Oral intervention from

Edward Burt

In the Matter of

Ontario Power Generation Inc.

Proposed Environmental Impact Statement for OPG’s Deep Geological Repository (DGR) Project for Low and Intermediate Level Waste

Joint Review Panel

September 16 to October 12, 2013

Intervention orale par

Edward Burt

À l’égard de

Ontario Power Generation Inc.

Étude proposée pour l’énoncé des incidences environnementales pour l’Installation de stockage de déchets radioactifs à faible et moyenne activité dans des couches géologiques profondes

Commission d’examen conjoint

16 septembre au 12 octobre 2013
To the Joint Review Panel  
In Consideration of Ontario Power Generation’s Proposed Deep Geologic Repository for Low and Intermediate Level Radioactive Wastes  

Written Statement of Mr. Ed Burt

1. My name is Edward Burt and I am resident of Kagawong, on Manitoulin Island.

2. I am a lifelong resident of Manitoulin Island. For my entire working life I was a farmer in Ice Lake. When I retired my son took over the family farm and I built a home in Kagawong, where I garden and keep a small number of animals for our family’s use and to share with friends and neighbours.

3. I became concerned about the use and spread of nuclear technology the day I learned of the bombing of Hiroshima. When I learned that the City of Nagasaki had been bombed three days later the thought came to me: mankind has reached the end of its tether.

4. Many years later we hosted a visitor from Japan who had survived the atomic attack on Hiroshima, but had lost his family and the students in the school where he was a principle at the time of the attack. He told us that they were saying their morning prayer when the bomb dropped and the school was turned to rubble. He found some of the bodies of his students, but no other survivors. I was reminded of the horror that I felt the week of the bombings in 1945 and was affirmed in my opposition to the use and spread of nuclear technology.

The Nuclear North Shore – Uranium Mining

5. In the 1950’s, nuclear development came to the North Shore of Lake Huron with the development of the first uranium mines in the Serpent River watershed, in what became known as the Elliot Lake mining camp. That camp grew into the City of Elliot Lake, and those early explorations turned into a dozen mines that had generated close to 200 million tonnes of toxic radioactive waste by the time the last one shut down in the mid 1990s.

6. The two largest companies, Rio Algom Ltd and Denision Mines, opened and operated a dozen mines in the Elliot Lake area, all in the headwaters of the Serpent River. By 1976 all 80 kilometres of the Serpent River system and ten local lakes had become highly
contaminated by acid generating radioactive wastes from the uranium mines. An official Ontario report confirmed that there were no living fish in the entire river located downstream from the mining wastes.

7. The mine shafts and buildings have been dismantled, and the majority of the mining wastes are now officially “decommissioned”. Most of them are in constructed ponds will a shallow cover of water to slow down the rate of acid generation and act as a barrier between the radioactive mine tailings and the rest of the environment.

8. But as early as the 1980s – ten years before the tailings management areas were constructed – Environment Canada was warning about climate change and how it could increase the ferocity and frequency of storms and decrease the overall amount of rain. Both of these climate-changes could affect the tailings ponds in the Elliot Lake area.

9. An environmental assessment hearing was held in 1995 to review the proposal to “decommission” the larger and more current tailings management areas by creating a shallow water cover over the majority of the tailings. More than 90% of the work had already been completed prior to the hearing being held, which meant some options – such as returning the tailings to the underground mines – were already off the table.


11. Currently, Denison Mines Inc. manages the Denison, Stanrock, and Can-Met mine sites under two uranium mine decommissioning licenses and Rio Algom Ltd. manages the Quirke, Panel, Stanleigh, Spanish American, Lacnor, Nordic, Buckles, and Milliken sites under a waste facility operating licence. The Atomic Energy Control Board – now the Canadian Nuclear Safety Commission - and the two companies have all left town, satisfying themselves with occasional site visits and a few part time employees.

**The Nuclear North Shore – Nuclear Reactors**

12. In the 1960s the first proposal to build a nuclear reactor in northern Ontario was for the La cloche area, near West Bay, in the North Channel of Lake Huron.
13. Later, there was a proposal to build a reactor at Dean Lake, near the uranium refinery just west of Blind River.

14. Ontario Hydro’s 25 Year Demand-Supply Plan was released in 1989 and included plans for a nuclear reactor on the North Shore of Lake Huron.

The Nuclear North Shore – Refining Uranium

15. In the 1970’s El Dorado Nuclear announced plans to build a uranium refinery in Blind River. This is the world’s largest uranium processing facility. When it was built, it processed the uranium from the mines in Elliot Lake, but now processes the high grade uranium from northern Saskatchewan, and from other countries. The uranium arrives as yellowcake, the product from milling the uranium at the mine site, and is processed into uranium trioxide (UO3). The UO3 is the shipped to Cameco’s Port Hope conversion facility for further processing or out of the country.

16. I participated in environmental assessment hearings in 1978 on behalf of the Algoma Manitoulin Nuclear Awareness group. The hearings were barely advertised and poorly attended. Location, production and other aspects of the refinery plan were changed after the hearing, but we failed to get a new hearing.

17. During the first 25 years of operation of the Blind River refinery’s operation – beginning with vegetation samples taken from 1983 to 1987 and continuing up to the most recent soil sampling – uranium concentrations have increased in the vegetation and the soil, doubling in some cases and increasing 100 fold in others.

18. Cameco – the company that took over the operation when El Dorado was privatised - has received approval from the Canadian Nuclear Safety Commission to increase production capacity from 18,000 tonnes of uranium per year to 24,000 tonnes per year. This will increase the amount of uranium going into the air.

19. Cameco has also been given permission to ship uranium contaminated wastes for incineration at the Blind River facility. This also increases the amount of uranium going into the air, and so eventually into the soil, water, plants and animals.
The Nuclear North Shore – Burying High Level Nuclear Waste

20. In the 1980’s Atomic Energy of Canada Limited conducted research into a permanent “disposal” site for high level nuclear reactor waste at East Bull Lake, just north of the Town of Massey.

21. Although AECL told the citizens of Massey that this is only a research project and that no decision would be made for at least ten years, there is a high level of concern about this investigation being done. Over 80 percent of the residents of Massey stated their objections to the research in a municipally sponsored vote and several other communities in the area rallied to support them.

22. AECL conducted the drilling in the area of the Sable River system from which the Town of Massey takes their drinking water.

23. In the mid-1980’s Atomic Energy of Canada Limited began developing a generic “concept” for the “geological disposal” of high level waste. AECL stated that the drilling done at Massey was part of their research in support of this proposal.

24. I participated in the federal hearings that were held in 1996 and 1997 by the Seaborn Panel.

The Nuclear North Shore – Importing Low Level Radioactive Waste


26. The Township of Shedden and the City of Elliot Lake were both part of this process.

The Nuclear North Shore – Studied Again for High Level Waste Burial

27. Since 2002 the Nuclear Waste Management Organization has been mandated by the federal government to find a location for a burial facility for high level nuclear fuel waste.

28. The Town of Spanish, the Township of the North Shore, the City of Elliot Lake and the Town of Blind River are all being studied by the Nuclear Waste Management Organization as possible locations for a geological repository for high level nuclear fuel waste.

29. There is very little information available about the NWMO process through the media and outside the communities being studied. I do not know if more information is available to
those who live in the communities being studied. As someone who lives in the North Shore area with four communities on the NWMO study list, I feel that there should be more information available.

30. I have concerns about the proposed repository(s) and about the transportation of the high level wastes through northern Ontario, including along the North Shore of Lake Huron.

**The North Shore – Ontario Power Generation’s Proposed Deep Geologic Repository**

31. Ontario Power Generation’s proposed “deep geologic repository” for low and intermediate level radioactive waste beneath the Bruce Nuclear Site at Kincardine is a concern for me and for other residents of Manitoulin Island and the North Channel and North Shore of Lake Huron.

32. I am concerned that the repository may result in the release of radionuclides into Lake Huron, either as a result of an accident or because the repository does not contain the waste for the long period of time for which it is radioactive.

33. There are already too many nuclear activities at the Bruce Nuclear site and too many nuclear installations around Lake Huron, including those I have talked about on the North Shore of Lake Huron. Singly or in combination they can cause great harm to the lake and the environment around it.

**Conclusion**

34. As the deadline for submitting this written statement approached, I was thinking about how to express my concerns to the Panel, and about how to convey all that I have observed in the many years of being involved in nuclear issues in the Lake Huron region.

35. I was reading the July/August issue of National Geographic, and found the article about stresses around the Great Lakes to be a visual representation of the concerns that I feel. These concerns increase when I consider the prospect of deep geological repository for nuclear waste being built at the Bruce site.

36. From Hiroshima to Fukushima we have all been subject to the experiments of the nuclear industry, although some have suffered more than others.
37. The proposed deep geological repository is another dangerous experiment. It should not be allowed to be built.

All of which is respectfully submitted by:
Edward Burt, Kagawong, Ontario.

August 9, 2013.
Pollution in the Great Lakes: Mapping the environmental woes of the Great Lakes
Map by Chris Brackley with text by Nick Walker, Canadian Geographic – July/August 2013