From: Lucas Forget [mailto:lucasforget@gmail.com]
Sent: Wednesday, September 28, 2016 11:18 PM

To: Consultation (CNSC/CCSN)

**Subject:** CNSC Strategy for SMR Development

To me the use of water in a nuclear reactor is one of the dumbest ideas of our century. The catistrophic consequences of water rapidly expanding into steam, bubbles forming voids, or water disassociating into hydrogen and oxygen are not acceptable. It is like strapping dynamite to a car engine and justifying all the reasons why the dynamite will not explode - just remove the dynamite!

A molten salt reactor operating near atmospheric pressure and with passive safety features does not have the fundamentally explosive consequences of failure and should be granted exceptions in its application for its licence. Additionally, if it is designed correctly, the molten salt reactor can reduce many of the fundamental dangers of nuclear waste, nuclear proliferation, and economically generate huge amounts of power without emitting greenhouse gases.

I am writing to the CNSC to express my interest and rational for how the novel technology brought forth with molten salt designs should be handled. I believe that the CNSC should evaluate the dangers of global warming against setting out on a new path for developing novel reactor designs. If the CNSC can develop an efficient method of bringing a new generation of fundamentally safe and efficient reactors to market, then the CNSC will have prevented irreparable harm to our environment and contributed to the survival of our species.

Inaction can sometimes be one of the most risky options. Ignoring the reality of our environmental dangers seems like an easy and uncontroversial option. However the reality, built by scientific evidence and recognized by the Canadian government, is that global warming is a real imminent danger to our environment.

I encourage the CNSC to do our part to reduce global warming's progression and be open to new ways of looking at challenges, challenging yourself to look understand new ideas, and encouraging the evolution of nuclear reactor technology, by asking questions such as:

- Can a molten salt nuclear reactor that operates near atmospheric pressure be granted exceptions and be safely tested and run through its product development lifecycle inside a containment structure?
- Since the laws of physics have not changed since the last molten salt reactor was operated, how can we best build on the success of past molten salt reactors?
- Can the CNSC request additional resources, funding, and experience needed to expadite and streamline bringing a nuclear reactor to market while still maintaining its high level of safety?

I truly belive that the molten salt reactor technology can be a practical and economic solution to global warming. I hope that this letter encourages the CNSC to think of how you can help work with others to bring technology to where we all want it to be.

Yours truly,

Lucas Forget