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**To:** [Williams, Onika](#); [Spritzer, Ronald](#)  
**Subject:** opposed to a proposed new reactor in Monroe County, Michigan  
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I am opposed to the proposed new reactor in Monroe County Michigan because:

1. It costs too much. Fermi 3's price tag is around \$20 billion and climbing. That money should be invested in renewables, such as wind power and solar photovoltaics, as well as efficiency, instead. Renewables and efficiency are the future, they are the solution to the climate crisis, not a new atomic reactor.
2. It takes too long. Fermi 3's 1,550 Megawatts of electricity are not needed. Fermi 3 would take years, if not decades, to build. As electricity demand in the area increases over time, efficiency and renewables can meet it better than such a large, centralized plant. (In fact, Detroit Edison itself has just indicated it would much more likely build natural gas fired plant, instead of Fermi 3.)
3. Weapons proliferation risks. Fermi 3 would be General Electric-Hitachi (GEH) so-called "Economic Simplified Boiling Water Reactor" (ESBWR) design. GEH also runs a new laser-based uranium enrichment facility in North Carolina, which would likely supply enriched uranium fuel to Fermi 3. The spread of laser enrichment technology worldwide, which GEH and NRC have thus encouraged, will worsen risks of nuclear weapons proliferation, due to its easily hidden small size, and its high efficiency for achieving weapons-grade highly enriched uranium (HEU).
4. Accident risks. The brand new Fermi 3, co-located with the age-degraded Fermi 2, would place "break-in phase" risks beside "break-down phase" risks. The 1966 "We Almost Lost Detroit" Fermi 1 meltdown, the 1979 Three Mile Island meltdown, and the 1986 Chernobyl nuclear catastrophe all occurred at new reactors, where the "bugs" in design, construction, and operator performance got "work out" the "hard way." Fermi 2 is the identical same design as Fukushima Daiichi Units 1 to 4 -- General Electric Mark I Boiling Water Reactors. But Fermi 2 is nearly as big as Fukushima Daiichi Units 1 and 2 put together. As shown by the Fukushima Daiichi itself, co-locating reactors and radioactive waste storage can lead to cascading, large-scale catastrophes.
5. Attack risks. Fermi 3 would be located on the shore of Lake Erie. The Great Lakes provide drinking water for 40 million people in 8 U.S. states, 2 Canadian provinces, and a large number of Native American First Nations. Such mega-risks should not be located next to such an irreplaceable natural resource.
6. Radioactive waste. The mountain of commercial high-level radioactive waste is now over a half-century tall, and we don't even know what to do with the first cupful. Fermi 2's Mark I storage pool contains well over 600 tons of HLRW, multiple times more than Fukushima Daiichi Unit 4's, on the brink of collapse, which would unleash a catastrophic radioactive waste fire. Fermi 2 and Fukushima Daiichi Unit 4's storage pools have something in common: the HLRW is stuck, they are not able to unload it. At Fermi 2, because structural welds were never installed in the adjacent structures. At Fukushima, because of the explosion that devastated Unit 4. Fermi 3 would only add to the HLRW woes on the Lake Erie shore. NRC should have no confidence in the safety and soundness of HLRW storage at Fermi. Electricity would be the fleeting byproduct at Fermi 3. The actual product would be forever deadly radioactive waste. The only solution to the HLRW problem is to not make it in the first place.
7. "Routine" radioactivity releases. Fermi 3 would add to the radiological burden in the environment, due to "permitted" or "allowed" releases of radioactivity into the air and water. Uncontrolled and unmonitored leaks should also be expected, as there is an epidemic of such leaks at U.S. reactors today. In addition to radioactivity releases, Fermi 3 would release toxic chemicals, as well as waste heat, into Lake Erie. This will worsen the already bad toxic algal blooms marking Lake Erie's demise.
8. Fermi 3's construction would mark the biggest impact on fragile Great Lakes coastal wetlands in the history of applicable environmental protection laws, according to the State of Michigan. This will

significantly harm the threatened Eastern Fox Snake, an indigenous constrictor species, which calls those Great Lakes coastal wetlands home. In fact, numerous threatened and endangered species would be harmed by Fermi 3's construction and operation. This would be made worse by tens of miles of associated new transmission lines that would be built as part of the Fermi 3 project, including through fragile forested wetlands.

As a physician, I am aware that our environment is becoming more radioactive and that radiation (including caesium and strontium) is bioaccumulative in living things.

(<http://vceenviroscience.edublogs.org/2011/10/15/bioaccumulation-of-radioactive-elements/>)

Cesium-137 has chemical properties that are similar to potassium. Because the cells in plants, animals and in the human body cannot distinguish between cesium-137 and potassium, cesium-137 can be mistaken by the body to be potassium and absorbed as such. Because most potassium in the human body is found in the blood, cesium-137 can be found in all parts of the human body.

Strontium-90, on the other hand, has chemical properties similar to that of calcium. Hence, strontium-90 concentrates in milk and bones.

The health effects are cancers, bone tumors and possibly birth defects. Cancers linked to ionizing radiation exposure include most blood cancers (leukemia, lymphoma), lung cancer, and many solid tumors of various organs. Birth defects can include downs syndrome, cleft palate or lip, congenital malformations, spinal defects, kidney, liver damage and more.

Humans are prone to making errors and with each new reactor built we face a more radioactive world. This is a dangerous way to make energy and should not be attempted.

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