



**VETERANS AGAINST NUCLEAR
ARMS**
**VÉTÉRANS CONTRE LES ARMES
NUCLÉAIRES**

Ontario Québec Region

c/o Louise Levert
Secretariat, Canadian Nuclear Safety Commission
Fax (613) 995-5086

14 Oct. 2012

**Re: Proposed Refurbishment and Continued Operation of Darling Nuclear
Generating Station**

Dear commissioners,

We write on behalf of Veterans Against Nuclear Arms (Ontario/Quebec region) (VANA), a non-governmental organization formed in 1984. Veterans bring to issues hard-won wisdom from experience of destruction, death, and pain, often from sudden catastrophes. VANA wrote last summer asking the Canadian Nuclear Safety Commission (CNSC) to broaden the environmental review to be undertaken for the life extension of the Darlington reactors. We write now to express our concern about the failure of the Screening Report (SR) to take seriously a number of grave concerns, and the unsatisfying response CNSC has made in accepting that inadequate report.

The failure of the SR to include assessment of any large scale accidents, occurring quickly with large release of radioactivity and therefore high consequences, is unacceptable. How does the CNSC know that a major nuclear event is unlikely? The fact that the licensees of the Darlington station, along with Ontario Power Generation, want the federal government to continue making taxpayers assume liability (beyond \$75 million) for reactor accidents – imposed by the Nuclear Liability Act 1974 – shows they think a catastrophic accident is a realistic risk. We find it alarming that Darlington's CANDU reactors have the same design flaw – positive reactivity – as Chernobyl RBMK reactors have. We understand that reactors with positive reactivity are generally shunned by international regulators.

It is scary that this design defect makes them prone to rapid increase in reactor power and the chance of an explosion and radioactivity release. The Darlington Nuclear Station has an added risk since it has a single containment system for all four its reactors, a cost saving measure not allowed by the guidelines of the International Atomic Energy Agency. So an accident at more than one reactor could be difficult to contain. Nor is the station built to resist terrorist attack. We think discounting major accidents at Darlington is irresponsible and reckless. Given that technological failures and human error are inescapable realities, we consider it mandatory for the CNSC to respect the precautionary principle.

It is certain, moreover, that when such an accident is arbitrarily excluded, no reasonable conclusions about the adequacy of emergency preparedness in Durham region can be drawn. Slow, low release accidents, on which assurances of such adequacy have been based, are, in fact, not the only ones to occur.

We also find reprehensible the SR's failure to pay attention to the ongoing Fukushima Dai-Ichi catastrophe in Japan, to its reported causes, and to the lessons learned that were set out in the related official investigation. In mirroring this inattentiveness, the SNSC is unacceptably dismissive of accident risk. By the International Atomic Energy Agency's – and CNSC's – safety guidelines, core damage to a nuclear reactor should have a frequency of less than 1 in a million years, which with the world's 440 reactors would make a significant accident to be expected once in 250 years. But with 440 nuclear reactors across the globe, a significant accident has in fact occurred recently with much greater frequency: Three Mile Island, Chernobyl, Fukushima. The gap between theoretical forecasts and experience is manifest. Reality has made CNSC's assumptions obsolete and dangerous.

Overconfidence in low probability projections is one of the identified causes of the Fukushima disaster. So it is irresponsible for the CNSC to ignore the need for re-evaluating the probabilities of nuclear meltdown. Ignoring the lessons in the official Fukushima report that the catastrophe was a man-made one and that institutional failures were a fundamental cause and must urgently be addressed, the CNSC is perpetuating the error. There is no evidence that the CNSC has taken seriously the report's warning that political influence of an overconfident nuclear industry ignoring risks was an officially identified cause of the disaster. The economic, social, and psychological effects of the ongoing Japanese nuclear nightmare – untold billions of yen required to stop the fuel-rod cooling problem and undertake decontamination, disruption of the lives of people forced, over a wide area, to flee homes and possessions for an unknown period of time – should

have prompted the CNSC, as it has nuclear regulators all over the world, to proceed with new caution. Toronto, where we are based, is not that far from Darlington nuclear station. We shudder to think of the consequences of a serious accident there, the pressure on emergency services, the impact on the tourist trade vital to our economy. You should know that it is precisely the refusal of authorities to take seriously the reported lessons of Fukushima that is fueling the evident worldwide growing doubts, scepticism and mistrust of the nuclear industry and those that promote it, as the CNSC is doing. And of course, many countries have drawn the logical conclusion that it is time to shut down their ageing reactors in the near future (Germany, Switzerland, and even Quebec).

Lake Ontario is vitally important as the source of drinking water for millions of people, and a treasure of natural beauty and rich aquatic life as well as a place of recreation, vital to preserve. So we also find it retrograde that the CNSC is not looking seriously at the destructive environmental impact that the Darlington station's once-through cooling system has on fish and their habitat, in contravention of the Fisheries Act. Its blindness and negligence are all the more reprehensible since the use of cooling-towers has been standard in the United States since the 1980s and were this nuclear station on the US side of the lake it would be a different story. It's bad enough that we are told fairy stories about the coming cost of refurbishment – we know that historically on average such refurbishment in Ontario has cost 2.5 times the initial estimate. Nuclear power in so many ways is costlier than the varied means of renewable energy, which receive no blank cheque from us, the taxpayers. We are angry that the province persists in an outdated 20th century technology, when the world is moving on to the 21st with renewables, which by any thorough analysis are safer, less expensive, result in much less greenhouse gas emission, and are therefore environmentally sounder. We consider the inadequacy of both the Screening Report and the CNSC response is proof of wilful, risky blindness.

Sincerely,

For the VANA coordinating committee