electricity. Typically, Hydro closed its waterpower dams at night and bought 1,000 megawatt-hours of low-cost electricity from U.S. coal-fired power plants that run non-stop and generate nightly surpluses. During the day, Hydro opened its dams wide and sold 880 megawatt-hours of stored-up B.C. waterpower at higher prices to U.S. utilities desperate for more daytime electricity. Hydro profited, despite its net dependence on imports.

The multi-billion-dollar profits from botched California deregulation schemes put a public smile on Hydro's face, but masked the private reality that buying low and selling high was still a losing proposition in terms of net B.C. supply and security.

If the fact that B.C. – the land of perpetually falling water – has, since 2001, depended on dirty Nevada coal-fired electricity isn't surprising enough to local consumers, annual electricity-rate increases nearing double-digit levels will shock them. The government will release its own new energy strategy sometime this year that will forecast eventual self-sufficiency – but reliance on increasingly expensive imported electricity is the foreseeable reality. Even Richard Neufeld, B.C.'s energy minister, admitted late last year in the legislature that the province must "make sure that we get that [U.S.] electricity north so we can keep the lights on in B.C. until we become self-sufficient again." In about, say, 15 or 20 years.

To his credit, Elton acknowledged to his Vancouver audience that Hydro now relies on outsiders for 12 per cent of its electricity. And he immediately endorsed the Progress Board's call for an end to the province's "increasingly risky" strategy of relying on any amount of imports. There's too much risk of interrupted supply, too much risk of soaring prices and "the consequences are too severe, for our citizens and our industry and for generations."

In a more recent and refreshingly candid interview with BCBusiness, in February, Elton termed the Progress Board 90 per cent right and “very helpful” for its warnings about an uninformed public, the certainty of escalating electricity rates and the need for B.C. to make some tough choices about how to get enough electricity. The board was “right on concerning the need for better communication. [Hydro] needs to get better at it.”

But a month after the Progress Board’s report, when Elton prepared to communicate a new Hydro plan to avert the worst of the risks, the provincial government gagged him – pleading ignorance of Hydro’s urgency and expressing discomfort with Hydro’s likely intention to boost electricity rates, build a big new hydro dam and pursue other water, gas and even coal options. The provincial clumsiness only seemed to confirm the Progress Board’s distress that the B.C. government is incapable of understanding and supervising Hydro. So, will B.C. electricity consumers soon get a shock from Hydro?

Extremely large numbers like 5,000,000 kilowatt-hours per year, engineering techno-babble and fantastic supply/demand scenarios bog down ordinary users’ comprehension of what’s going on with Hydro. But the emerging picture is that B.C. electricity consumers will pay heavily to avoid a dark era in B.C.’s economic development. Higher-priced electricity alarms Dan Potts, head of the Joint Industry Electricity Steering Committee, which represents big electricity users in B.C. Their 30 large smelters, mines, mills and factories consume a third of all the juice and employ 15,000 people. “The rate at which [B.C.] is acquiring power is not keeping up with the growth of demand. These new IPP [independent power producers] projects won’t satisfy the needs of the province,” says Potts.

Campbell’s 2001 sanctioning of IPPs was held out as the necessary and sufficient solution to B.C.’s growing energy demands. Confirmed in the November 2002 provincial energy plan, the move was bold, ending Hydro’s monopoly on power and theoretically jump-starting a new industrial sector scattered across the province, generating jobs and clean electricity for home and abroad. The government also contracted out Hydro’s administrative services and 1,000 employees to Bermuda-based Accenture. And it passed Hydro’s 43,000-mile transmission line system to a separate Crown corporation, the BC Hydro Transmission Corp., to help producers sell their power to the market without dealing with competitor BC Hydro. Critics such as the NDP and the Hands Off Hydro coalition argued the spin-offs meant virtual privatization of half of Hydro and paralysis of the other half, the always reliable power-

generating core.

"I remember the premier in 2001 coming up to me and saying Hydro's resistance is over. IPPs are really going to take off," recalls Steve Davis, president of the 250-member IPP association. His member companies range from giant Fortis (formerly East Kootenay Power), the private company serving 140,000 consumers in south-central B.C., to tiny firms of two or three employees (which is all it takes to operate a small-scale run-of-river power plant). For two decades, B.C. has been awash with engineers, hydrologists and accountants excited about harnessing the province's rain run-off, the tides and the wind for profit. "B.C. should be the green powerhouse of North America," says Davis. But throughout the '90s, Hydro bureaucrats' resistance and the low prices Hydro would pay for privately produced power – backed by the NDP government – killed almost all of the proposals, according to Davis's association. The 2001 change of government was supposed to unleash a flood of pent-up potential upon a tamed Hydro.

"And now we're four years out and Hydro's still bringing in U.S. coal-fired power," says Davis. Hydro's invitations for green (non-polluting) power producers suffered failure rates unparalleled in most industries. Its 2003 call for green power contracts attracted 70 companies, of which 16 ultimately qualified to send almost 500 megawatts of sparks into Hydro's grid by 2006. But only one truly green source, burning Delta garbage dump gas to generate two megawatts of electricity, is up and running today, says Davis. Several, like Holberg Wind Energy's 56-megawatt plant, died on Hydro's spreadsheets. Davis predicts none of the others will meet their late 2006 required start-up, and financing woes caused by the late start may kill some of those still under construction.

It has not been easy creating potentially dozens of mini-Hydros all over the province. Hydro was a big dam builder; IPPs must be small-scale and local but also technically sophisticated. The maze of engineering and environmental requirements, which Hydro must also approve because it wants private projects reliable for 20 years, is one thing. But winning local government land-use approvals is proving deadly, says Davis. Small-scale power plants can be little more than glorified waterwheels on a free-flowing river but "they get lumped in with dirty industries. Local NIMBYs get fired up and want to stop them," says Davis. And, echoing the BC Progress Board's alarm about public complacency, "Most of the public and politicians say 'Why bother with this hassle? B.C.'s got lots of electricity.'" IPPs are also caught in a Catch-22: Hydro won't contract proposals that lack local

endorsement, but municipalities won't endorse proposals that lack Hydro contracts. First Nations can also be barriers. A January 2006 proposal by Plutonic Power for a dozen small waterpower plants north of Pemberton to supply 65,000 Hydro customers may die due to the objection of one band, the Klahoose First Nation.

Then there's BC Hydro's practice of buying electricity from IPPs at prices pegged to Hydro's old-tech Columbia-Peace River dams – rendering many IPPs' new-tech projects uncompetitive. "Since late 2002, Hydro has just let the IPPs struggle," says Davis. IPPs' 12-per-cent contribution to Hydro's supply will rise only two per cent by 2010. Hydro will fall far short of its target of getting half of all the extra power it needs by 2012 from clean B.C. sources, he says. It will need more imports.

Hydro's president Elton is equivocal. He denies Hydro will need more imported electricity by 2010, but acknowledges IPPs haven't delivered as predicted, and that "there's concern whether we're buying enough [IPP power]." IPP developers "are getting a little more sophisticated" and Hydro is learning how to work with them, he says, but "whatever timelines we thought ... are going to fall behind."

But Hydro's penny-pinching policies are not entirely the result of hoary Hydro engineers who distrust little IPPs and pine to build one last big dam. The handover of Hydro rate setting to a public utilities commission in 2001 took the politics out of Hydro, but it also eliminated big-picture thinking. Guided by nothing but the increasingly outdated 2002 B.C. Energy Plan, the B.C. Utilities Commission religiously kept rates at rock-bottom price, ignoring crippled IPPs, rising natural gas prices and dwindling cheap imports. "The BCUC interpreted its role as strictly cost-control," says one-time member Jaccard. "The 2002 plan didn't emphasize the urgency of meeting new economic demand, and prices for energy growth going through the roof," says the Progress Board and Business Council's Jock Finlayson. "Policy leadership has to come from the government."

The days of cheap energy are coming to an end. Late last year, Hydro eased its stranglehold on the spluttering IPP industry by calling for additional suppliers of a modest 1,000-megawatt green power capacity. For the first time, Hydro lifted the low 5.5-cents-per-kilowatt-hour price ceiling on IPP electricity. Forty firms rushed forward with 81 projects theoretically capable of generating five times as much power as Hydro called for. Price competitiveness and Hydro's determination of reliability will determine which firms get the go-ahead by

September. Still, most of the higher-priced electricity won't be flowing until 2011, and won't displace half of the imported electricity. But heavy industry isn't about to accept higher electricity prices without a fight. Industrial rates have long been considered a major factor in attracting and keeping heavy industry, and Hydro is among the three lowest-cost suppliers (with Manitoba and Quebec) on the continent. Heavy industry pays 35 per cent less for electricity than small business and householders in B.C.

And Potts' lobby group has successfully prowled the corridors of political power for low-cost electricity. "We are price-sensitive, we are organized and we have good access to BC Hydro," Potts acknowledges. In 2004, the government and the BCUC promised another 10 years of low rates.

Hydro has long denied a worsening import risk by arguing it could always fire up its giant Burrard power station in Vancouver to replace interrupted or unaffordable imported electricity. But times have rapidly changed, says Potts. "Burrard – an obsolete technology reliant on rising natural gas prices – is really not credible any more." Burrard electricity is even more expensive than imported power. Potts, like most critics, says Hydro monumentally goofed in planning a huge gas-fired power plant at Duke Point on Vancouver Island. The project – conceived in the NDP era, baptized by the Liberals' plan – was crucial to averting blackouts on the Island, Hydro said. After five years of furiously defending it, but facing multi-billion-dollar invoices for soaring natural gas, Hydro abandoned its own \$110-million investment and its IPP partner late last year. Hydro says it will rely on underwater cables it previously called 'outdated by 2007' to supply the Island for now, and will lay new cables. But it hasn't said who will generate the power. (More imports, perhaps?)

There are other complaints and fears. Hydro's assumption it can cut one-third of B.C.'s energy demand growth through consumer conservation is perilously optimistic, says Jaccard. Hydro's latest estimates of economic growth and demand are seriously low-ball, and the province's 2002 energy plan is even worse off the mark, says Finlayson. Furthermore, Hydro is blocking IPPs' access to U.S. markets where they could sell their power profitably, says Davis's organization. One frustrated IPP, Sea-Breeze Power Corp., plans to build its own private cable carrying wind-power electricity to the States.

The spectre of pricier imported power and costly domestic sources serves both the IPP industry and the heavy-industry lobby to push Hydro and the government to do something. But their solutions are

very different. Davis wants the premier to light a fire under Hydro, raise Hydro rates to generate more private power plants and clear away the roadblocks. However, Potts says "there's no reason to raise rates to get new sources built – Hydro can borrow the money cheaper than anybody." The government should unleash Hydro on another giant hydroelectric dam, known as site C on the Peace River near Fort Simpson, says Potts. It could cost \$4 billion and take 10 years to complete, and it still won't meet all of B.C.'s needs over the next two decades.

"The province needs to maintain coal as an alternative. It is low-cost and B.C. has a very large supply" – and keeps IPPs from running amok with high-priced proposals, he adds.

Although embarrassing for Elton, Hydro's sudden muzzling on December 8 puts the B.C. energy shortage – and Hydro's recommended big-dam, higher-rates solution – back where it started: in the hands of the B.C. government. After four years on a long leash, guided only by a blinkered utilities commission and blundering in pitfalls (such as the collapse of the \$100-million Duke Point project), Hydro achieved less than the premier predicted, and apparently no one in the B.C. energy ministry noticed. Positioning the government as 'in command but not to blame,' and mentally preparing Hydro consumers for being a have-not-electricity province – and paying more for it – comes next. It may require fancy footwork and the premier's intervention.

"Hydro's doing a fabulous job," energy minister Richard Neufeld told BCBusiness in late February while bureaucrats were crafting a new provincial energy strategy to cope with reality. "We laid out the strategy in the 2002 plan and Hydro's carried it out well." Neufeld said the Progress Board's criticism of his ministry's execution of the plan and lack of supervision was interesting information but "we depend upon the Hydro board."

And what of the Hydro board? Potts, for one, isn't impressed. He says it is "Hydro's own damn fault" that it is potentially facing an era of insufficient domestic supply and dependence on uncontrollably priced imports. Hydro sustained the public myth about plentiful cheap power because "don't rock the boat in Victoria... is always Hydro's view. The fundamental purpose of BC Hydro is to elect the next government. It always will be, as long as Hydro is a Crown corporation."

Sidebar 1:
Revenue generation

Ever since WAC Bennett created a single province-wide utility in 1962 to build giant hydroelectric dams on the Peace and Columbia rivers, BC Hydro has been a powerhouse of reigning governments' economic strategies. Bennett's strategy electrified B.C. industrial growth and created mass residential addiction to some of the cheapest power in North America. Hydro became a B.C. icon, a beloved Crown corporation with 5,000 employees and a presumed perpetual source of energy security. It also stopped building dams in 1984, content with its surplus capacity to meet rising consumer demand. Those original dams and other smaller ones provide 75 per cent of B.C.'s electricity today.

In the NDP decade to 2001, especially under Glen Clark, Hydro was seen as a source of revenues and political credits. At times, Hydro electricity rates were kept artificially low to assuage the electorate; later, revenue projections were boosted to pad the provincial budget. The NDP government ultimately sluiced more than \$5 billion from Hydro into its general revenue.

Hydro's credibility was also drained by 1996 conflict-of-interest scandals involving NDP-appointed chairman John Laxton over Hydro development projects in Pakistan, and his successor Brian Smith's refusal to cover up government goosing of Hydro profit projections.

Sidebar 2:

Lessons from Ontario

Ontario is too far away from B.C. to tap our electricity, but not so far away as to be ignored. Ontario's Conservative-era deregulation left the province massively in debt to crippled nuclear plants. It's now desperately seeking \$40 billion worth of new generators for its auto plants and homeowners amidst current Liberal plans to scrap essential coal-fired power plants.

Successive governments have been determined to protect consumers (read: voters) with electricity price controls, but that strategy has repelled private investment in power plants. The result leaves OPG Corp. (Ontario Hydro) gulping imported Quebec, Manitoba and American power at usurious prices each frigid or fetid day (which seems half the time in Ontario).

Ontario Hydro's pleas for consumer conservation are contradicted by the government's decision in February to give heavy industry users another three-year, 35-per-cent discount on the real price of power. The cost of the subsidy will be borne by OPG, and ultimately taxpayers. The cut-rate corporate price is one more reason not to build

power plants in Ontario, say investors. In a related move, OPG recently attracted a dozen wind-farm generating projects, some from firms based in B.C., by guaranteeing full prices for their power.