



Oral Presentation

Exposé oral

**Submission from
Darlene Buckingham**

**Mémoire de
Darlene Buckingham**

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

Submitted by email on May 7, 2018

Commissioners:

I have been participating in Interventions for 10 years now and have noted over the years that despite the recommendations from many members of the public to shorten licenses of nuclear reactors and now to shut down Pickering as the reactors are well past their life design and more at risk of an accident that these requests go unheeded. It is if the public did not say a word and the nuclear proponents continue to say the same things; nuclear energy is safe and clean, no problem here. I am grateful to all those that have taken the time to come before the Commission to share their concerns and it is time to heed these words. There is enough information from the past 65 years to now be able to see that nuclear energy has not lived up to its expectations. Certainly nuclear energy provides electricity without the release of carbon dioxide thus the slogan it is clean energy but, when the the entire nuclear process is looked at from cradle to grave it is expensive, risky and far from a clean process. There is a big difference, for example, of sitting on the granite rocks in Bancroft, an historical uranium mining town and standing beside a spent fuel bundle. Yes ionizing radiation is released from the granite, when one is flying on a plane or eating a banana ,however, the human body is much more likely to deal safely with these example of exposure to ionizing radiation, whereas anyone in this room would be dead in ten minutes if standing beside a spent nuclear fuel bundle, thus the great risk of nuclear waste that to this day there is not a satisfactory solution and begs the question why is it being said nuclear energy is safe and clean. There is definitely a problem here that has to be solved and move forward away from this risky way to produce electricity.

All of us here do want to keep the lights on and there are other ways to do so. This is where the future is; in investing our money in researching and implementing ways to produce electricity that are not as risky and are more efficient. I trust that our scientists if freed up from nuclear energy would come up with solutions that are so much better than nuclear energy. The time is here to move forward and to deal with the aftermath of the nuclear age without digging any further. More and more people are coming forward and asking for other solutions. First Nations are becoming more involved in the process as historically they have been the ones to suffer the risks associated with mining uranium. I was surprised to learn from participating in the Chalk River Interventions that more than 3,000 hectares of land were expropriated from First Nations to build the facilities at Chalk River forcing relocation. When Pickering was first built there was a much smaller population than there is today in the immediate area and in the Greater Toronto area that would now be severely impacted by a nuclear accident thus raising the safety concerns. Nuclear reactors should not be near any population large or small due to these accident risks. Other problems created are nuclear reactors and spent fuel bundles produce extreme heat and are in danger of bursting into flames, releasing deadly levels of radiation. This requires access to water to cool the reactors and ensure the used rods are not uncovered that is why nuclear reactors are built near water creating another big problem to the safety of water. Nuclear waste really should not be stored or buried near drinking water or any type of water as this creates a far bigger distribution pattern when nuclear waste is in water. The old idea that dilution is the solution does not hold up to scrutiny as nuclear waste is still harmful even in water bodies which leads to another problem. To protect water, this waste would have to be transported thus increasing the odds of an accident and exposing local population to toxic materials, not to mention the higher costs of transporting this radioactive material. Any way it is looked at dealing with nuclear waste is not easy. It is not safe plus it is costly making it an inefficient source of electrical energy when all factors are considered.

Another far-reaching problem facing humanity is that the past 60 years has seen an explosion in Corporate growth that produces products that they all claim to be safe and these Corporations are not working together thus creating a toxic cesspool. Thousands of species are being lost yearly. Lifestyle diseases are skyrocketing. Continuing the risk analyses the way they are being calculated is not serving humanity or the planet we live on. Nuclear energy is one of thousands in the mix of risky businesses being conducted. The tragedy is there are other solutions and it is essential to start looking at alternatives now. I don't expect that anything is going to change today or that the license for Pickering will not be extended but I would like to plant the seed that if this continues it is going to cause unnecessary grief and suffering. We have to get on with it and deal with what we have, a way to generate electricity that is unfortunately too dangerous. I encourage all here to consider these words and start planning to move away from nuclear energy and to solve problems with creating a better world in mind rather than generating revenue. This model of revenue and stock holders before health and vitality is causing too much of an imbalance and if we don't heed the warning signs the inevitable will happen with calamitous collapse of healthy ecosystems into more and more habitats that are unliveable. There is still plenty of time to turn this around as all of us do our part to focus on living in more harmonious and balanced ways. Nuclear energy is a symptom of the much bigger problem but is a blatant example of what can happen when risk is ignored as we have seen with Chernobyl and Fukushima that are still ongoing disasters and unintended consequences of the use of nuclear energy. There is opportunity here today to start the process of moving towards creating a better world and turning on the lights with technology that we have not dreamed of because of being tied to our present day systems. This is the time to dream and to vision the future and perhaps here is where the solution to nuclear waste will be found as well when the intention is to only use technology that is truly renewable and safe rather than continue with technologies that create profits for the few at a great cost to the many. A vision of a world lived in harmony and unification is important to guide all of us in weaving together in our small part of the world a way of living that will be much better than the way we are living today. We know using nuclear energy and all the non-renewable energies, such as oil and gas, plus the use of thousands of toxic chemicals are taking us closer to a degraded way of living with loss of diversity and habitat. Is this what we really want? I ask the Commissioners to carefully heed the words of all Intervenors that speak before you and especially those sharing their concerns. Thank you for the opportunity to speak and to plant seeds for the future.

Darlene Buckingham