



## **Canadian Unitarians for Social Justice**

*A national faith-based organization founded in support of Unitarian values*

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Canadian Nuclear Safety Commission  
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### **Re: Proposed Refurbishment and Continued Operation of Darlington Nuclear Generating Station**

Dear Sir or Madame:

The Canadian Unitarians For Social Justice (CUSJ) is a national organization representing Unitarians who are particularly involved in social justice issues in Canada. For a number of years we have had climate change and related environmental concerns on the top of our agenda. We are writing to express our concerns about the environmental evaluation for the plans to refurbish the four Darlington nuclear power plants.

We have read the briefs of many organizations and do not plan to duplicate their efforts in this position paper. We support the Riverkeeper's recommendations that the Federal environmental review has not adequately considered the current damage being done to marine and plant life in Lake Ontario by the Darlington plant's excessively warm effluent. We support their recommendation for closed cycle cooling to mitigate those effects.

We share the concerns of the International Institute for Public Health for nuclear energy workers. We watched the personal sacrifices that Fukushima workers had to make in order to save an even greater disaster for their country. We agree that it will be most difficult to keep our workers safe during the many stages of the project where they will be exposed to radiation. We deplore the continued assumption that there will be no accidents. We believe that unpredictable accidents for at this time unknown causes are inevitable at some point, either through human or human system error, or unexpected natural causes. The necessity of taking every precaution makes such nuclear projects too expensive to be feasible.

We are concerned about the current standards of acceptable radiation levels in Ontario. They are not in alignment with other places around the world. How can it be that Europe sets an acceptable guideline of 100 bq/L for exposure to Tritium; California sets a standard of 14.8 Bq/L; and Ontario accepts a standard of 7000 Bq/L, with a normal level of 513 Bq/L and spills causing rises to 19,000 Bq/L in April 2010 and 1350 Bq/L in September 2010?

We agree with Greenpeace that the Federal Government must give a more thorough assessment of the risks of some kind of major accident, and must demonstrate that we have thoroughly learned the lessons from Fukushima and other nuclear disasters. This would include accurate data on the risks and proper definitions of things such as "what is a large release."

We wonder, with the Sierra Club, why the cracking of the aging concrete containment systems was not seen as worthy of a mention in the report, let alone a thorough assessment of the risks this cracking concrete poses.

We share the concerns of Northwatch on the lack of detail regarding waste disposal issues. The environmental review does not mention the radiation levels of spent fuel, nor does it mention at any point the potential of accidents in either storage or transportation. We need more clear definitions of exactly what is meant by the levels of residual radioactivity of all the different types of radioactive waste, exactly what levels would have to be achieved before it would be moved, how it will be stored until it is moved, and to where and how it will be moved as well as what precautions will be taken in transportation.

In principle, CUSJ believes that our best future lies with developing our capacity and stimulating innovation and manufacturing of all forms of renewable energy. We believe smaller, localized, appropriate renewable projects with a decentralized system of projects contributing to the grid are the way to go. We would like to see the Federal Government and all provincial governments adjust their subsidies and incentive systems in that direction. We believe that moving to renewable energy by 2040 is possible if we put our undivided attention and our best possible effort toward that goal. It is essential that we do this to slow the growth of greenhouse gases causing climate change. The survival of hundreds of millions of people in coastal regions of the world depends on it.

In the attached brief, after reviewing research from many sources, we concluded that nuclear power has not delivered its promised benefits. It has not been a cheap source of power but a source of endless costly overruns. It has not been a reliable source of power. The Canadian power plants have often had to be shut down for extensive periods of time for refurbishing because of the easily corroded pipe systems of the Candu Reactor. It is not greenhouse gas free if you consider cradle to grave production including mining, transportation, uranium refinement and processing, and the cost of building and eventually decommissioning nuclear power plants. Furthermore, as more nuclear plants are built, and more uranium is required to feed them, the quality of uranium ore available declines requiring more and more costly processing using conventional fuels. Finally, we have not come up with a solid solution to the problems of waste disposal or storage.

We believe the risks of refurbishing Darlington have not been adequately assessed. It is essential to use the precautionary principle as our guide. We would like to see nuclear plant refurbishment only as a back-up plan if it proves impossible to move quickly enough to renewable energy. In such a circumstance we would hope that you would make your plans so that at most, one or two of the Darlington plants would be refurbished as a last measure.

Thank you for taking the time to read and consider our submission.

Respectfully,



Rev. Frances Deverell,  
President,  
Canadian Unitarians For Social Justice.

Cc Peter Kent