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WASTE: US Congress Weighs in on Canadian Great Lakes Repository Plan

With cross-border pressure intensifying against a proposed Canadian nuclear waste site a mile from the Lake Huron shoreline, Canada's Minister of Environment and Climate Change Catherine McKenna must decide later this year on whether to grant a license that would allow Ontario Power Generation (OPG) to build the deep geologic repository (DGR) it proposed more a decade ago. Part of that decision will hinge on how McKenna reacts to additional information she requested from OPG a year ago, including on possible alternative "locations" for storing low- and intermediate-level (L&ILW) nuclear waste (NIW Apr.22'16).

On Feb. 1 a bipartisan letter to Canada's foreign minister, Chrystia Freeland, signed by 23 Democratic and Republican members of the US Congress expressed "opposition to permanently burying nuclear waste within the Great Lakes Basin." Contrary to OPG's claim that there is "little" public concern about the project, "there is in fact broad opposition from citizens in both Canada and the United States to burying nuclear waste near the Great Lakes," the lawmakers wrote in the letter, citing "a list of 186 local, county and state governments representing nearly 23 million people in the US and Canada that have passed resolutions opposing the proposed nuclear waste repository."

A separate bipartisan letter from Congressional representatives also dated Feb. 1 sought US President Donald Trump's intervention in the matter, though there has been no word from the White House on whether he will weigh in.

In response to McKenna's request, OPG submitted a "Study of Alternate Locations" in December and it's now up to the minister to decide whether the response was satisfactory, or more information is needed. Whether she has scope to order a more thorough formal review of alternate sites is unclear. The ministry is currently reviewing its environmental assessment processes in a bid to "restore trust" but said that as part of that review it would not require a "project proponent" to "return to the starting line." However, it also said that "timely decisions on individual projects will depend upon the provision of sufficient information and evidence," and "where required, steps will be taken to gather additional evidence." Such steps would further delay construction of the proposed DGR, expected to take approximately 10 years.

L&ILW stemming from more than four decades of reactor operations is stored above-ground at OPG's Western Waste

Management facility located at the massive Bruce nuclear power plant site in Kincardine, where private generator Bruce Power leases the eight reactors from provincially-owned OPG. For "permanent" disposal OPG has proposed building a facility 680 meters below the surface, also on the Bruce property, with capacity for 200,000 cubic meters of L&ILW generated at the Bruce, Pickering and Darlington plants. Also under consideration by Canada's Nuclear Waste Management Organization is a plan to build a high-level waste facility for spent nuclear fuel. A total of eight "study areas" in various part of Canada are under consideration, including "South Bruce" where three prospective "host" communities are near Kincardine, raising fears that most of Canada's commercially generated nuclear waste could be buried near the shores of the Great Lakes.

Feasible Alternatives?

In her request to OPG last February McKenna asked for "technically and economically feasible alternative locations for the DGR" — and to press the point further she asked for "specific reference to actual locations." In response, OPG suggested two massive "regions" — one a granite or "crystalline" rock formation and the second consisting of sedimentary rock. Together, these two types of formations cover almost three-quarters of Ontario's roughly 1 million square kilometers; the lack of specificity was proof to OPG critics that the utility will oppose any effort to relocate the project.

OPG defended its approach saying that it "understood this requirement ... to be for a study, rather than the design and implementation of a new multiyear, multiphased site selection process ... that, in effect, would amount to 'returning to the starting line.'" Relocating the project "would require approximately 22,000-24,000 radioactive shipments" and increase the project's current estimated life-cycle cost of C\$2.4 billion (\$1.8 billion) by C\$1.2 billion to C\$3.5 billion.

The approval process for the DGR project has dragged on for years under the three-member Joint Review Panel (JRP) which was established by the Canadian Nuclear Safety Commission (CNSC) and the Canadian Environmental Assessment Agency (CEAA) to conduct public hearings on the DGR project. The CNSC is the licensing agency, reporting to the Minister of Natural Resources, while the CEAA is mandated to oversee environmental assessments on behalf of the Minister of Environment. In the spring of 2015, under the Conservative

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government of former Prime Minister Stephen Harper, the JRP recommended approval of the planned DGR on environmental grounds (NIW May8'15). This prompted widespread criticism and after Harper was defeated by Liberal Justin Trudeau that fall his new environment minister lost no time requesting further information from OPG. Now that OPG has complied, the public has an opportunity to comment until Mar. 6.

OPG claims the best place to store L&ILW is “on land they already own across the road from their nuclear plant,” said former OPG scientist and whistleblower Frank Greening. “It’s simply dishonest — they are claiming to have looked at Ontario’s million square kilometers only to have found the best one square kilometer storage site was a limestone formation where they now operate.”

Gordon Edwards, a scientist and spokesman for the Canadian Coalition for Nuclear Responsibility, said that the proximity of nuclear waste to any body of water is the biggest issue facing the industry today. “We are entering the ‘age of nuclear waste’ and our emphasis should be on keeping the stuff away from water since it is the mostly likely mechanism to disseminate it,” he told NIW. And in Canada where low and intermediate level waste goes then high level waste is sure to follow. “Rather than sending it deep underground wouldn’t it be better to keep it somewhere safe — and away from water — where we can keep an eye on it?”

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