Thank you for the opportunity to submit comments regarding the Bruce C Project.

Without having selected a reactor design, Bruce Power has already started an impact assessment, wanting approval without stating what kind of nuclear power plant they would build. Most assuredly and idiotically putting the cart before the horse.Without this information and wanting approval without stating what kind of power plant they will build, it is impossible for a review panel to approve this project, as their impact assessment would be missing critical information.

The guidelines are clear.There has not been an examination of the need for this project, nor an examination of environmentally friendlier and less costly alternatives. How is it possible to even consider approval? There is the matter of the creation of massive amounts of radioactive nuclear waste. What kind of reactor? How much more waste? If SMR's are considered, and according to Lindsay Krall and Alison McFarland, we know that the use of HALUE fuel creates 2-30 times more nuclear waste per unit of energy used and this is even more dangerous high level waste.

There must be a cost-benefit analysis. It is clear that the construction and then the operating of a nuclear facility is the costliest form of energy to be produced and sold on earth. The lethal nuclear waste that is produced must be watched over and cared for, for hundreds of thousands of years. The cost-benefits analysis should include this. This analysis must also include the health costs to society. The cancers that are sure to develop in workers and in the surrounding community must be taken into account.The personal financial cost as well as the medical and health insurance costs need to be accounted for. Costs are enormous.There are no benefits. The existing data is clear that people will die from radiation caused by nuclear power.

Nuclear waste inventories and characterizations for all waste categories - low level waste, high level waste and short, medium and long term storage costs must be included. The analysis must also include the impacts on the local environment and population, including the impact to Lake Huron and the Great Lakes - drinking water supply for millions of humans.

The environmental impact analysis must include a detailed list of all radionuclides that would or could be released to the air, water and soil as well as the impacts of pathways of ingestion. This assessment must include wild life - including the impacts on fish habitats and nurseries as well as on the fish themselves and the aquatic eco-systems which support all life.

Is well known by now - by the IAEA, the NRC in the United States and by Canadian agencies, that nuclear energy is not zero emissions - not even low emissions.*During it's life cycle and energy production, nuclear reactors produce large quantities of greenhouse gas emissions (GHG) from construction, natural gas power and the mining, milling and transportation of uranium causing great harms and serious illnesses, mostly upon the Indigenous peoples.* Emissions from operating nuclear reactors include non-monitored GHG's of radioactive CO_2, radioactive methane, tritium and Krypton-85, all powerful climate change accelerators. Nuclear reactors emit many other radionuclides into our air, water, and land including strontium-90 and cesium-137, known carcinogens.

Krypton 85, a powerful radioactive green house gas enhances air ionization and interferes with the atmospheric-electrical system and water balance of the earth's atmosphere. Produced during nuclear fission, emissions have increased in the atmosphere 10 million times since the beginning of the nuclear era. In the 1970's, the International Atomic Energy Agency (IAEA) knew that "global changes in the atmospheric electric circuit will occur within 50 years and require further investigation." In 1994 the IAEA issued another report adding "This is reason for concern. There are unforeseeable effects for weather and

climate if the Krypton-85 content of the earth atmosphere continues to rise. In addition, human well-being may be expected to be impaired as a result of the diminished atmospheric-electrical field." 50 years ago is now. N*uclear power is not zero emissions.* Nuclear power is a climate change accelerator.

Nuclear reactors use vast quantities of water and return hot thermal pollution back into the water source. Waters worldwide are not only rising causing flooding, but rising in temperature significantly and nuclear power plants end up having to shut down because "cooling waters" are not cool enough. Nuclear power seems to have a preferred status as a pollutor, with radioactive waste that has no solution for safety or storage. Considering the millions of people, wild and aquatic life that rely on Lake Huron, part of the Great Lakes, this project is of unconscionable consideration.

Bruce Nuclear Generating Station that already has eight (8) nuclear reactors, is the largest operating facility in Canada and still one of the largest nuclear power plants in the world. The amount of dirty energy used to build and operate a nuclear facility and the amount of radioactive nuclear waste that will be created and released into the air people breathe, water people drink and land used for growing food - is staggering. It is impossible to fathom the need for four (4) new, massive nuclear reactors. The cost, the environmental damages and the egregious damages to First Nations People must be considered.

Lake Huron, one of the Five Great Lakes of North America, the second largest of the freshwater Great Lakes, is shared by Ontario, Canada and the State of Michigan in the U.S. The Lakes have a remarkable geologic and hydrologic history, but the most important history is that of the indigenous people. They are water protectors, who know that clean water equals life. The most important issue, front and center is that of gaining the free (freely given), prior and informed consent from the First Nations People. It is incumbent upon and the duty of the Crown to receive permission from the First Nations.

Without this - and without even naming what kind of reactor (s) would be built and without an environmental statement, this project is impossible to consider.

Sincerely,

Jacquelyn Drechsler and Jocelyn DeCrescenzo

<personal information removed>