This is to express opposition to the development of more nuclear facilities for the purpose of generating energy. There are two compelling reasons: 1) the disposal problem of nuclear waste, and 2) the danger of accidents creating hazardous radioactive fallout.

Nuclear waste and fallout are dangerous because of the effect of radiation on living tissue and on DNA, potentially causing irreversible and major problems for present and future generations. Finding a disposal site for nuclear waste is very difficult because of the hazards of handling/transporting the dangerous material and because of the difficulty of finding a secure enough storage place, able to last for as long as many times the half lives of the nuclear material. Accidents happen due to environmental and geologic events and to human error. The cases of Chernobyl and Fukushima, among others, should give us all pause.

Transition from our dependence on hydrocarbons needs to be to solar, wind and geothermal safe sources. We also need to deal with the methane trapped below the permafrost in the Arctic before the permafrost melts, as this would make capture of the gas virtually impossible.

For these and other reasons, well over 100 public interest, Indigenous and civil society groups from coast to coast across Canada have criticized the federal government for funding small nuclear reactor development. Our statement says that:

"Small Modular Reactor (SMR) development is too slow to address the climate crisis:
The 2020 World Nuclear Industry Status Report says that developing new nuclear energy is too slow to address the climate crisis – as well as more expensive – compared to renewable energy and energy efficiency. No SMRs have yet been built and the models being proposed will take a decade or more to develop.

SMRs are more expensive than renewable energy:
A Canadian study found that energy from small nuclear reactors would be up to ten times the cost of renewable energy. In the past decade, the cost of building solar, wind power and battery storage has gone down dramatically, while the cost of building new nuclear reactors has gone up. Small reactors will be even more expensive per unit of power than the current large ones.

Nuclear power creates fewer jobs than renewable energy:
Renewable energy is one of the fastest-growing job sectors in North America. An American study found that solar energy leads to six times as many jobs as nuclear power for each gigawatt-hour of electricity generated.

There are better sources of energy:
[NRCAn] Minister O'Regan said repeatedly, without providing evidence, that there is no path to net-zero greenhouse gas emissions without nuclear energy. In fact, on the contrary a new study of 123 countries over 25 years found that countries that invested in renewable energy lowered their carbon emissions much more than those reliant on nuclear energy."

Our statement can be found here: https://cela.ca/statement-on-small-modular-reactors/

Yours respectfully,

Jorge (George) Sorger, PhD
sorger@mcmaster.ca
Council of Canadians - Ottawa Chapter