



Oral Presentation

Submission from the Canadian Association of Physicians for the Environment

In the Matter of

**Ontario Power Generation Inc.,
Pickering Nuclear Generating Station**

Request for a ten-year renewal of its Nuclear Power Reactor Operating Licence for the Pickering Nuclear Generating Station

Commission Public Hearing – Part 2

June 2018

Exposé oral

Mémoire de l'Association Canadienne des Médecins pour l'Environnement

À l'égard de

**Ontario Power Generation Inc.,
centrale nucléaire de Pickering**

Demande de renouvellement, pour une période de dix ans, de son permis d'exploitation d'un réacteur nucléaire de puissance à la centrale nucléaire de Pickering

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

Juin 2018



**CNSC Hearings June 2018 Submission on behalf of
the Canadian Association of Physicians for the Environment (CAPE)
Prepared by Dr. Cathy Vakil
May 7, 2018**

I am a family doctor and professor in the Department of Family Medicine at Queen's University in Kingston Ontario and a longtime board member of Canadian Association of Physicians for the Environment (CAPE). I am writing this submission on behalf of CAPE and would like to make an oral presentation at the Jun. 26-28, 2018 hearings.

I recommend that the CNSC reject OPG's request to continue operation of Pickering nuclear plant for the following reasons:

1) The Ontario Provincial Nuclear Emergency Response Plan (PNERP) is completely inadequate to deal with a Fukushima level accident despite its claim to protect the health, safety, welfare and property of the people of Ontario and the protection of the environment. The plan does not use a Fukushima level accident as its planning basis and intentionally lacks detailed emergency preparation because a severe accident is "unlikely" despite the fact that a major accident has occurred worldwide every decade since the inception of nuclear energy. A severe nuclear accident in Toronto would be far more catastrophic than Fukushima due to the proximity of the Pickering and Darlington reactors to the Great Lakes and to the two million people who live within 30 kilometres of these nuclear plants.

The primary zone of ten kilometres is completely arbitrary as is the proposed increase to 20 kilometres. KI distribution to 20 kilometres as the PNERP suggests is not in keeping with international best practices. Switzerland presently pre-distributes KI to all citizens living within a 50 kilometre radius of nuclear stations. In Ontario KI pills are pre-distributed to people living within 10 kilometres of nuclear power plants and is available free upon request to everyone living within a 50 kilometre radius. However due to non-existent public education of people living within the 50 kilometre radius there has been little uptake.

There are significant unrealistic assumptions made in the PNERP about how evacuation of over a million people would occur in the event of a major accident. These assumptions do not take into account challenges regarding traffic congestion, in complete communication and unpredictable weather patterns. As Pickering's population continues to grow, it becomes more and more unlikely that evacuation of such a large population in a short time span would be possible and this could potentially expose millions of people to high levels of radiation.

In addition, there is no plan in place in the PNERP to address the very real possibility of radioactive contamination of the Great Lakes in the event of a nuclear accident. This is a crucial omission and would threaten the health of the 40 million people who rely on the Great Lakes for their drinking water.

So far there has been basically no public education for the millions of people living in the GTA and surrounding area about evacuation procedures in the event of a nuclear accident and there is no

mention of a structured detailed education plan in the PNERP. There is no discussion of preparedness of the healthcare community to deal with largescale evacuation of hospitals and nursing homes, nor education about treatment of radiation-exposed citizens and workers.

CAPE supports the City of Toronto and the Region of Durham which have requested that the CNSC include a condition on the OPG licence requiring it to compensate municipalities for all costs related to nuclear emergency planning and preparedness.

Until all the above extremely important issues of public safety are addressed in our PNERP, OPG should not be granted permission to continue operation of Pickering nuclear plant.

2) Pickering reactors are old and well beyond their design life, and it is dangerous to continue their operation. OPG was supposed to close down the reactors by 2020 and now wants to extend the lifespan of these aging reactors, further increasing the chance of a major accident. The design of our reactors is such that they are already at risk, being multiunit plants with a single containment structure.

3) The electricity the Pickering reactors produce is largely surplus and Ontario has sold it in the past at a loss to New York state. Any electricity Ontario requires that is presently provided by the nuclear industry could be supplied by Quebec using cheaper safe clean hydro power. Nuclear energy, with its toxic radioactive waste, astronomical cost and significant risk of accident, is a dangerous and expensive alternative to conservation and renewable energy.

Presently the nuclear reactors in Pickering pose a threat to the safety and health of people living in the GTA. It is unconscionable that these aging reactors continue to operate now, in the absence of an adequate emergency response plan in such a highly populated area. The electricity they produce is unnecessary and expensive. CAPE recommends that the CNSC deny OPG permission to extend the licence of the Pickering nuclear facility.

Sincerely,



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