



Oral Presentation

Exposé oral

**Submission from
Andrei Neacsu**

**Mémoire de
Andrei Neacsu**

In the Matter of

À l'égard de

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

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

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

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

Commission Public Hearing – Part 2

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

June 2018

Juin 2018

Greetings,

My name is Andrei Neacsu. I am a Canadian citizen and resident of Scarborough, Greater Toronto Area. To be specific, I live just outside the 15km radius from the Pickering Nuclear Power Plant (at 15 Guildwood Pky.). In this intervention, I am urging the CNSC (Canadian Nuclear Safety Commission) to stop the Pickering Power Plant from operating. Please let OPG (Ontario Power Generation) know that as previously planned, the Pickering Nuclear Power plant has to start shutting down this coming summer. I will go as quickly as possible through some general reasons, as well as some particular and unique reasons on why this nuclear power plant has to be shut down.

Regarding general reasons on why OPG's license to operate in Pickering should not be renewed, I must begin by saying that three major meltdowns in the world, in the last thirty-five years (Three Mile Island, Chernobyl and Fukushima) have been enough. We do not need another and the Pickering Nuclear Power Plant poses a serious and dangerous risk.

In general for us to have nuclear energy, we are mining and purifying uranium. This by no means is a safe endeavor. Even the transportation of nuclear fuel poses significant contamination risks and in the end, we have radioactive waste, which will remain dangerous for as many as tens of thousands of years. I am not a gambler in my personal private life and as such I do not like to gamble with my safety. Yet, I feel that Ontario Power Generation is gambling with my safety and well-being.

As a newer type of security threat, hacking into Ontario's nuclear power plants is a "very serious question" said Premier Kathleen Wynne just this past March (2018), as reported by the Now Magazine. She continued to say that "we are ... making sure that all precautions are taken". And I am quite sure that all precautions which can be taken are taken in this aspect but we are not going to be one hundred percent sure that all threats can be averted. Therefore, why are we taking the risks which we are taking, associated with this nuclear power plant? It really is unnecessary in my opinion.

Now, in respect to the specific reason to why the license for operation should not be renewed, I would like to quote the Canadian Environmental Law Association by saying that "both the Pickering A and Pickering B reactors have a long history of poor performance and multiple accidents." A long list of such historical malfunctions and accidents can be found in a report done by the Ontario Clean Air Alliance, from 2016, titled "Pickering Nuclear, Unsafe At Any Speed". Ultimately, the Pickering Nuclear Power Plant is not very reliable. On top of which, it has the highest operating cost in North America. Even from a financial standpoint, allowing the Pickering Nuclear Power Plant to operate any further does not make sense.

My specific concerns with this nuclear power plant and which are unique to it, relate to the fuel channels and pressure tubes. There have been previous studies and reports commenting on the problems existing at the Pickering Nuclear Power Plant. In specific here, I am referring to a report done by a United States company, Fairewinds Associates, Inc., titled "ANALYSIS OF THE RELICENSING APPLICATION FOR PICKERING NUCLEAR GENERATING STATION". This report explains in great detail problems with fuel channels and pressure tubes (among many other things).

To further the above point, just two years ago (2016) the CNSC had a report stating that the plant's Unit 4 reactor "showed significant stem generator tube thinning in a number of tubes ... in Steam generators 11 and 12, winter 2014 and fall 2011 respectively". These pressure tubes are located in a severe environment for operation and deterioration/failures are to be expected in the long-term (as explained in the Fairwinds Associates report). Failure and deterioration can mean ruptures and that can lead to a greater accident, which we may not be ready for.

Now, fuel channels is another great concern because as mentioned by OPG (and in the Fairwinds Associates report), the safety of fuel channels is 70% assured and OPG claims that this 70% is a "high or very high level of confidence". Again, I must be clear here: I do not like to gamble, especially with my life and well-being. 70% is not acceptable when the risks are enormously high as they are.

I would also like to mention here that as reported by Dr. Frank Greening, a retired nuclear researcher, the six nuclear reactors at Pickering share one single common safety system: the vacuum building. This building is in place to extract the pressure and radioactive emissions in case of a malfunction. This does not take in consideration multiple malfunctions, as was the case during the Fukushima melt-down. The Pickering Nuclear Power Plant should really have six such vacuum buildings, one for each reactor, Dr. Frank Greening argued. This does seem to be a design flaw and one which increases the risks of this nuclear power plant. We do have to keep in mind that this plant started being built in the 1960s, with the technology and knowledge of those days. We now know much more relating to nuclear power.

Lastly, I would like to point-out that the Pickering Nuclear Power Plant is unlike any other nuclear power plant in the world, located near densely populated areas. Not only is this plant located near heavily populated areas but the government of the Province of Ontario released a "Greater Golden Horseshoe" plan, on May 18th, 2017. This is a plan in which population will further increase (in the proximity of the Pickering Nuclear Power Plant) by building "complete communities", by "providing housing options".

So, let's increase population density near one of the world's oldest nuclear power plants and on top of that, let's extend the use of this plant well beyond its best before date. No, this is really unacceptable. If the motto on the provincial government's website is "Places to Grow - Better Choices. Brighter Future." then, let us chose renewable energy, which is free of melt-down risks and possible death on mass. It is time to start decommissioning the Pickering Nuclear Power Plant.

There really should not be much of an argument about this. Very little energy is used by Canadians from this plant. Most of it goes to the United States and if we are to talk about the United States, New York Governor Andrew Cuomo is calling for closure of Indian Point Nuclear Station, north of New York City. So, if they do not want them, why do we? It makes no sense. We can get the little energy we lose from decommissioning the Pickering Nuclear Power plant from Quebec's water power which is sold at a third of the price of power from that at the Pickering plant.

Other countries in the Western hemisphere are moving away from nuclear power as well. Germany is using almost all of its energy from renewable sources. Switzerland is also phasing-out completely their nuclear reactors. I am convinced that Canada can also phase-out our old, expensive and unreliable nuclear power plant at Pickering.

Please do take in consideration that OPG is a business. It exists to make a profit and that is exactly what it is doing: trying to milk whatever is left from this power station. It does not care about the future of Ontario, or the health of Ontarians. When its liability is capped at 1 billion, there is not much concern for this company whether an accident happens, or not. Fukushima expenses are running well over 100 billion, as of this moment. Liability should be capped at 100 billion in case of an accident. Then, we would see if OPG would be applying for another license to operate. I do not think it would.

Therefore, please stop the operations of the Pickering Nuclear Power Plant. This is in the best interest of Ontarians. We really do not need to gamble with our safety and well-being. Millions of people depend on clean water from Lake Ontario, not only in Canada but the United States as well. This plant posses incredible risks. Forty-seven years of operation is enough as well. The time to close-down is here.

Thank You for your time and consideration.

Sincerely,

I (Andrei Neacsu)