

June 2022 CRAFT Times vol. 9 no. 6

Fermi Malfunctions on Restart

The Fermi reactor has previously had troubles with the facility's High Pressure Coolant Injection (HPCI) System, and maintenance was supposed to replace an "air operated containment valve" solenoid as the repair during the refueling outage.

However, during the restart operations on 5/11/22, the HPCI malfunctioned again when the reactor had only reached 15 percent power.

DTE reported in their filing, "the turbine tripped without operator action. The HPCI was declared inoperable as an investigation into the cause of this trip is ongoing."

Fermi's HPCI has been problematic since July 13, 1985, and since then there have been forty-eight separate License Event Reports (LERs) pertaining to Fermi's HPCI, two within the last year.

We feel this speaks to DTE's concern for our safety since the HPCI is what turns the water on a mishap. We certainly hope it is never needed, but we would like to know it stands in good condition should it be needed. Like the saying, "Hope for the best, but be prepared for the worst."

The reactor was down for three months during the refueling outage instead of the three weeks it usually takes. The NRC named COVID as the cause.

In addition to a new rotor, teams also replaced a third of the fuel and other maintenance and tests. Fermi went back on the grid on the 13th at 22% power.

(We take a different view of these reports after watching the Three Mile Island Meltdown series on Netflix.)

Citizens' Resistance at Fermi Two

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Palisades Reactor Shuts Down

The Palisades reactor, owned by Entergy, is located on the shore of Lake Michigan in Covert Township. Palisades has been described by Beyond Nuclear as having the most embrittled reactor pressure vessel in the US reactor fleet.

The reactor was scheduled to shut down at the end of May but shut down a week early. The plan to shut down was made in 2017 when Entergy's contract with Consumers Energy expired.

Last month, Gov. Gretchen Whitmer sent a letter to the U.S. Dept. of Energy asking them to provide money to keep the reactor running.

"The time is way overdue to shut it down," said Michael J. Keegan of Don't Waste Michigan, an environmental organization opposed to Palisades. "We have better, cheaper, reliable energy sources."

The reactor was sold to Holtec International, a private corporation, to be decommissioned. Of the appropriate six hundred employees, 260 will stay on to do clean-up.

"We are thankful that Palisades shut down before it melted down," said Kevin Kamps, Beyond Nuclear and DWM. See insert.



Fermi Latest Inspection Report

The Nuclear Regulatory Commission (NRC) completed its Integrated Inspection Report on March 31, 2022. Two violations were documented, and dozens of problems were cited in the CARD system, which is not available to the public. In addition to the violations, the report says they are "tracking the HPCI Inoperable due to Contact Oxidation."

One violation involved failure to "routinely check the water level of the Alternate Diesel Fire Pump Engine Fuel-Water Separator" which had previously gotten ice in the system. On Jan. 7, 2022, the pump refused to start, and investigations found ice in the fuel lines.

Also mentioned were two small fires, "One occurred due to an electrical fault in a breaker, the other in the drywell."

Ludington Pumped Storage Plant

Those opposed to the solar movement spout ridiculous things like "the sun doesn't shine at night" and "there is no way to store the energy." DTE representatives never refute those statements even though DTE is co-owner of the largest pumped storage plants in the world.

The 2,000 Megawatts (MW) Ludington Pumped Storage Plant, which was built in 1973 in Mason County is jointly owned by DTE and Consumers, can supply power to 1.4 million households.

How it works is a reservoir above the shoreline holds twenty-seven billion gallons of water with a surface area of more than a square mile. During demand, water is released downhill through turbines that produce electricity. DTE and Consumers are doing a \$500 million upgrade at the plant that adds 300 MW to the mix.

Fermi 2's Christmas 1993 Accident

"When Fermi shut down for refueling in September 1992, the turbine vendor recommended that blades in Low Pressure Turbine No. 3 be replaced during the outage," stated David Lochbaum, retired nuclear engineer who issued an in-depth article in April examining an event that endangered us all.

DTE declined to replace the turbine blades even though their vibrations kept the reactor from reaching one hundred percent power. On Christmas Day 1993, the turbine shook itself to pieces and sent shrapnel through two cooling water systems.

Five-hundred-thousand gallons of water flooded the basements of the turbine and radwaste buildings, and another 531,840 gallons filled the Condensation Storage Tank.

What to do with a million gallons of radioactive contaminated water? Dump it in Lake Erie of course. The Ohio Congressional delegation asked the Nuclear Regulatory Commission to deny DTE permission to discharge, as did the Servants of Immaculate Heart of Mary Sisters, and others.

Outraged citizens came together to try to convince the NRC not to let DTE dump a million gallons of radioactive waste into Lake Erie, but the NRC did not listen to us either.

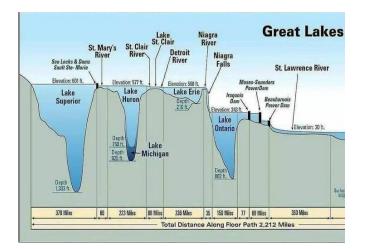
A subtitle to this article should be 'Why CRAFT was formed' and other such shenanigans was why we revived CRAFT nine years ago.

Here is Lochbaum's report: <u>tinyurl.com/fermi93</u> Also the resources page on our website has this presentation along with all our newsletters and inserts: <u>shutdownfermi.org/resources</u>

House Bill No. 6019 – Nuke Study

The bill to study ramping up nuclear operations in Michigan passed the House unanimously and was sent on to the Senate Energy Committee.

"Personally, I'm a big fan of nuclear energy. Clean, emission-free, safe, reliable," said Republican Representative Graham Filler of DeWitt. "One of my personal goals to make Michigan a key nuclear energy state. I want to attract researchers, I want that all but right now, I'll just settle for a very important study."



Fermi Non-Rad Operating Report

DTE does not own the corridors where their electricity is transported and therefore the corridors are not covered by environmental rules DTE is. ITC Transmission is the owner and here is what the report said about them.

"ITC vegetation managers confirmed that in 2021, ITC applied 98.43 acres of herbicide treated brush of the Brownstown-Fermi corridor and 413.11 acres of the Wayne-Monroe corridor were sprayed between July and September."

There were two incidents of noncompliance in 2021. The first was on March 30, 2021, "While dewatering the oily waste equalization basin into the nearby sanitary manhole #7, system pluggage occurred causing the rainwater, groundwater, and sanitary sewage line to back flow and spill onto the ground." Approximately 150 gallons overflowed.

"The second event occurred on June 15, 2021, when Fermi 2 personnel discovered the quarterly total copper sample exceeded the site's NPDES permit limit at monitoring point 001A." DTE was also reprimanded for not reporting the incident to Michigan Department of Environment, Great Lakes, and Energy (EGLE), the agency charged with monitoring Fermi's discharge permit.

FYI - In the News

= The U.S. Nuclear Regulatory Commission (NRC) issued an Order suspending the general license authority under NRC regulations to export radioactive material, and deuterium for nuclear end use, to the Russian Federation.

= Michigan will receive more than \$27 million in federal grants and loans for about a half-dozen

clean energy installations and a major electric cooperative building project.

= Germany will oppose European Union plans to include nuclear energy as a sustainable investment in its "taxonomy" policy for labelling green investments.

= The U.S. Department of Energy has extended a deadline by 47 days, to July 5 for nuclear power plants to apply for federal funding to keep them running.

= DTE investors voted down an activist shareholder proposal to report on greenhouse gas emissions more fully at an annual meeting of common stock shareholders last month.

= John Oliver's <u>expose on electric utilities</u> was marvelous, explaining the high cost of abusive utility behavior. The segment was full of rich storytelling that made clear the dangers of allowing these utility companies to continue operating in

their current fashion.

= President Joe Biden and Prime Minister Fumio Kishida of Japan announced the successful removal of highly enriched uranium (HEU) from three Japanese sites to the United States for disposal.

= *Detroit* — City leaders broke ground 5/19/2022 on a new \$6.6 million solar-powered community center east of Detroit's riverfront, replacing the nearby Lenox Center that has sat vacant for nearly a decade.

= Senator Gary Peters is among the bi-partisan pronuclear representatives. Here is a May statement by him, "The Senate-version of this <u>legislation that I</u> <u>helped pass last year</u> includes \$50 billion to increase production of semiconductors – and I <u>added an additional</u> \$2 billion in new funding for mature semiconductor technologies that critical manufacturing industries – like the auto industry – rely on.

= On May 21, 2022, Kazakhstan and Russia met to explore prospects for nuclear energy cooperation, <u>Trend</u> reports "... the leaders also confirmed their readiness to continue collaboration for the successful implementation of existing projects and to discuss new areas of mutually beneficial partnership."

May Fermi Documents Received

= ML 22116A160. Safety Relief Valve Report. DTE said all was well last year. https://adamswebsearch2.nrc.gov/webSearch2/ main.jsp?AccessionNumber=ML22116A160

= ML22119A173. Fermi 3 Periodic Reports. No
reported changes. Still "To Be Determined."
https://adamswebsearch2.nrc.gov/webSearch2/
main.jsp?AccessionNumber=ML22119A173

= ML22119A255. Annual Non-Radiological Environmental Operating Report. See article, p 2. https://adamswebsearch2.nrc.gov/webSearch2/ main.jsp?AccessionNumber=ML22119A255

= ML2212A044. Fermi 2 Integrated Inspection Report. See article, page 1.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML22126A044

= Event Number 55894. DTE restarted Fermi and on 5/11/22, when the reactor got to 10 %, "the turbine tripped without operator action." This issue was supposed to be fixed during the outage by maintenance replacing a solenoid.

= ML22130A516. Information Request for Baseline Inspection and Emergency Plans.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML22130A516

= ML22131A209. NRC Order Suspending export shipments to the Russian Federation.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML22131A209

= ML22138A174. Changes to Tech. Specs Manual https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML22138A174

ML22144A105. NRC Report of Open House. https://adamswebsearch2.nrc.gov/webSearch2/ main.jsp?AccessionNumber=ML22144A105



NRC In-Person Public Meeting

We attended the Nuclear Regulatory Commission's Open House to discuss Fermi with the public. In this case, the public consisted of two people from CRAFT, one from the Michigan Environmental Justice Campaign, and one from the Alliance to Halt Fermi Three.

There were six NRC officials; one from the Michigan Department of Environment, Great Lakes, and Energy (EGLE); and two DTE (Stephen Tait, Fermi spokesperson, and Eric Olson, Fermi Site VP). Olson assured me that the fuel loaded in Fermi during the outage was from Kazakhstan.

The NRC report of the meeting only listed three members of the public in attendance: J. Collins, J. Deerinwater, G. Alcazar. They did not list that we were from CRAFT or that Pam Barker of the Alliance to Halt Fermi 3 was there.



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