



Public Comments on the Request for Confidentiality

Commentaires du public sur la demande de confidentialité

In the Matter of

À l'égard d'

Ontario Power Generation Inc.

Ontario Power Generation Inc.

Application for amendment to the power reactor operating licence for the production of Cobalt-60 (Co-60) radionuclide at the Darlington Nuclear Generating Station

Demande visant la modification du permis d'exploitation d'un réacteur de puissance pour autoriser la production du radionucléide Cobalt-60 (Co-60) à la centrale nucléaire de Darlington

**Public Hearing – Hearing in writing based
on written submissions**

**Audience publique – Audience fondée sur
des mémoires**

February 2024

Février 2024



January 18, 2024

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Email: interventions@cnsccsn.gc.ca

Re: Ontario Power Generation's application to amend its Darlington Nuclear Generating Station power reactor operating licence to authorize the production of cobalt-60 radioisotope and request for confidentiality

Dear President and Commission Members,

On behalf of the Canadian Nuclear Isotope Council (CNIC), we are pleased to support Ontario Power Generation's application to amend its operating licence at the Darlington Nuclear Generating Station to produce cobalt-60 isotopes, in addition to OPG's request for confidentiality.

The CNIC is a not-for-profit organization consisting of representatives within the Canadian health sector, nuclear industry, and research bodies, convened specifically to advocate for our country's role in the production of the world's isotope supply. The CNIC serves as a voice in safeguarding the continued availability of isotopes, ensuring our public policies are risk-informed and science-based, and support the highest levels of public health and safety.

Around the world, nuclear isotopes are used for a variety of modern medical uses, including diagnostic imaging, precise radiotherapeutic treatments of illnesses like cancer, and sterilization of single-use medical equipment.

Canada is fortunate to be home to nearly the entire production pipeline for various medical isotopes. Thanks to the contributions of companies like OPG, Canada is a global leader in the production, research and development of several essential isotopes. The world continues to rely on Canada for its supply of critical isotopes, and the CNIC was established to ensure this leadership can continue. As a founding member of the CNIC and a key participant in CNIC activities since 2018, OPG's importance to the isotope sector is clear.

OPG's CANDU reactor not only produces clean, reliable energy to power our communities but also produces a steady supply of cobalt-60 (Co-60) isotopes. Co-60 is most commonly used to sterilize single-use medical devices, including gowns, masks, syringes, and implantable devices. Roughly 40% of the world's single-use medical devices are sterilized using Co-60, with a significant portion of this supply produced here in OPG's reactor. Presently, over 70% of the world's supply of Co-60 comes from Ontario's CANDU reactors, including OPG. Protecting our domestic source of Co-60 sterilized medical items is crucial to preventing the spread of disease in Canada and around the world.

Additionally, in February 2023, OPG's Darlington Station began production of molybdenum-99, the precursor isotope for technetium-99m used in SPECT imaging scans to diagnose and stage illnesses. This milestone will enable Darlington to produce enough Mo-99 to supply a major portion of current and future North American demand.



Amending the Darlington Nuclear Generating Station's operating licence to authorize the production of Co-60 will directly benefit Canada's healthcare sector by contributing to the production of this important medical isotope, which will keep patients, frontline workers, and our communities safe and healthy.

Finally, the CNIC is supportive of OPG's request to protect certain documents and keep specific aspects of their business confidential during this upcoming hearing. The specialized equipment and tooling in OPG's facility to produce medical isotopes can be considered proprietary technology and therefore warrants consideration to be kept confidential. Additionally given the nature of the energy sector certain commercial arrangements as they relate to power production, or isotope production must remain protected to protect business competitiveness.

For these reasons, the CNIC supports OPG's application to amend its Darlington Nuclear Generating Station power reactor operating licence to authorize the production of cobalt-60 radioisotope and request for confidentiality.

Sincerely,

James Scongack
Chair
Canadian Nuclear Isotope Council
James.Scongack@brucepower.com

From: Alex F
Sent: January 21, 2024 10:08 AM
To: Interventions / Interventions (CNSC/CCSN)
Subject: Notice of Confidentiality - Darlington Cobalt-60 Production
Attachments: Screenshot_20240121_092032_Chrome.jpg

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

On January 16th 2024, the Canadian Nuclear Safety Commission circulated a notice that the public has until Monday, January 22nd to comment on OPG's request that all the references in their application to amend the Darlington operating license to allow the production of Cobalt-60 are to be kept confidential. I am against that and that they be kept confidential or that there should be limited or no public release or disclosure.

The notice of OPG's request for confidentiality is accessible but all of its links were broken and were error 404 when I clicked on them (see attachment) : <https://api.cnsccsn.gc.ca/dms/digital-medias/Notice-Confidentiality-OPG-CMD24-H101-e.pdf/object?subscription-key=3ff0910c6c54489abc34bc5b7d773be0>

My reasons are as follow:

Cobalt-60 (Co-60) is a radionuclide therefore it is a dangerous, toxic substance and the public should have access to information regarding it's production, the operations, how contaminants and radionuclides are disposed of, etc.

The DNGS is located in the Municipality of Clarington, Ontario, approximately 65 km east of Toronto, and on the traditional territory of the Michi Saagiig Anishinaabe people. These lands are covered by the Williams Treaty between Canada and the Mississauga and Chippewa Nations. You claim: "In preparation for hearings regarding the production Co-60, as well as the transportation of irradiated Co-60, OPG will proactively engage the identified Indigenous Nations and communities through various activities, such as staff briefings, community information sessions, written communication and/or workshops, etc. " but the First Nations should also have access to all information to make informed and prior consent to have more and different radioactive substances/radioisotopes on their unceded land.

It is close to the world's largest freshwater (ie drinking water) supply and there is a risk of contaminating it with rising water levels, wildfires, earthquakes, etc. so the public, especially the dense population surrounding it, has a right to know what the situation is by accessing Darlington documents. And what if it mixes with the nuclear operations and the independence of both systems cannot be guaranteed. It said it will have "negligeable effects on safe reactor operations". Experts would like to access documents to determine that for themselves. What about the irradiated rods during unplanned outages? What safety measures are in place, what will happen in case of environmental contamination, possibly during transportation to Kanata, what is the clean-up plan once the building's operation cease?

Thank you,
Alex F

January 22, 2024

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Email: interventions@cnscccsn.gc.ca

Attention: Canadian Nuclear Safety Commission (CNSC) Tribunal Chair and Commission Members

Re: Bruce Power's Intervention in Support of Ontario Power Generation's Request for Confidentiality Concerning their Hearing to Amend the Darlington Nuclear Generating Station Power Reactor Operating Licence

Bruce Power is an electricity company based in Bruce County, Ontario. Our 4,200 employees are the foundation of our accomplishments and are proud of the role they play in safely delivering clean, reliable, low-cost nuclear power to families and businesses across the province, and life-saving medical isotopes around the world. Together, we are powering the innovation that will allow us to help power our province and keep Canada at the forefront in the supply of life-saving medical isotopes.

Bruce Power has been a global leader in the production of medical isotopes for over 35 years, beginning with the production of Cobalt-60 (Co-60), an isotope used to keep hospitals clean and safe and fight cancer. Co-60 is used in Gamma irradiation to sterilize single-use medical devices and equipment such as syringes, gloves, implantable devices, and surgical gowns and masks. Co-60 is also used in radiation therapy for the treatment of complex brain cancers and conditions through non-invasive procedures like the Gamma Knife.

Ontario Power Generation (OPG) shares Bruce Power's values around the production of clean, reliable electricity and life-saving medical isotopes. Through our round-the-clock production capabilities, our nuclear power plants are uniquely positioned to be able to provide a consistent, reliable source of Co-60 as well as other medical isotopes. Bruce Power is therefore supportive of OPG's intent to apply for an amendment to the Darlington Nuclear Generating Station Power Reactor Operating Licence (PROL), 13.03/2025, to authorize the production of Co-60.

Bruce Power has also recently expanded its medical isotope production capabilities beyond Co-60 to the production of Lutetium-177 (Lu-177). Bruce Power is the first commercial nuclear power plant to produce Lu-177, a short-lived medical isotope used in precision oncology for the targeted therapy of a growing number of cancers, including neuroendocrine tumors and prostate cancer, using a first-of-a-kind Isotope Production System. As such, we understand the need to maintain the confidentiality of certain financial, commercial, scientific and/or technical information, to protect the economic interests of the parties involved in advancing these innovative technologies.

Given all of the above, Bruce Power is supportive of OPG's request to protect certain documents and keep specific aspects of their business confidential during the upcoming hearing. We also plan to intervene in support of OPG's application to amend its Darlington Nuclear Generating Station PROL, 13.03/2025, to authorize the production of the Co-60 radioisotope.

Thank you for the opportunity to share our views on the request for confidentiality. If upon reviewing this letter you have any questions, please feel free to contact Chad MacLean, Senior Director, Business Development and Energy Innovation, at 226-930-0834.

Regards,

A handwritten signature in black ink, appearing to read "James Scongack". The signature is fluid and cursive, with a long horizontal stroke at the end.

James Scongack
Chief Development Officer & Executive Vice President Operational Services
Bruce Power