



Oral presentation

**Submission from
Suhail Barot**

In the Matter of

Ontario Power Generation Inc.

Application to renew the Power
Reactor Operating licence for the
Darlington Nuclear Generating Station

Commission Public Hearing
Part 2

November 2-5, 2015

Exposé oral

**Mémoire de
Suhail Barot**

À l'égard de

Ontario Power Generation Inc.

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

Audience publique de la Commission
Partie 2

2-5 novembre 2015

Suhail Barot

To: Canadian Nuclear Safety Commission

I write to you today in opposition of the request of Ontario Power Generation (OPG) to receive a 13 year license for the purposes of rebuilding the reactors at Darlington Nuclear Station. OPG has not demonstrated the need for such an extraordinary license and several questions remain unanswered about the safety of a rebuilt Darlington Nuclear Station.

My concerns relate primarily to the inadequacy of current emergency plans. Like many members of the public, post the Fukushima accident in Japan in 2011, I am very concerned about the possibility of such an accident happening in Canada and about our capabilities to respond to such an accident.

- 1) The Canadian Nuclear Safety Commission (hence, the Commission) promised to model the impacts of such an accident (a Level 7 accident on the International Atomic Energy Agency's International Nuclear Event Scale), but has not released the results for review by the public and independent scientific bodies. Instead, the Commission has released the results modeling the impacts of a much less severe accident. It is unconscionable for any license extension to be granted before this information is fully disclosed.
- 2) Current emergency planning does not model the evacuation of the almost 500,000 people that live within a 20km radius of Darlington. Furthermore, to the extent that the Commission does model evacuation, it assumes that most individuals that are evacuated would stay with family or friends within the GTA. The Commission must perform a detailed analysis of the capabilities of the remainder of the GTA to absorb such a number of evacuees as well as the potential impact of panic that may lead to further evacuations.
- 3) It is evident that the zone wherein contamination of food and water and dispersal of radioactive elements is significantly larger than the evacuation zone. One significant concern relates to the possibility that such a release may lead to levels of radioactive contamination within the vicinity of intakes of water supply and treatment plants of GTA communities that are above safe limits for exposure or consumption. The Commission must perform a detailed analysis to show that either a level 7 accident would not lead to contamination levels that would exceed Ontario's drinking water standards and/or to show that GTA municipalities are capable of supplying residents with safe drinking water should these facilities be unable to supply them.

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- 4) Plans and procedures in this regard should be updated on a regular basis, as additional research is developed, and best practices change. The grant of a 13 year license would deny the public a substantive opportunity to review emergency plans and to ensure that everything possible is being done to minimize both the chance of an accident and the procedures in place to handle one, if it were to occur. A license of this duration has never before been granted in Canada. There is no basis for such to be granted in this case.

In the interests of public safety, it is essential that the above four points are addressed before any license renewal is granted. I look forward to the opportunity to address the above in my oral presentation to you.

Sincerely,

Suhail Barot,

PhD Candidate, Electrical Engineering,

University of Toronto