

February 26, 2011
Times & Transcript

N.B. doesn't want nuclear waste

Waste storage repository still years away but N.B. already paying into construction fund

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Canada's Nuclear Waste Management Organization is still looking for a place to construct an \$8-billion underground repository for nuclear waste, but so far no New Brunswick communities have expressed an interest in getting involved and the provincial government is definitely not interested.

"We are not pursuing a nuclear waste site anywhere in this province," Premier David Alward flatly stated this week when asked about the idea.

Mike Krizanc, communications manager for the NWMO, said yesterday that seven communities - three in Saskatchewan and four in Ontario - have filed official expressions of interest. But any potential sites will go through a rigorous screening process that could take eight to 10 years.

"There's no firm timeline on this. We're going to take the time to answer all the questions for them so people in those communities can make an informed decision that is in their own best interest. We're certainly not going to force this on anyone," Krizanc said.

Newspaper reports earlier this week cited NWMO internal documents that suggested Saskatchewan - along with New Brunswick - was more receptive to a nuclear-waste site than Ontario and Quebec. But Krizanc said that "receptiveness" was limited to some media reports and editorials. So far, no one in New Brunswick has come forward with a willingness for such a facility. He said a notice of interest would have to come from an elected body such as a municipal council or First Nations council.

The NWMO kicked off a process last spring looking for a community willing to host an underground complex that would serve as a long-term storage facility for all of Canada's nuclear waste. The selection process could take up to 10 years.

Krizanc said the selection process begins with the willingness of a community. After that, the proposed site would have to go through an evaluation of its geology and proximity to population, water, minerals, natural gas or other natural resources - now and in the future. He said the most likely suitable location would be far into the deep granite of the Canadian Shield. The repository would be located at least 500 metres deep in a solid rock formation. Areas with unsuitable geology and other factors would be ruled out very quickly.

The NWMO says the benefits of hosting such a facility would create hundreds of jobs during construction and hundreds more after it is up and running. If built today, the facility would cost \$6 billion to \$8 billion, which translates into \$16 billion to \$24 billion down the road, when you factor in the long-term management and maintenance costs. Krizanc said it will be up to future generations to decide what to do with the nuclear waste. If the process started right away, it might not be ready until 2034, and then it would be operational for 40 or 50 years.

The money for constructing and maintaining the facility will come from a trust fund that was started in 2000 and already has roughly \$2 billion. The money comes from all companies that operate nuclear

reactors, like NB Power. So really, the money for the site comes from consumers who purchase electricity.

NB Power stores nuclear waste on the site of the Point Lepreau generating station and plans to continue doing so for at least 30 years.

NB Power spokeswoman Kathleen Duguay said nuclear fuel rods are stored on site before they are placed into the reactor.

The irradiated fuel bundles are stored on site at Lepreau's own Nuclear Waste Management Facility.

"A fuel bundle typically stays in the reactor for approximately six months to 18 months," Duguay said. "This irradiated fuel (or spent fuel) is removed from the reactor via automated fuelling machines and stored underwater in a spent fuel bay. The fuel is stored in water for two reasons: the water is a good shield from radiation, and the water carries the heat away from the irradiated fuel bundle. After seven years, the radioactivity and heat have decreased enough to allow the irradiated fuel to be transferred to dry storage in concrete canisters above ground located in our Solid Radioactive Waste Management Facility. The canisters are on the property of PLGS and are constantly monitored."

She said there are 81,000 irradiated fuel bundles stored in 150 canisters located at the Solid Radioactive Waste Management Facility at the Point Lepreau Generating Station.

NB Power has set aside enough land and storage space to accommodate 30 years' worth of spent fuel.

Refurbishment of New Brunswick's Point Lepreau Generating Station is nearly complete, with a goal of returning it to service this fall. It is expected to run for 30 years. The decommissioning plan assumes that the irradiated fuel will remain in New Brunswick's own Solid Radioactive Waste Management Facility until a permanent site has been constructed or another solution is identified by the Nuclear Waste Management Organization.