

Subsidizing new mines not the way to save power

Marvin Shaffer

Special to the Sun

Friday, October 19, 2007

If Victoria is going to commit large amounts of money and effort in conservation to reduce our electricity requirements, it should not build major new transmission lines into remote regions for the primary purpose of attracting new electricity-intensive industrial loads.

Yet attracting new electricity-intensive industrial loads is precisely what the provincial government is doing with the \$400-million transmission project in northwest British Columbia that it recently announced.

The new line will enable BC Hydro to displace the diesel generation currently being used to meet the small amount of electricity required in that isolated area.

But that is not the main purpose of the line, nor would it begin to pay for its cost. The primary purpose of the line is to support new mining activity.

Mines are electricity-intensive. And, depending on the size of the mine, ore concentrations and other factors, they can consume as much as one million megawatt hours of electricity per year -- the equivalent of almost two per cent of BC Hydro's entire system load. Attracting one new mine with the new transmission line can offset almost all of the electricity savings BC Hydro hopes to achieve with its latest Power Smart initiatives.

Because they consume so much electricity, mines frequently need access to low-cost power to go forward -- hence the vocal industry support for the new transmission line.

Once connected to BC Hydro's integrated system, the mines will be eligible for BC Hydro's low industrial rate.

The problem, however, is that the electricity the new mines in the northwest will consume will not in fact be low cost. The BC Hydro industrial rate they will pay is less than half the cost BC Hydro will have to incur to meet the new requirements. The effective subsidy -- the net loss to BC Hydro and its existing customers (what we will have to pay to support the new mines) -- is more than \$40 per megawatt hour. The effective subsidy for a new mine consuming one million megawatt hours of electricity is more than \$40 million per year.

It is not really good business to attract new mines with heavily subsidized electricity rates (on top of the heavily subsidized transmission line itself.)

Nor is it good for the environment. Mining can have significant environmental effects, including greenhouse gas emissions.

Low electricity rates (well below the cost of new supply) are a problem in their own right. BC Hydro's rates are based on the low-cost hydroelectric sources that were developed on the Peace and Columbia Rivers in the 1960s and '70s.

But those sources are fully committed. New demand for electricity requires new supply. And new supply is expensive.

Virtually all economists agree that it is important to signal customers the cost of new supply. It is essential if we are serious about conservation, efficient use of electricity and sustainable development.

Low electricity rates based on historic costs of supply is a "buy high-sell low" strategy that simply encourages too much electricity use.

The official rationale for all this is that low electricity rates are needed to protect households, and low rates combined with new transmission lines will encourage economic development.

However, there are many more equitable and efficient ways to protect households. For example, instead of providing the biggest subsidy to those who use the greatest amount of electricity, low residential rates could be limited to a basic electricity requirement as is done with so-called lifeline rates in a number of American jurisdictions.

As the government's own committee on electricity policy pointed out several years ago, the low rate strategy is unsustainable. It is based on the false premise that we have cheap power for sale.

There is no justification for projects and policies that are designed to promote electricity-intensive economic development. The money spent subsidizing new electric loads would be far better spent on strategic infrastructure investments, education and training, or lower taxes, all of which can effectively contribute to economic growth.

Marvin Shaffer is an adjunct professor at Simon Fraser University's graduate program in public policy.

© The Vancouver Sun 2007

CLOSE WINDOW

Copyright © 2007 CanWest Interactive, a division of [CanWest MediaWorks Publications, Inc.](#) All rights reserved.