

# Dry winter to blame for BC Hydro decision to boost energy imports

## Lower reservoirs in Peace and Upper Columbia mean less water available for power generation

BY SCOTT SIMPSON, VANCOUVER SUN MAY 15, 2010

BC Hydro is preparing to increase its electricity imports this summer, after a relatively dry winter deposited less snow than usual in watershed areas across much of the province.

Snowpacks are 19 and 20 per cent below normal, respectively, in the Peace and Upper Columbia basins, according to recent data posted on the B.C. government's river forecast centre.

Those aren't the lowest snowpacks reported this month by the forecast centre -- the southern Interior is facing a class-three drought -- but they're significant because the Peace and Upper Columbia provide the water resources for 80 per cent of B.C.'s electricity production.

Lower reservoirs mean less water is available for electricity generation, which means Hydro will have to go more frequently to the western North American trading market to purchase power from producers in other jurisdictions so that the demands of its B.C. customers can be satisfied.

Environment Minister Barry Penner announced last week that the province is developing a drought response plan to take effect in June, based on the snowpack and water supply challenges.

According to the forecast centre, "the low snowpack and smaller-than-normal snowmelt run-off are likely to be reflected in such things as lower-than-normal lake and reservoir levels, lower-than-normal recharge of groundwater aquifers, and lower-than-normal river levels during summer.

"To reduce the potential for summer low flow or drought problems, rainfall during May and June will need to be at or above normal."

The Bonneville Power Administration, which manages Columbia River hydro generation downstream of B.C. for four Pacific Northwest states, warned last week that a weak snowpack is "a bad situation that has just gotten worse."

Bonneville says it is looking at "the fifth lowest run-off since the hydro system has been in existence" beginning in 1929, and estimates it

finish the fiscal year with a \$230-million loss -- as reduced stream flows mean less opportunity to export power to customers such as British Columbia.

"With reduced snowpack, the fuel power the dams is running low," Bonneville said in a May 7 news release. "By April, snowpack building season is pretty much over."

The situation for Bonneville's primary customers-- Washington, Oregon, Montana and Idaho -- is exacerbated by semi-arid conditions in the southern Columbia basin on both sides of the border.

"The reduced run-off results from a persistent El Nino weather pattern that brought unusually dry conditions to the Northwest this past winter," the administration said.

Hydro remains more optimistic about B.C.'s prospects.

It uses a somewhat different set of measures than the provincial environment ministry to calculate potential reservoir volumes.

It is forecasting that from February through September, inflows to its reservoirs systemwide will be 88.6 per cent of normal water volume -- which means Hydro expects an average rather than low amount of rainfall in the coming months will improve the situation here in B.C.

"That ranks as 12th lowest out of 51 years, so it's lower than normal, but not exceptional," Hydro spokesman Dag Sharman said in an e-mail.

Even in an average year, Hydro is a net importer of power, so a below-average water supply means increased reliance on imports.

"If the forecast materializes then, yes, we would certainly expect to have to purchase from the market to meet our needs again this year," Sharman said.

"The largest source of forecast uncertainty is future precipitation, i.e., precipitation that will occur between now and the end of the forecast period in September."

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