



CMD 25-H2.65

Date: 2025-05-08

**Written Submission from
Nancy Covington**

**Mémoire de
Nancy Covington**

In the matter of the

À l'égard d'

Ontario Power Generation Inc.

Application to renew power reactor
operating licence for the Darlington
Nuclear Generating Station

Ontario Power Generation Inc.

Demande concernant le renouvellement
du permis d'exploitation d'un réacteur de
puissance pour la centrale nucléaire de
Darlington

**Commission Public Hearing
Part-2**

**Audience publique de la Commission
Partie-2**

June 24-26, 2025

24-26 juin 2025

From: nancy covington
Sent: Thursday, May 8, 2025 10:23 PM
To: Interventions / Interventions (CNSC/CCSN)
Subject: Request to extend license of Darlington Nuclear Power station for 35 years Reference 2025-H-02

EXTERNAL EMAIL – USE CAUTION / COURRIEL EXTERNE – FAITES PREUVE DE PRUDENCE

Reference 2025-H-02

Regarding request to extend license of Darlington Nuclear Power Station to 35 years.

Who I am and why I am concerned: I am retired family physician who belongs to Canadian Association of Physicians for the Environment and also International Physicians for the Prevention of Nuclear War Canada. Although I belong to both these groups I write as a private citizen who does not even live in Ontario. However, I have heard anecdotes from physicians in the area who describe their many patients with thyroid cancers. This cancer is known to be caused by radioactive iodine emitted by nuclear power plants.

I have been asked to give advice to family members about whether it is a good idea or not to move to the area around Darlington. My advice to them has been “don’t move there unless you absolutely have to”.

Why do I give this advice:

1. There are routine expected radioactive emissions from Darlington which include Tritium, Carbon 14, Nobel gases, Iodine 131. Without being asked or told, the public around Darlington station are being exposed to these carcinogenic materials. Indeed at times, Tritium will be emitted in a burst.
2. These releases are considered to be within “permissible levels”, however, it is known that permissible levels may not be safe levels.

Permitted or ‘safe’ levels of radioactivity are based on “Reference man”, and were mostly devised from data on Hiroshima and Nagasaki nuclear bomb survivors. However, children and women are more sensitive and most guidelines ignore these gendered differences. <https://www.genderandradiation.org/basics>

Here is a link which summarizes articles on the effects of low level ionizing radiation on children, written from UK perspective.

<https://www.ianfairlie.org/news/a-report-on-radiation-risks-and-on-cancer-in-children/>

3. Given that renewable energy sources (solar with storage and wind) are constantly coming down in price especially when compared to nuclear power, it would be prudent to follow the cheaper route instead of trying to build BWRX - 300 which is an experimental reactor even by name - Boiling Water

Reactor eXperimental. The BWRX is slated to use fuel enriched from natural uranium to a level of 2 - 5%. This means that the fuel must be imported from outside of Canada, perhaps USA or Russia, thus causing a worrisome nuclear weapons proliferation risk.

4. Radioactive wastes have been accumulating for nearly 100 years. To date, there is no satisfactory solution to deal with these wastes, despite claims to the contrary by the nuclear industry. The high level wastes (spent fuel) is many times more radioactive than the original mined material and indeed the wastes from proposed small modular reactors may be worse yet as they may be in a chemically reactive form, making them harder to contain than CANDU waste.

<https://www.pnas.org/doi/epdf/10.1073/pnas.2111833119>

Because the radioactivity in these wastes will last for millennia, they must be separated from the biosphere for longer than humans have been called “homo sapiens”. Is this even possible?

5. I would truly like CNSC to return to and refine its central mandate of regulating the nuclear industry to **“protect the health, safety, security and the environment”**. The public needs to be informed regularly about routine radioactive emissions which could harm their babies and children. All citizens within a 50 km radius (not just 10 km) need to be given potassium iodide pills in case of a burst of radioactive iodine from the plant. Citizens need to know how they will be informed about such leaks. Emergency routes for evacuation need to be regularly reviewed.

6. Finally, all complicated machinery will fail at some point in time. All we have to do is look at the plumbing in our own homes. How often do toilets or taps leak? Operators of nuclear power plants must care for plumbing which is far more complicated than toilets with risks far greater than the damage from a leaky toilet. We know catastrophes of the Chernobyl, Fukushima and Three Mile Island variety are rare, but they do happen. Acts of nature happen and operators are human who do occasionally make mistakes.

For all of the above reasons, I think the license to operate Darlington Power station needs to be shortened to no more than five years. In this way, the above issues and others can be reviewed on a more regular basis.

Respectfully submitted by
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