Premature closure of highest carbon emitting generating station would have "catastrophic impact"

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Liberal Carleton-Victoria MLA Andrew Harvey, chair of the select committee on climate change, is pictured. Adam Huras/Legislature Bureau

FREDERICTON • The premature closure of New Brunswick highest carbon emitting generating station would have a "catastrophic impact" on the province's power rates, while potentially leaving the region vulnerable to electricity shortages, the legislature's climate change committee has heard.

International Brotherhood of Electrical Workers business manager Ross Galbraith says the coal-burning plant at Belledune shouldn't be shut down, while also suggesting the province consider increasing its nuclear power capacity with the addition of several smaller reactors.

The provincial government has struck an all-party committee of the New Brunswick legislature to consult the public on options to strengthen the province's response to climate change.

Public hearings - which have crisscrossed the province this summer - continued in Fredericton on Thursday with a full slate of presenters.

A final report from the committee to inform how the government will move forward is expected by mid-October.

NB Power's electrical generating plants, especially the coal-burning plant at Belledune, pump 31 per cent of New Brunswick's greenhouse gas emissions into the province's atmosphere.

Belledune could be on the chopping block as the federal government and the provinces agree on tough new climate change controls.

But Galbraith has warned against the northern facility's closure.

"This would be a gigantic burden for a province and its many ratepayers and industries that are already struggling," he said.

The presentation follows comments NB Power CEO Gaëtan Thomas made to the committee last month that Belledune, one of two base load plants in the province along with the nuclear station at Lepreau, is important to maintaining reasonable power costs and reliable electricity supply, especially during high demand in the winter.

"The impact on rates would be significant - 38 per cent if it (Belledune) had to be shut down and we still would need to replace it with some base capacity, which would likely be natural gas," Thomas said. Galbraith said on Thursday that "this huge impact on our power rates is unacceptable given the very minor difference it would make to greenhouse gas emissions globally."

He said the base load can't be easily replaced.

While wind power has a place in a jurisdiction's mix, it's unreliable to replace base load power, Galbraith said.

He added that purchasing power is a "risky alternative."

There are also 120 people work at the Belledune plant.

"These are well-paid jobs in a struggling area of the province," Galbraith said. "If a decision was ever made to retire the Belledune plant prematurely, not only would it cause a catastrophic impact on New Brunswick power rates, but consideration would be need to be given to the future of the people who currently work there and the impact it would have on the greater region."

Galbraith said New Brunswick's goal must be to maintain a sustainable and reliable electrical system, arguing that the province is responsible of less than 0.03 per cent of the world's carbon emissions.

"If we stopped all emissions today, the effect would be insignificant," he said. "Doing more is a must, but considering the very small part we have control over we must proceed in a reasonable and appropriate manner."

David Coon, leader of the Green party and a member of the climate change committee, said the country will be expecting New Brunswick to make the tough changes needed in order to achieve climate change goals.

Canada is the ninth largest producer of greenhouse gases and that minimizing New Brunswick's impact isn't helpful.

"Using this kind of percentage approach kind of underplays our

responsibility," he said, adding the numbers could be used to argue that individual jurisdictions everywhere may argue against doing anything. "It's a bit of problematic approach."

Meanwhile, New Brunswick Lung Association president and CEO Barbara MacKinnon recommended to the committee on Thursday that the Belledune plant be phased out by 2026.

That is the expected end-of-life date for the facility.

"But we know how sometimes the province likes to keep our power plants going well beyond their lifespan," MacKinnon said.

Galbraith has also called on the government to initiate an independent study to determine the true viability of jobs in the renewable energy sector, while questioning if they can match those of existing tradition power generation.

He then called for the expansion of nuclear power.

"Going forward, we should also look at the feasibility of introducing small modular reactors," Galbraith said.

Small modular reactors are smaller than conventional reactor with an output of less than 500 megawatts and manufactured at a plant and brought to a site to be fully constructed.

He pointed to a Canadian manufacturer, Terrestrial Energy - a startup working on the new technology.

"We share a responsibility to be part of the solution, but we also need to recognize that the impact we can make (in New Brunswick) on reversing global-scale climate change is very small, while the costs to New Brunswick is very high if we don't take a measured, phased-in approach," Galbraith said.

Natural Solution

The Nature Conservancy of Canada says conservation of New Brunswick's forests, wetlands and salt marshes should be a part of the province's climate change strategy, other jurisdiction already safeguarding pristine landscapes for carbon credits.

"One of the proven actions that we can undertake and should undertake is the conservation of natural ecosystems," Rob Wilson, director of carbon finance for the Nature Conservancy of Canada, told the province's climate change committee on Thursday.

Wilson said that Canada is home to a quarter of the earth's boreal forests and wetlands with the ability to absorb carbon dioxide from the atmosphere.

New Brunswick itself is 85 per cent forested.

"These critically important domestic carbon sinks play a global role in sequestering and storing carbon," Wilson said. "In addition to holding massive stores of carbon, by maintaining these natural systems intact, we increase the resiliency to respond to changing conditions.

"These areas act as important buffers against some of climate change's most serious effects."

He later added: "We think we need to better recognize the important role that nature plays in supporting our community infrastructure."

Wilson pointed to what's known as the darkwoods forest carbon project - a special initiative of the Nature Conservancy of Canada that markets carbon credits generated from the conservation of a 136,000-acre area.

The credits are sold through the voluntary carbon market to businesses, governments and other agencies wishing to reduce their carbon footprint.

"Offsets from darkwoods has actually been used by British Columbia in meeting the province's own commitments to a carbon-neutral government," Wilson said, adding it offset about half of provincial emissions in 2010.

Liberal Carleton-Victoria MLA Andrew Harvey suggested that's a viable solution in New Brunswick.

"What we have heard from a lot of groups similar to yours is that nature is the best filter and natural green areas, we should maybe be looking at that more than a lot of new grey infrastructure," he said.

The conservancy recommends that the provincial government identify the most climate vulnerable species, landscapes, and watersheds and develop action plans to protect them from the effects of climate change.

It calls for more Crown land to be set aside as natural protected areas.

It urges coastal protection to be legislated and for an expansion of the protection of wetlands.

Shawn Dalton, executive director of the Canaan-Washademoak Watershed Association, based in the southeastern part of New Brunswick, pointed to the protection of forests as a way to protect the province's water supply.

"I'm not suggesting that we stop forestry at all, this province is based on forestry, but improved forest harvesting could actually make a huge contribution to protecting water courses in the whole province," Dalton said.

She called for the stricter enforcements of buffer zones along shorelines that neighbour agricultural operations and warned against the negative effects of urbanization on ecosystems.

Dalton pointed to algal blooms that have ruined water supplies elsewhere in North America.

"The only reason we don't have this in New Brunswick is simply because we don't have the population to support that kind of development and we need to think about that carefully as a province," she said. "Everything that happens on the landscape affects the quantity and the quality of the water."