	Fer	mi e e e e e e e e e e e e e e e e e e e
	N	Jewport MI
Date	Reactor	Event Description
19680726	Unit 2	Plans for the reactor were announced
19690429	Unit 2	The construction permit application was submitted
19691130	Unit 2	Construction began at the site.
19720926	Unit 2	The construction permit was issued
19731130	Unit 2	Construction was suspended due to financing problems.
19761130	Unit 2	Construction was resumed after Wolverine Power Supply Cooperative purchased a 13.6 percent share of the plant.
19791217	Unit 2	An electrician was killed after falling about 20 feet from scaffolding.
19801024	Unit 2	An individual was discovered in the owner-controlled area twice. The first time (3 am), security personnel questioned and released the individual. The second time (4:30 am), security personnel called local authorities who took the individual into custody.
19811207	Unit 2	Workers discovered apparent vandalism to a 2-inch globe valve, a 1-inch stainless steel pipe, and a 90-degree pipe elbow in the residual heat removal system. All three components had dents from a blunt object.
19811210	Unit 2	A contract electrician died after falling about 20 feet from a scaffolding platform onto the turbine building floor.
19841130	Unit 2	Radioactively contaminated water leaked from the condensate storage tank into the soil. Potentially contaminated soil was excavated, monitored, and approved for re-use onsite as fill dirt.
19841231	Unit 2	Workers determined that 2 of the 4 emergency diesel generators were damaged, apparently by cold startup of the engines without prelubrication of the main bearings.
19850328	Unit 2	During initial fuel loading in Mode 5, a reactor scram occurred at 11:45 pm when power to system service transformer #64 was lost, which de-energized division 1 of the reactor protection system. Because the neutron monitoring shorting links were removed for reactor core loading, the loss of reactor protection system division 1 resulted in a reactor scram. Troubleshooting did not identify the reason for the power loss that triggered this event. Following a similar event on March 31, 1985, workers determined that water entering a switchgear cabinet caused a ground fault that resulted in a power loss. Since both events were preceded by heavy rainstorms with strong wind conditions, it was believed that water intrusion caused both events.

1/17/2022 Page 1 of 34

	Fer	<mark>mi en la companya di managan di man</mark>
	N	ewport MI
Date	Reactor	Event Description
19850408	Unit 2	With the reactor in Mode 5, a reactor scram occurred at 4:26 pm when an instrument and control technician valving a reactor vessel water level instrument back into service following its calibration. The worker opened the isolation valve too quickly, causing a pressure transient in the reference leg for the instrument that produced a false signal of low water level in the reactor vessel. The corrective action included training on a mockup of the transmitter and valve arrangement for instruments sharing a common reference leg.
19850425	Unit 2	With the reactor in Mode 5, a reactor scram occurred when workers conducting control rod drive refurbishment under the reactor vessel bumped an intermediate range monitor (IRM) cable, causing a false upscale trip signal on IRM H in reactor protection system B. Because reactor protection system A was already in the tripped condition due to maintenance on main steam line radiation monitors, a full reactor scram resulted.
19850427	Unit 2	With the reactor in Mode 5, reactor scrams at 11:06 am and 2:06 pm occurred due to radio-frequency signals generated by test equipment being used to troubleshoot intermediate range monitor circuits locatede in the same cabinet as the source range monitors. The shorting links were removed, allowing any source range monitor upscale trip to cause a reactor scram.
19850428	Unit 2	With the reactor in Mode 5, a reactor scram occurred at 1:32 am when an operator installed the source range monitor shorting links using an obsolete version of the procedure. A second reactor scram occurred moments later when the operator installed a second shorting link using the obsolete procedure again.
19850501	Unit 2	With the reactor in Mode 5, a reactor scram occurred when an instrument and control technician valving a reactor vessel water level instrument back into service following its calibration. The worker opened the isolation valve too quickly, causing a pressure transient in the reference leg for the instrument that produced a false signal of low water level in the reactor vessel.
19850506	Unit 2	With the reactor in Mode 5, a reactor scram occurred at 2:01 pm when an instrument and control technician valving a reactor vessel water level instrument back into service following its calibration. The worker opened the isolation valve too quickly, causing a pressure transient in the reference leg for the instrument that produced a false signal of low water level in the reactor vessel.
19850509	Unit 2	With the reactor in Mode 5, a reactor scram occurred when a non-licensed operator improperly manipulated valves for a reactor water level instrument. The non-licensed operator attempted to remove a temporary nitrogen supply that supplied a simulated reference leg signal for the flood-up range water level instrument.
19850621	Unit 2	Initial criticality of the reactor core achieved

1/17/2022 Page 2 of 34

	Fer	mi <u>mi</u> mana ang kalangan ang kal
Newport MI		
Date	Reactor	Event Description
19850701	Unit 2	The operators inadvertently achieved reactor criticality by withdrawing 11 control rods fully from the reactor, instead of only one notch (six inches) as specified per procedure. The NRC was not informed until two weeks later, prompting the NRC to refer the matter to the Department of Justice for possible criminal investigation.
19850705	Unit 2	The reactor automatically scrammed on low water level in the reactor vessel when a controller malfunctioned causing all the turbine bypass valves to close.
19850715	Unit 2	The NRC issued a full power operating license.
19850716	Unit 2	The NRC issued a confirmatory action leter limiting the reactor power level to 5 percent of rated.
19850723	Unit 2	Detroit Edison made a formal presentation to the NRC regarding the July 2, 1985, inadertent criticality event's causes and consequences.
19850903	Unit 2	The reactor scrammed from 3 percent power at 3:34 pm when a Group 1 primary containment isolation signal closed the main steam isolation valves, causing a reactor scram on high pressure in the reactor vessel. Workers attempted to refill a condenser pressure sensing line with water produced a false signal of high condenser pressure, which caused a half-isolation signal for the main steam isolation valves. Because there was already a half-isolation signal in effect due to an earlier problem with a main steam line radiation instrument, a full isolation signal was generated.
19850905	Unit 2	Detroit Edison informed the NRC in writing that all actions needed to correct the causes of the July 2, 1985, inadvertent criticality event had been completed.
19850927	Unit 2	The reactor automatically scrammed on high reactor pressure during turbine testing when one turbine bypass valve spuriously closed. It was determined that noise from the turbine speed pickup was amplified and seen by the run-up module as part of the speed pick-up. This caused a control signal error that closed the turbine bypass valve.
19851001	Unit 2	The reactor automatically scrammed on low water level in the reactor vessel. The operators were increasing the reactor pressure for a startup test when both turbine bypass valves unexpectedly opened. The resulting pressure drop caused the water level in the reactor vessel to swell above the high level setpoint and trip the feedwater pump. When the operators closed the turbine bypass valves, the resulting pressure splike drove the water level below the low level scram setpoint.
19851011	Unit 2	The reactor scrammed on low water level in the reactor vessel caused by the reference leg flashing to steam due to radiant energy conduction. The company elected to extend the outage to replace the main turbine bypass lines. Numerous through-wall cracks had been found in the piping. The reactor remained shut down the remainder of the year.

1/17/2022 Page 3 of 34

	Fer	mi en la companya di salah
	N	lewport MI
Date	Reactor	Event Description
19851130	Unit 2	Radioactively contaminated water leaked from the condensate storage tank into the soil around the secondary containment. The NRC approved the company's request to leave the contaminated soil in-place. To prevent future contamination, a leak-tight poly liner was installed on the surface of the diked area around the condensate storage tank.
19851224	Unit 2	The NRC ordered the company to report in detail the actions it would take to improve operations, maintenance, engineering, and security at the site. The NRC informed the company that it would not authorize reactor operation above 5 percent until it had reviewed the company's plan and agreed the measures would address the known problems.
19851224	Unit 2	The NRC issued a request pursuant to 10 CFR 50.54(f) seeking the company's plans to improve regulatory performance. The NRC cited a series of operational and equipment problems at Fermi since July 1985.
19860109	Unit 2	The NRC responded to Congressman John Dingell, Chairmand of the Hosue Committee on Energy and Commerce, about its investigation into the July 2, 1985 inadvertent criticality event.
19860131	Unit 2	The company announced that the reactor outage, which began on October 11, 1985, would be prolonged by the resolution of emergency diesel generator bearing problems.
19860213	Unit 2	At the request of the Regional Administrator for NRC Region III, OIG investigated when the NRC was informed of the July 2, 1985, inadverent criticality event. OIG determined that the NRC Resident Inspector was notified on July 3, 1985, about a significant operator error, but not told about the inadvertent criticality consequence. OIG determined that the NRC was not informed of the inadvertent criticality until July 15, 1985.
19860316	Unit 2	A load-side electrical breaker from reactor protection system bus A to logic circuits failed to trip when transferring from the motor-generator set to the alternate power source. The operators attempted twice to manually trip the breaker. The breaker responded to the first attempt in 10 seconds and failed to respond at all on the second attempt.
19860331	Unit 2	Seven of the eight main steam isolation valves grossly failed their local leak rate tests. Workers found four broken closing springs in two of the main steam isolation valves.
19860331	Unit 2	The company annoujnced that the current outage would be extended to address questions about 188 embement plates supporting safety-related components like cable trays.

1/17/2022 Page 4 of 34

	Fer	<mark>mi en la companya di manana di mana</mark>
	N	ewport MI
Date	Reactor	Event Description
19860523	Unit 2	The NRC imposed a \$50,000 civil penalty for 13 security violations: 2 failures to take corrective actions to address degraded access barriers; 3 failures to report security events within required times; 2 failures to adequately test and maintain security equipment; 2 failures to adequately control access to vital areas; 1 failure to develop a procedure specified in the security plan; 1 failure to control safeguards documents; and 1 failure to meet training/qualification requirements for security guards.
19860703	Unit 2	The NRC imposed a \$300,000 civil penalty for the premature criticality that occurred on July 1, 1985.
19860730	Unit 2	The NRC imposed a \$75,000 civil penalty for numerous violations: (a) from July 23, 1985, to July 29, 1985, two of the four emergency diesel generators were inoperable because a cooling water valve was improperly closed; (b) from June 21, 1985, until September 2, 1985, a open valve and an uncapped pipe created a potential leakage pathway for radioactivity from the containment; and © from June 21 1985, until August 28, 1985, the system used to control hydrogen buildup inside containment had unacceptably high leakage.
19860804	Unit 2	The operators achieved reactor criticality to end an outage that began October 11, 1985.
19860806	Unit 2	An Alert was declared due to a fire in a dc distribution panel that primarily supplied the high pressure coolant injection (HPCI) system components. The reactor was at approximately 1 percent power during a startup with the HPCI system not required to be operable at that low pressure. Operators manually shut down the reactor for repairs to cables damaged by the fire.
19860806	Unit 2	The operators manually shut down the reactor after a valve motor breaker overheated and actuated the fire extinguisher system.
19860811	Unit 2	The operators achieved reactor criticality.
19860820	Unit 2	The reactor automatically scrammed on high reactor pressure during startup when the operator responded to an inadvertent trip of the feedwater pumps by closing the turbine bypass valves.
19860911	Unit 2	Detroit Edison requested NRC's approval to increase the reactor power level above 5 percent and reiterated that all corrective actions for the July 2, 1985, inadvertent criticality event had been completed.
19860912	Unit 2	The NRC authorized operation up to 20 percent of rated reactor power.
19860921	Unit 2	Reactor output connected to the electrical grid for the first time

1/17/2022 Page 5 of 34

	Fer	<mark>mi en la companya di managan di man</mark>
	N	ewport MI
Date	Reactor	Event Description
19860923	Unit 2	The operators shut down the reactor to repair leaking condenser tubes.
19861017	Unit 2	The reactor automatically scrammed due to a failed reactor pressure regulating valve.
19861017	Unit 2	The unit was connected to the electrical grid to end a 599 hour outage.
19861022	Unit 2	The unit was connected to the electrical grid to end a 106.3 hour outage.
19861023	Unit 2	The operators shut down the reactor to repair the motor-generator set for recirculation pump ${\it A}$.
19861031	Unit 2	During a reactor startup with the reactor power level around 17 percent, the same operator made two out-of-sequence control rod withdrawals. At 3:01 am, the operator skipped a step in the control rod withdrawal procedure and withdrew the next rod one notch. Recognizing the error, the operator notified his supervisor. The NRC Restart Team was notified. Reactor Engineering advised that the control rod be reinserted one notch and it was. At 5:06 am, the same operator withdrew a group of four control rods one notch as per the control rod movement procedure. Instead of moving on to the next step, he mistakenly withdrew the last of the four control rods out an additional notch. He recognized the mistake and notified his supervisor. The NRC Restart Team was informed. The operator was replaced at the controls. The replacement operator inserted the control rod one notch to correct the error.
19861101	Unit 2	The unit was connected to the electrical grid to end a 195.8 hour outage.
19861107	Unit 2	The operators shut down the reactor to repair leaking condenser tubes. The outage was extended when the condensate return line to the condensate storage tank was overpressurized, damaging a condensate storage tank penetration.
19861218	Unit 2	The unit was connected to the electrical grid to end a 996 hour outage.
19870105	Unit 2	The operators shut down the reactor for repairs to cracked welds on instrument taps on all four main steam lines.
19870114	Unit 2	The unit was connected to the electrical grid to end an outage that began on December 31, 1987.
19870115	Unit 2	The NRC approved full power operation.
19870124	Unit 2	The unit was connected to the electrical grid to end a 618.6 hour outage.
19870216	Unit 2	The NRC authorized operation up to 50 percent of rated reactor power.

1/17/2022 Page 6 of 34

	Fer	<mark>mi</mark>
	N	ewport MI
Date	Reactor	Event Description
19870218	Unit 2	The NRC imposed a \$25,000 civil penalty for a design deficiency that could have disabled the emergency core cooling systems during certain accident conditions. The design error was detected on September 8, 1987, and corrected before the reactor restarted. The normal fine of \$50,000 was halved by the NRC due to prompt corrective actions taken by the company.
19870226	Unit 2	The reactor automatically scrammed from 29 percent power at 1:36 pm due to a generator ground fault. An aluminum strip used to aid assembly of the isophase bus duct borke free and contacted the y-phase bus, causing a ground fault.
19870301	Unit 2	The reactor automatically scrammed during startup when workers reset an electrical governor trouble alarm and inadverently de-energized portions of the electrohydraulic control (EHC) system. The turbine bypass valves fully closed.
19870303	Unit 2	The unit was connected to the electrical grid to end a 113.6 hour outage.
19870316	Unit 2	The reactor was shut down as planned during the loss of turbine generator power ascension test. During the outage, workers modified the moisture separator reheaters and replaced the inner springs on the main steam isolation valves.
19870406	Unit 2	The reactor scrammed from 31 percent power at 10:41 pm due when personnel error during the surveillance test of the average power range monitors (APRMs) produced a reactor scram signal.
19870406	Unit 2	The unit was connected to the electrical grid to end a 493.2 hour outage.
19870411	Unit 2	The operators shut down the reactor, again, for repairs to cracked welds on instrument taps on all four main steam lines.
19870513	Unit 2	The reactor scrammed from 18 percent power at 5:03 pm after the south feedwater pump turbine tripped on excessive vibrations, causing the water level in the reactor vessel to drop below the trip setpoint. Workers attributed the high vibration to the high pressure casing drain valve for the south feedwater pump turbine due to an inadequate procedure.
19870515	Unit 2	The NRC impsoed a $$100,000$ civil penalty for violations of surveillance testing requirements.
19870529	Unit 2	The unit was connected to the electrical grid to end a 1,142.6 hour outage.
19870624	Unit 2	The operators manually shut down the reactor after recirculation pump B tripped. Workers replaced the motor-generator set brushes for the recirculation pump.

1/17/2022 Page 7 of 34

	Fer	<mark>mi en la companya di manana di ma</mark>
	N	ewport MI
Date	Reactor	Event Description
19870625	Unit 2	At 8:31 pm, a car drove up near the plant's front gate. An individual emerged from the car and fired a weapon into a field adjacent to the plant. The individual got back into the car and it drove off.
19870626	Unit 2	An operator trainee, who received insufficient instructions, allowed the reactor water temperature to increase to 230F while the unit was supposed to be in cold shutdown (reactor water temperature less than or equal to 200F).
19870701	Unit 2	The unit was connected to the electrical grid to end a 108.7 hour outage.
19870720	Unit 2	The reactor automatically scrammed due to a false indication of high turbine generator vibration.
19870725	Unit 2	The unit was connected to the electrical grid to end a 117.8 hour outage.
19870726	Unit 2	The operators took the generator offline, with the reactor continuing to operate at low power, for repairs to a leaking 20-inch diameter feedwater check valve.
19870731	Unit 2	The reactor automatically scrammed on low water level in the reactor vessel caused by feedwater flow oscillations at low power levels.
19870929	Unit 2	The NRC imposed a \$75,000 civil penalty for a violation occurring on June 26, 1987, in which operators improperly let the reactor change from Mode 4 to Mode 3.
19870929	Unit 2	Workers discovered a suspicious bag with protruding wires at 12:48 am in the main steam tunnel. The FBI was contacted. The Michigan State Police Bomb Disposal Unit arrived onsite at 1:35 pm. The bag was found to contain trash.
19871009	Unit 2	The unit was connected to the electrical grid to end a 1,856.3 hour outage.
19871023	Unit 2	A report issued for the NRC's Operational Safety Team Inspection found that "Operators did not appear to understand the use of the Technical Specificatiosn (TS) as a 'working' document Operators appeared to have a good classroom knowledge of the TS but appeared to have difficulty identifying and complying with its many requirements."
19871205	Unit 2	The NRC authorized operation up to 75 percent of rated reactor power.
19871231	Unit 2	The reactor automatically scrammed from 75 percent power when a cable was inadvertently gorunded during the installation of a temporary monitor and printer on the feedwater control system. Feedwater flow increased until high water level in the reactor vessel tripped the turbine.
19880123	Unit 2	Unit placed into commerical operation

1/17/2022 Page 8 of 34

	Fer	<mark>mi en la companya di manana di mana</mark>
	N	lewport MI
Date	Reactor	Event Description
19880227	Unit 2	The operators manually shut down the reactor after it was determined that testing of the emergency diesel generators had not satisfied technical specification requiremen
19880318	Unit 2	A worker received a bomb threat by phone. The Michigan State Police Bomb Dispose Unit responded to the site and assisted in the search of the facility, which produced negative results. On November 2, 1988, a contractor cleaner laid off in March was stopped for a traffic violation. Property believed to have been stolen from the nuclear plant was found inside his car. The individual confessed to making the March 18th bomb threat call because he had been harassed by co-workers.
19880508	Unit 2	During startup with the reactor power level at approximately 6 percent, the operator performed a surveillance test of the valve logic for the high pressure coolant injection (HPCI) system. The HPCI pump was not operating as the operators positioned valve to test interlocks. During the valve manipulations, the operators opened a pathway for feedwater flow to flow to the condensate storage tank through the HPCI test return line instead of flowing to the reactor vessel. As water level inside the reactor vessel dropped towards the automatic scram setpoint, the operators closed a valve to terminate the flow diversion pathway. As the feedwater pump ramped up to recover the lowered water level, the rapid injection of cool water caused an automatic reactor scram on high-high levels on the intermediate range monitors.
19880515	Unit 2	The unit was connected to the electrical grid to end a 1,848.7 hour outage.
19880518	Unit 2	The NRC's Office for Analysis and Evaluation of Operational Data issued a report of its review of recent operational experience trends at the plant. AEOD reported: "It was found that while the number of atpyes of events at Fermi 2 are not that much different from the rest of the industry, a preponderence of the events are associated with personnel and procedural problems. This preponderence is unklie that of the industry as a whole of that of plants that have been licensed within the last two years This experience is continuing in spite of programs agreed to be instituted in late 198 to address similar problems identified by Region III."
19880531	Unit 2	Four members of the Canadian parliament petitioned the NRC to revoke the reactor's operating license.
19880616	Unit 2	The NRC imposed a \$200,000 civil penalty for two violations: (1) a 1984 modificatio to a containment radiation monitoring system that violated the double containment isolation provisions, and (2) the removal of an air compressor from service on January 14, 1988, that disabled the control room HVAC and the standby gas treatment system.
19880723	Unit 2	The operators shut down the reactor due to excessive unidentified leakage inside containment. Workers repaired leaks from two reactor water cleanup system valves and one reactor core isolation cooling system steam line valve.

1/17/2022 Page 9 of 34

	Fer	mi e e e e e e e e e e e e e e e e e e e
Newport MI		
Date	Reactor	Event Description
19880728	Unit 2	The NRC denied a petition by four members of the Canadian parliament calling for revocation of the reactor's operating license.
19880808	Unit 2	The unit was connected to the electrical grid to end a 376.8 hour outage.
19880813	Unit 2	The reactor scrammed from 78 percent power at 7:22 am when the turbine tripped on high bearing vibration. Workers found that the flow control valve on the cooling water supply to the turbine generator lube oil coolers. The additional cooling water supply to the lube oil coolers created an oil whirl condition that increased turbine vibration above the trip setpints.
19880821	Unit 2	The operators shut down the reactor after the discharge valve on a recirculation pump failed to close upon demand. Workers tightened the leads on the valve's motor operator.
19880825	Unit 2	The unit was connected to the electrical grid to end a 97.1 hour outage.
19880828	Unit 2	The operators shut down the reactor after the discharge valve on a recirculation pump failed to close upon demand. Workers determined that the motor operator had its torque switch settings improperly set in May 1988.
19881007	Unit 2	The unit was connected to the electrical grid to end a 966 hour outage.
19881101	Unit 2	The operators shut down the reactor during a planned test of shut down capability from outside the main control room and for testing of the main steam isolation valves.
19881108	Unit 2	The unit was connected to the electrical grid to end a 168.9 hour outage.
19890103	Unit 2	The operators shut down the reactor to repair a hydrogen leak in the generator stator cooling water system. Workers replaced a static o-ring. During the shut down, a recirculation system motor-generator set field breaker failed.
19890112	Unit 2	The NRC imposed a \$50,000 civil penalty for violations involving improper torque settings on motor operated valves.
19890114	Unit 2	The unit was connected to the electrical grid to end a 274 hour outage.
19890226	Unit 2	The reactor scrammed when an operator used the turbine overspeed reset button inconsistently with procedures.
19890228	Unit 2	The unit was connected to the electrical grid to end a 58.9 hour forced outage.
19890307	Unit 2	The operators shut down the reactor due to excessive vibration on turbine bearing No. 8.

1/17/2022 Page 10 of 34

	Fer	<mark>mi</mark>
	N	lewport MI
Date	Reactor	Event Description
19890319	Unit 2	The unit was connected to the electrical grid to end a 279 hour outage.
19890507	Unit 2	The operators reduced the reactor power level to 60 percent for repairs to the north reactor feedwater pump minimum flow valve and to the north and south heater drain pump valves.
19890630	Unit 2	The operators reduced the reactor power level to 60 percent for a control rod sequence exchange. Problems with the north heater drain pump valves forced the operators to reduce reactor power further to 50 percent.
19890721	Unit 2	Problems with the heater drain pumps caused an automatic runback of the recirculation pumps.
19890805	Unit 2	The operators reduced the reactor power level to 90 percent for turbine valve testing. Problems with the heater drain pumps forced the operators to reduce reactor power further to 59 percent.
19890905	Unit 2	The operators shut down the reactor for repairs to the generator stator cooling water system. The company opted to transition into refueling outage 1.
19891215	Unit 2	The unit was connected to the electrical grid to being operating cycle 2.
19891218	Unit 2	The reactor scrammed from 20 percent power during the surveillance test of the reactor water cleanup differential flow function when the control room operator mistakenly depressed the close pushbuttons for main steam isolation valves A, B, and C.
19891223	Unit 2	The operators manually scrammed the reactor due to a fire beneath the main turbine. Workers determined the source to be oil-soaked lagging for the turbine.
19891224	Unit 2	The unit was connected to the electrical grid to end a 25.5 hour forced outage.
19900108	Unit 2	The operators declared an Unusual Event and began shutting down the reactor to comply with technical specifications after a fuse blew on an electronic card in a testability cabinet for emergency core cooling system division 2. The blown fuse was relaced and the replacement also blew. With power level reduced to 39 percent, workers installed a new ammeter fuse with the specified current rating and it tested satisfactorily. The Unusual Event was exited and the operators returned the reactor power level to 100 percent.
19900211	Unit 2	The operators reduced the reactor power level to 50 percent so leaking condenser tubes could be plugged and the seals on the heater drain pumps could be repaired.

1/17/2022 Page 11 of 34

	Fer	<mark>mi en la companya di manana di ma</mark>
	N	lewport MI
Date	Reactor	Event Description
19900212	Unit 2	The NRC issued a violation based on deliberate material false statements between 1984 and 1986 and failure to properly evaluate construction deficiencies.
19900404	Unit 2	The operators shut down the reactor due to unidentified leakage inside the drywell. Workers identified the source as the welded connection of a 3/4-inch vent and drain line to a residual heat removal pipe.
19900410	Unit 2	The reactor automatically scrammed when the coil of the K1 relay for Division 1 reactor protection system motor-generator set A burned up. The main steam isolation valves closed about six minutes later, triggering the reactor scram signal.
19900415	Unit 2	The unit was connected to the electrical grid to end a 129.3 hour forced outage.
19900630	Unit 2	The operators manually scrammed the reactor to enter a planned outage to repair leaking tubes in a feedwater heater.
19900706	Unit 2	The unit was connected to the electrical grid to end a 139.2 hour scheduled outage.
19900707	Unit 2	The operators reduced the reactor power level and took the generator offline to repair a feedwater heater relief valve.
19900711	Unit 2	The unit was connected to the electrical grid to end a 93.6 hour scheduled outage.
19900929	Unit 2	The operators shut down the reactor for a planned outage to repair leaking tubes in the feedwater heaters.
19901005	Unit 2	The unit was connected to the electrical grid to end a scheduled outage.
19901006	Unit 2	The reactor automatically scrammed on indicated low water level in the reactor vessel. Workers determined that the reference legs for the water level instrumetnation had not been backfilled as recommeded by the vendor.
19901009	Unit 2	The unit was connected to the electrical grid to end a forced outage.
19901018	Unit 2	A technical specialist was fatality injured during balancing and vibration monitoring on a reactor building ventilation supply fan. The 36-inch diameter fan had been removed from service and was on a test stand in the turbine building. The technician was taking vibration data when she fell into the operating fan. A medical examiner pronounced the technician dead at the scene.
19901125	Unit 2	The operators manually scrammed the reactor to enter a planned outage. An increase in turbine bearing vibration was diagnosed as being caused by damge to the south low pressure turbine blades and shroud.

1/17/2022 Page 12 of 34

Fermi		mi en la companya di salah di
	N	ewport MI
Date	Reactor	Event Description
19910102	Unit 2	The unit was connected to the electrical grid to end a 903.1 hour scheduled outage.
19910312	Unit 2	The operators manually scrammed the reactor when a moisture separator reheater drain line weld failure caused condenser vacuum to decrease.
19910313	Unit 2	The unit was connected to the electrical grid at 5:15 pm to end a 34.9 hour forced outage.
19910330	Unit 2	The operators shut down the reactor to enter refueling outage 2. Workers installed new control rods and replaced the condenser tubes with tubes made of titanium.
19910610	Unit 2	The unit was connected to the electrical grid to begin operating cycle 3. During the outage, workers replaced the blade in the three low pressure turbines and in the high pressure turbine, replaced 60,000 brass tubes in the main condenser with titanium tubes, replaced 165 of the 185 control rods, and installed four lead test assemblies of Asea Brown Boveria Atom fuel.
19910614	Unit 2	The operators reduced the reactor power level and took the generator offline for turbine balancing to reduce vibration problems.
19910619	Unit 2	The unit was connected to the electrical grid to end a 118.3 hour scheduled outage.
19910620	Unit 2	The operators reduced the reactor power level and took the generator offline for repairs to south feedwater heater #4.
19910621	Unit 2	The unit was connected to the electrical grid to end a 20.2 hour scheduled outage.
19910627	Unit 2	The operators tripped the turbine which caused an automatic scram of the reactor. The operators responded to overheating of the main transformer. Workers found inadequate clearance between the oil cooling piping and the generator bus dict cover.
19910628	Unit 2	The unit was connected to the electrical grid to end a 38.7 hour forced outage.
19910925	Unit 2	The operators reduced the reactor power level and took the generator offline for repair of the generator slip rings.
19910928	Unit 2	The unit was connected to the electrical grid to end a 77.3 hour scheduled outage.
19911210	Unit 2	The reactor was shut down for a planned outage to replace a main transformer.
19911220	Unit 2	The unit was connected to the electrical grid to end a 234.9 hour scheduled outage. During the outage, a crane boom made momentary contact with one phase of the 120 kilovolt transmission line providing offsite power to the plant. Power supply was interrupted for a few cycles, but no sustained loss of offsite power resulted.

1/17/2022 Page 13 of 34

	Fer	<mark>mi en la companya di manana di mana</mark>
	N	lewport MI
Date	Reactor	Event Description
19920316	Unit 2	The operators manually scrammed the reactor when inadvertent initiation of the low pressure coolant injection mode of residual heat removal during a test caused a reactor coolant system runback and recirculation pump trip that put the unit in an instability region of the power-to-flow operating map.
19920318	Unit 2	The unit was connected to the electrical grid to end a 45.6 hour forced outage.
19920407	Unit 2	The operators shut down the reactor after a drywell vacuum breaker failed to reclose following a surveillance test.
19920411	Unit 2	The unit was connected to the electrical grid to end a 92.8 hour forced outage.
19920829	Unit 2	The operators reduced the reactor power level and conducted flux tilt testing to locate a failed fuel bundle. The fuel defect was the first found at Fermi Unit 2.
19920901	Unit 2	During the third refueling outage, Detroit Edison did not follow General Electric's recommendation to replace the 8th stage turbine blades in the low pressure turbine.
19920909	Unit 2	The NRC approved a 4 percent increase in the maximum licensed power level.
19920912	Unit 2	The operators shut down the reactor to enter refueling outage 3.
19921107	Unit 2	The unit was connected to the electrical grid to begin operating cycle 4. During the outage, workers installed an eigth condensate filter demineralzier, replaced safety relief valves, replaced piping due to erosion/corrosion, installed the torus hardened vent, and replaced main transformer 2B.
19921118	Unit 2	The reactor automatically scrammed when inadvertent opening of the condensate demineralizer inlet valve dropped the suction pressure to the heater drain tank pumps, causing them to trip.
19921120	Unit 2	The unit was connected to the electrical grid to end a 57.2 hour forced outage.
19921205	Unit 2	The reactor was shut down to repair a ruptured extraction steam line (extraction line to feedwater heater #4).
19921214	Unit 2	The unit was connected to the electrical grid to end a 209.6 hour scheduled outage.
19930210	Unit 2	The operators shut down the reactor when a condenser tube leak caused water chemistry parameters to reach action levels.
19930213	Unit 2	The unit was connected to the electrical grid to end a 81.8 hour forced outage.

1/17/2022 Page 14 of 34

	Fer	mi e e e e e e e e e e e e e e e e e e e
	N	lewport MI
Date	Reactor	Event Description
19930219	Unit 2	The reactor automatically scrammed due to a pump breaker trip relay failure during testing.
19930220	Unit 2	The unit was connected to the electrical grid to end a 31.7 hour forced outage.
19930410	Unit 2	The reactor was shut down to repair a ruptured extraction steam line.
19930420	Unit 2	The reactor automatically scrammed during startup when an incorrectly installed test instrument allowed water to leak onto the main steam line pressure transmitters.
19930420	Unit 2	The unit was connected to the electrical grid to end a 239.6 hour scheduled outage.
19930421	Unit 2	The unit was connected to the electrical grid to end a 33.4 hour forced outage.
19930813	Unit 2	The reactor automatically scrammed when the turbine tripped due to a false indication of high water level in the reactor vessel.
19930815	Unit 2	The unit was connected to the electrical grid to end a 49 hour forced outage.
19930917	Unit 2	The operators manually scrammed the reactor during a controlled shut down to repair a heater drain system level control valve.
19930920	Unit 2	The operators manually scrammed the reactor during startup when the main turbine turning gear circuit breaker failed. The reactor was shut down to minimize differential heating of the turbine shaft with the turning gear out of service.
19930920	Unit 2	The unit was connected to the electrical grid to end a 70.4 hour scheduled outage.
19930921	Unit 2	The unit was connected to the electrical grid to end a 22 hour forced outage.
19931225	Unit 2	Began year-plus outage
19931225	Unit 2	An Alert was declared after catastrophic failure of the turbine triggered a turbine trip and automatic reactor scram.
19931225	Unit 2	Reactor shut down when the 8th stage low pressure turbine blades catastrophically failed - reactor had been administratively limited to 93 percent power since early 1993 due to increased turbine vibrations. About 500,000 of water from the fire suppression systems and broken piping flooded six feet of the turbine building basement. Ejected parts of the turbine damaged condenser tubes and allowed circulating water to flood the condenser, which backwashed to the Condensate Storage Tank. High chloride water from the CST found its way to the reactor vessel and damaged in-core nuclear instrumentation.

1/17/2022 Page 15 of 34

Fermi		<mark>mi en la companya di manana di ma</mark>
	N	ewport MI
Date	Reactor	Event Description
19931228	Unit 2	NRC dispatches Augmented Inspection Team to site to investigate turbine failure event
19940108	Unit 2	NRC AIT reports plant is outside design bases: FSAR analysis assumed worst-case event was release of contaminated water from all equipment in the Radwaste Building; Christmas Day event dumped far more contaminated water into the reactor building
19940312	Unit 2	The company began refueling outage 4.
19940507	Unit 2	Refueling outage 4 ended.
19940518	Unit 2	NRC SALP report stated that "The ratings represent a decline in performance from the previous assessment period particularly for the area of Operations. This can be attributed to failure to effectively correct adverse conditions resulting in repetitive performance deficiencies Performance in the area of Operations, which was rated a Category 3, was disappointing Although your staff had identified that perceived schedule pressure was a causal factor in personnel errors, managers did little to change it."
19940519	Unit 2	NRC SALP report stated that "the significance of personnel errors, inadequate work planning, and instances of recurring equipment problems reflected a weakness in developing effective corrective actions for longstanding deficiencies."
19941214	Unit 2	Detroit Edison letter to NRC seeking permission to restart
19941219	Unit 2	Reactor achieves criticality
19950118	Unit 2	Unit connected to the electrical grid to end extended outage
19950118	Unit 2	Ended year-plus outage
19950127	Unit 2	The operators took the generator offline for post-outage balancing of the turbine generator.
19950127	Unit 2	Reactor shut down to balance turbine to resolve vibration problems
19950201	Unit 2	The post-outage balancing was completed, but the generator remained offline for repairs to #4 jacking oil pump discharge piping.
19950212	Unit 2	The unit was connected to the electrical grid to end a 386.5 hour scheduled outage.
19950213	Unit 2	The operators took the generator offline to repair turbine jacking oil system structural concerns.

1/17/2022 Page 16 of 34

Fermi		<mark>mi en la companya di manana di mana</mark>
Newport MI		lewport MI
Date	Reactor	Event Description
19950313	Unit 2	The unit was connected to the electrical grid to end a 663.2 hour forced outage.
19950314	Unit 2	The operators took the generator offline for post-outage balancing of the turbine generator.
19950315	Unit 2	The unit was connected to the electrical grid to end a 18.1 hour scheduled outage.
19950316	Unit 2	The operators took the generator offline to obtain turbine bearing vibration data during coastdown.
19950317	Unit 2	The unit was connected to the electrical grid to end a 20.6 hour scheduled outage.
19950326	Unit 2	The operators took the generator offline to repair a stator cooling water vent line leak.
19950328	Unit 2	The unit was connected to the electrical grid to end a 47.8 hour forced outage.
19950409	Unit 2	The operators manually scrammed the reactor and tripped the turbine from 80 percent power to collect turbine bearing vibration data during coastdown.
19950412	Unit 2	The operators tool the generator offline to repair the steam isolation valve to the moisture separator reheater.
19950412	Unit 2	The unit was connected to the electrical grid to end a 62.1 hour scheduled outage.
19950414	Unit 2	The unit was connected to the electrical grid to end a 41.8 hour forced outage.
19950425	Unit 2	The reactor automatically scrammed on average power range monitor high flux caused by a pressure regulator malfunction.
19950505	Unit 2	The unit was connected to the electrical grid to end a 249.3 hour forced outage.
19950602	Unit 2	The reactor automatically scrammed when the turbine tripped on overspeed during testing.
19950616	Unit 2	The unit was connected to the electrical grid to end a 333.7 hour forced outage.
19950809	Unit 2	At 8:00 am, three individuals entered the owner controlled area from boats. Two individuals climbed up the access ladder on the north cooling tower and unfurled a protest banner. The third individual was detained at the base of the tower. At 5:15 pm, the demonstrators climbed off the cooling tower and were arrested.
19960119	Unit 2	The operators reduced the reactor power level to 55 percent for maintenance to scram solenoid pilot valves.

1/17/2022 Page 17 of 34

Fermi		<mark>mi en la companya di manana di ma</mark>
	N	lewport MI
Date	Reactor	Event Description
19960205	Unit 2	Service water pump C repeatedly failed to start during a test. Workers later dsicovered an ice buildup on the pump shaft.
19960210	Unit 2	The operators reduced the reactor power level to 65 percent for repairs to a steam leak on Feedwater Heater No. 5 and to replace the low pressure switch on the No. 3 low pressure turbine intercept valve accumulator.
19960327	Unit 2	The operators shut down the reactor to comply with the Technical Specifications when both divisions of the Emergency Equipment Cooling Water system were declared inoperable due to a design issue with its make-up tank.
19960418	Unit 2	The operators achieved reactor criticality during startup following a forced outage.
19960419	Unit 2	The operators shut down the reactor from 8 percent power during startup when the reactor core isolation cooling system was declared inoperable due to turbine shaft gland leakage and the high pressure coolant injection system was not tested within the time permitted by technical specifications. The entry into technical specification 3.0.3 required the reactor to be shut down.
19960422	Unit 2	The unit was connected to the electrical grid to end back-to-back forced outages.
19960503	Unit 2	The operators reduced the reactor power level to 68 percent for power suppression testing to locate leaking fuel bundles and to perform a control rod sequence exchange.
19960927	Unit 2	The reactor was shut down to begin refueling outage 5.
19961227	Unit 2	The operators started up the reactor from a scheduled outage.
19961228	Unit 2	The reactor automatically scrammed from 18 percent power when a spurious low reactor vessel water level signal caused an alternate rod insertion signal.
19970103	Unit 2	The unit was connected to the electrical grid to end a forced outage that began on December 28, 1996.
19970110	Unit 2	The reactor was shut down to repair high water level in the 20-inch offgas manifold.
19970117	Unit 2	The reactor was shut down to inspect the main generator.
19970117	Unit 2	The main generator output breaker failed while the operators attempted to synchonize the unit to the electrical gird.
19970506	Unit 2	The unit was connected to the electrical grid to end a forced outage that began on January 17, 1997.

1/17/2022 Page 18 of 34

	Fer	<mark>mi</mark>
	N	ewport MI
Date	Reactor	Event Description
19970512	Unit 2	The operators reduced the reactor power level to 65 percent for power suppression testing to identify leaking fuel rods.
19970626	Unit 2	The operators reduced the reactor power level and tripped a reactor recirculation pump to repair its motor-generator set tachometer-generator.
19970905	Unit 2	The operators reduced the reactor power level to 76 percent so workers could repair a hot spot on main generator CM breaker Z.
19970924	Unit 2	The operators reduced the reactor power level to 55 percent for power suppression testing to identify leaking fuel rods.
19971003	Unit 2	The operators shut down the reactor to enter a planned maintenance outage to replace two leaking fuel bundles and replace a seal on a reactor recirculation pump.
19971019	Unit 2	The unit was connected to the electrical grid to end a 368.7 hour scheduled outage.
19971029	Unit 2	The operators reduced the reactor power level to 60 percent so workers could set the reactor recirculation motor-generator set limiters and stops. Workers also performed corrective maintenance on 345 kilovolt Brownstown line breaker hot spots.
19971229	Unit 2	The operators reduced the reactor power level to 25 percent so workers could repair the reactor water level control system.
19980201	Unit 2	The reactor automatically scrammed from 96 percent power at 9:18 am when an operators pressed a test switch in the switchyard that caused the generator output breakers to open. An electrical breaker in the switchyard had been improperly assembled, setting the stage for the test switch to cause the output breakers to open.
19980215	Unit 2	The unit was connected to the electrical grid to end a 342 hour forced outage.
19980504	Unit 2	The operators reduced the reactor power level to 25 percent so workers could troubleshoot feedwater and reactor vessel water level control problems.
19980529	Unit 2	The operators reduced the reactor power level to 60 percent so workers could replace the control rod scram solenoid pilot valves on 39 control rods.
19980529	Unit 2	The operators reduced the reactor power level to 60 percent so workers could replace the scram solenoid pilot valves on 39 control rods.
19980719	Unit 2	The operators manually scrammed the reactor from 64 percent power at 10:00 am in response to power fluctuations. The operators had reduced the reactor power level to 64 percent for a control rod pattern adjustment. The reactor power level fluctuated between 50 percent and 75 percent. Workers determined that unstable flow through turbine control valve #4 caused the reactor power fluctuations.

1/17/2022 Page 19 of 34

	Fer	<mark>mi</mark>
Newport MI		lewport MI
Date	Reactor	Event Description
19980724	Unit 2	The unit was connected to the electrical grid to end a 114.7 hour forced outage.
19980904	Unit 2	The operators manually scrammed the reactor from 70 percent power due to reactor power fluctuating between 61 and 79 percent. The operators had been reducing the reactor power level to enter refueling outage 6. Workers determined that turbine control valve #3 oscillations caused the reactor power fluctuations.
19980904	Unit 2	The unit was shut down to enter refueling outage 6.
19981008	Unit 2	An Alert was declared due to a fire in an emergency diesel generator (EDG). During the 24-hour post-maintenance operability run of EDG-12, an operator observed heavy smoke coming from the EDG control panel. The operator tripped the EDG, opened the output breaker, and left the smoke-filled building. Personnel re-entered the building with self-contained breathing apparatus and observed the fire was extinguished. The reactor was in a refueling outage at the time.
19981008	Unit 2	There was an electrical fire in the control panel for an emergency diesel generator. The NRC reported it as 0 on the INES scale.
19981010	Unit 2	The operators declared an Unusual Event due to a small fire in a switchgear room.
19981029	Unit 2	The unit was connected to the electrical grid to begin operating cycle 7.
19981113	Unit 2	The operators scrammed the reactor so workers could repair an indicator shaft seal leak on a feedwater check valve.
19981118	Unit 2	The unit was connected to the electrical grid to end a 126.1 hour forced outage.
19990518	Unit 2	The operators manually scrammed the reactor at 5:09 pm in response to the reactor entering the scram region of the power to flow map. Workers performing routine field brush maintenance on recirculation pump A inadvertently caused the pump to trip.
19990922	Unit 2	A contractor's truck was searched by security guards prior to entering the protected area. As the contractor removed large flexible tubing from the back of the truck inside the protected area, a loaded Glock 9 mm pistol was found. The contractor immediately contacted security. The contractor reported not having known about the weapon. The sheriff and the FBI attempted to identify the owner of the weapon without success.
19991215	Unit 2	The NRC issued a notice of violation (Severity Level III) for inadequate implementation of the security plan that resulted in a loaded handgun being carried into the protected area.

1/17/2022 Page 20 of 34

	Fer	<mark>mi en la companya di manana di mana</mark>
	N	lewport MI
Date	Reactor	Event Description
20000401	Unit 2	The operators manually scrammed the reactor during a controlled shut down to enter refueling outage 7. The operators had tripped recirculation pump A when the pump's scoop tube failed to lock in position in response to an unexpected speed increase. Faced with unclear procedural guidance on how to handle single loop operation at low reactor power, the decision was made to manually scram the reactor.
20000524	Unit 2	The unit was connected to the electrical grid to begin operating cycle 8.
20000624	Unit 2	The operators reduced the reactor power level so workers could replace the steam tunnel cooling unit's motor and clean the main generator's hydrogen cooler.
20001102	Unit 2	The operators reduced the reactor power level to 53 percent in response to failure of the solenoid valve on the south reactor feedwater pump.
20010321	Unit 2	The operators declared an Alert after paint on the outboard generator bearing cover on emergency diesel generator #14 caught fire. Workers put out the fire in less than one minute using a portable carbon dioxide extinguisher.
20010328	Unit 2	Emergency diesel generator 14 was discovered to have been inoperable for 6185 hours during reactor operation due to a degraded bearing.
20010329	Unit 2	The NRC granted enforcement discretion from the technical specification requirement to shut down the reactor when an emergency diesel generator is inoperable for 7 days. Workers had removed emergency diesel generator 14 from service on March 21, 2001, for testing. During a 24-hour endurance test, workers halted the test and shut down the diesel generator due to high temperatures on the generator's outboard bearing. After the diesel generator was shut down, workers found and extinguished a small fire on the bearing housing. The damage could not be repaired within the time remaining on the 7-day allowable outage period. The company sought and the NRC granted an additional 7 days to repair the emergency diesel generator while the reactor remained operating.
20010331	Unit 2	Reactor listed in the Regulatory Response Column
20010427	Unit 2	The operators manually shut down the reactor due to a 0.5 gallon per minute reactor coolant leak inside the drywell. Workers repacked a pressure relief valve on the residual heat removal (RHR) system.
20010430	Unit 2	The unit was connected to the electrical grid after a short maintenance outage.
20010630	Unit 2	Reactor listed in the Regulatory Response Column

1/17/2022 Page 21 of 34

	Fer	<mark>mi</mark>
	N	lewport MI
Date	Reactor	Event Description
20010914	Unit 2	The NRC issued a notice of violation and White finding for inadequate design controls when the oil sight glass for the emergency diesel generator (EDG) outboard bearing leading to catastrophic failure of the EDG bearing during operation.
20010930	Unit 2	Reactor listed in the Regulatory Response Column
20011026	Unit 2	The operators manually shut down the reactor to enter refueling outage 8.
20011206	Unit 2	The operators manually scrammed the reactor due to failure of a heat exchanger vent line and loss of stator cooling system flow.
20011208	Unit 2	The unit was connected to the electrical grid to end a forced outage.
20020331	Unit 2	Reactor listed in the Regulatory Response Column
20021002	Unit 2	The reactor automatically scrammed when the turbine tripped on low condenser vacuum after a circulating water pump failed.
20021005	Unit 2	The unit was connected to the electrical grid to end a forced outage.
20021229	Unit 2	The operators manually scrammed the reactor due to degraded instrument power voltage.
20030102	Unit 2	The unit was connected to the electrical grid to end a forced outage.
20030329	Unit 2	The operators manually scrammed the reactor to enter refueling outage 9.
20030510	Unit 2	The unit was connected to the electrical grid to begin operating cycle 10.
20030814	Unit 2	Northeast grid outage caused loss of offsite power lasting 6 hours 19 minutes with complication caused by failure of gas turbine to start
20030814	Unit 2	The reactor automatically scrammed when an electrical grid failure caused fast closure of the turbine control valves.
20030820	Unit 2	The unit was connected to the electrical grid to end a forced outage.
20030905	Unit 2	The operators manually scrammed the reactor to enter a scheduled maintenance outage to repair a leak on reactor water cleanup (RWCU) system return check valve G3300F120.
20030910	Unit 2	The unit was connected to the electrical grid to end a scheduled maintenance outage.

1/17/2022 Page 22 of 34

Fermi		<mark>mi en la companya di manana di mana</mark>
	N	ewport MI
Date	Reactor	Event Description
20031231	Unit 2	Reactor listed in the Regulatory Response Column
20040128	Unit 2	The operators reduced the reactor power level to 55 percent to repair oil leaks on the main generator.
20040131	Unit 2	The operators returned the reactor power level to 100 percent.
20040331	Unit 2	Reactor listed in the Regulatory Response Column
20040630	Unit 2	Reactor listed in the Regulatory Response Column
20040809	Unit 2	The operators manually shut down the reactor due to failure of the scavenging air blower on emergency diesel generator (EDG) No. 12.
20040817	Unit 2	The unit was connected to the electrical grid at 0:14 am to end a forced outage.
20040903	Unit 2	The reactor automatically scrammed due to failure of the main generator excitation automatic regulator system.
20040907	Unit 2	The unit was connected to the electrical grid at 2:58 am to end a force outage.
20040930	Unit 2	Reactor listed in the Regulatory Response Column
20041031	Unit 2	At 8:46 pm, a recirculation pump runback signal reduced the reactor power level to 62 percent.
20041101	Unit 2	The operators returned the reactor power level to 100 percent at 11:47 pm after a speed signal isolator card in the A recirculation motor generator distributed control system was replaced.
20041106	Unit 2	The operators manually shut down the reactor to enter refueling outage 10.
20041203	Unit 2	The unit was connected to the electrical grid to begin operating cycle 11.
20041204	Unit 2	The reactor automatically scrammed from 60 percent power at 4:17 am during power ascension when a generator automatic voltage regulator failure tripped the main turbine.
20041207	Unit 2	The unit was connected to the electrical grid at 8:42 am to end a forced outage.
20041231	Unit 2	Reactor listed in the Regulatory Response Column

1/17/2022 Page 23 of 34

	Fer	<mark>mi</mark>
	N	ewport MI
Date	Reactor	Event Description
20050124	Unit 2	An Unusual Event was declared due to indications of unidentified reactor coolant leakage exceeding 10 gallons per minute. Operators manually scrammed the reactor from 100 percent power. The emergency classification was upgraded to an Alert after calculations of the leak rate indicated 75 to 80 gallons per minutes, exceeding the emergency plan threshold of 50 gallons per minute. Chemical analysis of the water collecting in the drywell sump suggested a non-reactor coolant system source based on (a) lack of radioactivity in the water and (b) presence of corrosion inhibiters. Operators closed valves in the reactor building closed cooling water (RBCCW) system and affected the leak rate.
20050124	Unit 2	The operators manually scrammed the reactor at 4:19 pm due to unidentified drywell leakage above the technical specification limit. Workers entered the drywell and identified the source of the leakage as a failed end-bell gasket on drywell cooler No. 4.
20050202	Unit 2	The operators manually shut down the reactor during startup to repair a steam leak from recirculation pump A discharge valve packing.
20050202	Unit 2	The operators achieved reactor criticality to end a forced outage.
20050206	Unit 2	The unit was connected to the electrical grid to end back-to-back forced outages.
20050331	Unit 2	Reactor listed in the Regulatory Response Column
20050626	Unit 2	The operators manually scrammed the reactor at 2:47 am to repair reactor building closed cooling water (RBCCW) system leakage inside the drywell.
20050716	Unit 2	The unit was connected to the electrical grid at 10:21 am to end a forced outage.
20060325	Unit 2	The operators manually shut down the reactor to enter refueling outage 11.
20060505	Unit 2	The unit was connected to the electrical grid at 7:19 pm to begin operating cycle 12.
20060510	Unit 2	The operators reduced the reactor power level and conducted power suppression testing to locate a leaking fuel bundle.
20060514	Unit 2	After identification and suppression of a leaking fuel bundle, the operators returned the reactor power level to 100 percent.
20060520	Unit 2	The operators manually scrammed the reactor at 3:53 am to enter a scheduled outage to replace a leaking fuel bundle.
20060529	Unit 2	The unit was connected to the electrical grid at 4:02 am to end a scheduled outage.

1/17/2022 Page 24 of 34

Fermi Company		mi e e e e e e e e e e e e e e e e e e e
	N	Jewport MI
Date	Reactor	Event Description
20060615	Unit 2	The reactor automatically scrammed at 10:53 am due to failure of the 2B main unit transformer. The operators put the 2A main unit transformer in service for restart.
20060618	Unit 2	The unit was connected to the electrical grid at 2:18 am to end a forced outage. The reactor power level was limited to about 63 percent due to the 2B main unit transformer being out of service.
20060708	Unit 2	The operators manually scrammed the reactor at 12:58 pm to enter a scheduled maintenance outage for replacement of main unit transformer 2B.
20060721	Unit 2	The unit was connected to the electrical grid at 7:43 pm to end a scheduled maintenance outage.
20060729	Unit 2	The reactor automatically scrammed from 100 percent power when a trip of the transformer #2 87T-2 device caused a lockout of 120 volt bus 101.
20060801	Unit 2	The unit was connected to the electrical grid at 11:07 am to end a forced outage.
20060817	Unit 2	The operators declared all four emergency diesel generators inoperable due to undersized control power transformers for the emergency diesel generator service water pumps. The potential existed for the EDGSW pump motors to have inadequate voltage at their starter circuits under degraded voltage conditions.
20060828	Unit 2	The NRC's special inspection team began investigating emergency diesel generator problems.
20061107	Unit 2	The NRC's special inspection team report identified 2 Green findings.
20070929	Unit 2	The operators manually shut down the reactor to enter refueling outage 12.
20071113	Unit 2	The operators restarted the reactor at 11:03 pm.
20071115	Unit 2	The operators manually scrammed the reactor due to a human performance error while checking the position of a valve in the reactor vessel water level reference leg backfill system.
20071115	Unit 2	The operators manually shut down the reactor after a reactor water level instrument switch was inadvertently activated.
20071115	Unit 2	The operators withdrew control rods to restart from a refueling outage.
20071118	Unit 2	The unit was connected to the electrical grid at 10:16 pm to begin operating cycle 13.
20071118	Unit 2	The unit was connected to the electrica grid to begin operating cycle 13.

1/17/2022 Page 25 of 34

	Fer	<mark>mi en la companya di managan di </mark>
	N	ewport MI
Date	Reactor	Event Description
20071125	Unit 2	The operators reduced the reactor power level to 60 percent for about 12 hours to resolve isophase bus duct cooling system problems.
20071202	Unit 2	The operators reduced the reactor power level to 60 percent for about 9 hours to resolve isophase bus duct cooling system problems.
20071203	Unit 2	The NRC's special inspection team report on the discovery of a hole drilled in the safety relief valve discharge line and damage to insulation on piping inside the containment identified 5 Green findings for 3 non-security-related violations, 1 security-related violation and 1 non-security-related non-cited violation. In addition, the report identified one unresolved item regarding an unauthorized change to the plant's emergency plan.
20080131	Unit 2	The operators manually tripped the reactor after one of the recirculation pumps tripped.
20080203	Unit 2	The unit was connected to the electrical grid at 7:35 pm to end a forced outage.
20090328	Unit 2	The operators manually scrammed the reactor due to high turbine vibrations during a controlled shut down to enter refueling outage 13.
20090501	Unit 2	The unit was connected to the electrical grid at 7:00 am to begin operating cycle 14.
20090516	Unit 2	The operators reduced the reactor power level to 89 percent for 8 $1/2$ hours to repair the seal on the east feedwater pump.
20090613	Unit 2	The reactor was shut down to repair drywell cooler #11.
20090615	Unit 2	The unit was connected to the reactor vessel at 9:48 am to end a 56.97 hour forced outage.
20090730	Unit 2	The operators reduced the reactor power level to 93 percent due to failure of main turbine high pressure control valve No. 2.
20090731	Unit 2	The operators restored the reactor power level to 100 percent.
20090915	Unit 2	The operators reduced the reactor power level to 44 percent after a recirculation pump tripped following loss of emergency cooling water.
20090916	Unit 2	The operators restored the reactor power level to 100 percent.
20090930	Unit 2	The operators manually scrammed the reactor due to hydrogen leaking into the stator water cooling system.

1/17/2022 Page 26 of 34

	Fer	<mark>mi en la companya di managan di man</mark>
	N	lewport MI
Date	Reactor	Event Description
20091112	Unit 2	The unit was connected to the electrical grid at 3:04 am to end a forced outage that began on September 30, 2009. The forced outage was caused by inleakage to the generator stator water cooling system.
20100305	Unit 2	The operators reduced the reactor power level to 61 percent to enter single loop operations with one recirculation pump out of service.
20100306	Unit 2	The operators returned the reactor power level to 100 percent.
20100322	Unit 2	The operators reduced the reactor power level to 49 percent after a breaker failure on recirculation pump A caused entry into single loop operations.
20100325	Unit 2	The reactor automatically tripped due to failure of a main generator current transformer.
20100330	Unit 2	The unit was connected to the electrical grid at 7:55 pm to end a 123.47 hour forced outage.
20100606	Unit 2	The reactor automatically scrammed from full power due to loss of the 345 kilovolt main transformer.
20100616	Unit 2	The unit was connected to the electrical grid at 7:21 pm to end a 256.72 hour forced outage.
20101024	Unit 2	The reactor automatically scrammed due to degrading condenser vacuum. The unit transitioned into refueling outage 14. Control rod 10-35 stopped moving at position 42. The loss of condenser vacuum occurred when erosion of the No. 3 steam jet air ejector steam supply first stage nozzle caused loss of air ejector capacity.
20101120	Unit 2	A worker scrubbing the reactor cavity wall during drain down lost a face shield. Efforts to locate and recover the face shield failed to do so.
20101201	Unit 2	The drain valve for condensate filter demineralizer D failed in the open position. Water flowed to the condensate backwash receiving tank (CBWRT). The flow rate to the CBWRT was move than could be handled by the tank's overfill line. The CBWRT vent was connected to the radwaste building's ventilation system. Consequently, water and condensate polisher resins entered the ventilation system and spilled out through various places in the radwaste and turbine buildings. Some spilled water entered the floor drain in a room on the second floor of the turbine building and flowed into the sanitary waste system. About 100 gallons of water and resin collected in the sanitary waste collection tank outside the plant. Some of this tank was pumped to the county sanitation system.
20101205	Unit 2	The unit was connected to the electrical grid at 12:30 pm to begin operating cycle 15.

1/17/2022 Page 27 of 34

	Fer	mi en la companya di salah
	N	Jewport MI
Date	Reactor	Event Description
20101207	Unit 2	The reactor power level automatically ran back from 75 percent to 54 percent due to failures within the feedwater digital control system.
20101215	Unit 2	The operators returned the reactor power level to 75 percent where it remained for the rest of the month. The powr limitation was due to the north reactor feedwater pump being unavailable.
20110101	Unit 2	The reactor was limited to 75 percent power due to condenser pump operating restrictions.
20110110	Unit 2	The operators achieved criticality of the reactor.
20110129	Unit 2	The operators shut down the reactor to enter a planned outage to repair a condenser pump and high pressure control valves.
20110211	Unit 2	The operators manually shut down the reactor when condenser inleakage caused water chemistry to degrade.
20110215	Unit 2	The unit was connected to the electrical grid at 5:45 am.
20110216	Unit 2	The operators reduced the reactor power level from 95 percent to 59 percent due to a repeat problems with the north reactor feedwater pump.
20110218	Unit 2	The operators returned the reactor power level to 100 percent.
20110601	Unit 2	The operators reduced the reactor power level to 97 percent due to condenser backpressure caused by high ambient temperatures. The operators returned the reactor power level to 100 percent later that day.
20110608	Unit 2	The operators reduced the reactor power level to 94 percent to control condenser backpressure caused by high ambient temperature.
20110609	Unit 2	The operators returned the reactor power level to 100 percent.
20110702	Unit 2	The operators returned the reactor power level to 100 percent at 11:20 pm.
20110702	Unit 2	At 5:54 pm, the operators reduced the reactor power level to 97 percent due to high condenser pressure caused by high ambient temperatures.
20110721	Unit 2	At 5:54 pm, the operators reduced the reactor power level to 91 percent due to high condenser pressure caused by high ambient temperatures.
20110722	Unit 2	The operators returned the reactor power level to 100 percent.

1/17/2022 Page 28 of 34

Fermi Company		mi e e e e e e e e e e e e e e e e e e e
	N	Jewport MI
Date	Reactor	Event Description
20111117	Unit 2	The operators reduced the reactor power level and took the generator offline to repair a failed conductor on the generator disconnect.
20111117	Unit 2	The unit was connected to the electrical grid to end a 13.52 hour forced outage.
20120326	Unit 2	The operators shut down the reactor to enter refueling outage 15.
20120505	Unit 2	The unit was connected to the electrical grid to begin operating cycle 16.
20120624	Unit 2	The operators shut down the reactor to enter a planned outage to repair a failed oil pump on transformer 2B.
20120625	Unit 2	The operators manually scrammed the reactor due to loss of condenser vacuum after a feedwater pump failed.
20120625	Unit 2	The unit was connected to the electrical grid at 1:29 pm to end a 19.08 hour scheduled outage.
20120630	Unit 2	Reactor listed in the Regulatory Response Column
20120722	Unit 2	The operators achieved criticality of the reactor core at 11:49 am during an attempted restart from a month-long outage.
20120723	Unit 2	The operators shut down the reactor at 9:04 pm due to high pressure coolant injection system problems.
20120729	Unit 2	The reactor was connected to the electrical grid to end a 34 day forced outage.
20120831	Unit 2	The reactor power level was limited to 68 percent the entire month due to operation with only one feedwater pump in service.
20120914	Unit 2	The reactor automatically scrammed due to a bird intrusion in the 120 kilovolt switchyard.
20120919	Unit 2	The reactor was connected to the electrical grid to end a 123.52 hour forced outage.
20120930	Unit 2	Reactor listed in the Regulatory Response Column
20121107	Unit 2	The reactor was shut down due to increasing generator stator water cooling system inleakage.
20121231	Unit 2	The operators achieved reactor criticality at 3:47 am.
20121231	Unit 2	Reactor listed in the Regulatory Response Column

1/17/2022 Page 29 of 34

Fermi Company		<mark>mi</mark>
	N	Jewport MI
Date	Reactor	Event Description
20130101	Unit 2	The reactor was connected to the electrical grid to end a 7 week forced outage.
20130211	Unit 2	The operators reduced the reactor power level from 68 percent to 47 percent due to a problem with the high pressure turbine control valves.
20130331	Unit 2	Reactor listed in the Regulatory Response Column
20130427	Unit 2	The operators shut down the reactor to enter a planned maintenance outage.
20130510	Unit 2	The reactor was connected to the electrical grid at 5:28 pm to end a scheduled outage.
20130908	Unit 2	The operators manually shut down the reactor to enter a planned maintenance outage to return the south reacotr feedwater pump to service following repair and refurbishment of its turbine.
20130923	Unit 2	The unit was connected to the electrical grid at 10:31 pm to end a 355.52 hour scheduled outage.
20131025	Unit 2	The operators reduced the reactor power level to 67% for power suppression testing.
20131028	Unit 2	The operators returned the reactor power level to 100 percent.
20131108	Unit 2	The operators reduced the reactor power level to 69% for power suppression testing.
20131109	Unit 2	The operators returned the reactor power level to 100 percent.
20140113	Unit 2	The operators reduced the reactor power level due to a problem with main unit transformer 2B. Power remained limited to 85 percent the remainder of the month.
20140210	Unit 2	The NRC approved a 1.6 percent increase in the maximum licensed power level.
20140210	Unit 2	The operators shut down the reactor to enter refueling outage 16.
20140331	Unit 2	Reactor listed in the Regulatory Response Column
20140405	Unit 2	The unit was connected to the electrical grid at 12:37 am to begin operating cycle 17.
20140406	Unit 2	The operators reduced the reactor power level due to an oil leak on main unit transformer 2B.
20140415		

1/17/2022 Page 30 of 34

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	N	ewport MI
Date	Reactor	Event Description
20140423	Unit 2	The unit was connected to the electrical grid to end a 166.75 hour scheduled outage.
20140630	Unit 2	Reactor listed in the Regulatory Response Column
20140930	Unit 2	Reactor listed in the Regulatory Response Column
20141013	Unit 2	The operators reduced the reactor power level to 64 percent for maintenance of a feedwater pump.
20141015	Unit 2	The operators returned the reactor power level to 100 percent.
20141207	Unit 2	The operators reduced the reactor power level to 55 percent to repair leaking condenser tubes.
20150319	Unit 2	The reactor automatically scrammed due to power oscillations after workers tripped a recirculation pump due to a cooling water leak inside the drywell.
20150404	Unit 2	The unit was connected to the electrical grid to end a 16 day forced outage.
20150913	Unit 2	The operators manually scrammed the reactor following the complete loss of the turbine building closed cooling water system. The company decided to transition into a scheduled refueling outage.
20151128	Unit 2	The unit was connected to the electrical grid to begin operating cycle 18.
20160417	Unit 2	The operators reduced the reactor power level to 61 percent for power suppression testing to identify the location of leaking fuel bundles.
20160421	Unit 2	The operators returned the reactor power level to 100 percent.
20160503	Unit 2	The operators shut down the reactor to repair Bus 64 potential transformer fuses.
20160513	Unit 2	The unit was connected to the electrical grid at 10:35 pm to end a 239.57 hour forced outage.
20160706	Unit 2	The operators reduced the reactor power level to 90 percent power so workers could repair an oil leak on high pressure stop valve #4.
20160825	Unit 2	The operators reduced the reactor power level to 52 percent power so workers could repair condener tube leaks.
20160902	Unit 2	The operators returned the reactor to 100 percent power.

1/17/2022 Page 31 of 34

Fermi Company		mi e e e e e e e e e e e e e e e e e e e
	N	Jewport MI
Date	Reactor	Event Description
20160922	Unit 2	The operators reduced the reactor power level to 78 percent power so workers could repair condener tube leaks.
20160923	Unit 2	The operators returned the reactor to 100 percent power.
20161107	Unit 2	The operators shut down the reactor to enter a planned maintenance outage for replacement of main unit transformer 2B.
20161113	Unit 2	The unit was connected to the electrical grid to end a 148.27 hour scheduled outage.
20170205	Unit 2	The operators reduced the reactor power level to 44 percent following the trip of the South Reactor Feed Pump.
20170211	Unit 2	The operators returned the reactor power level to 100 percent.
20170318	Unit 2	The operators shut down the reactor to enter Refueling Outage 18.
20170420	Unit 2	The unit was connected to the electrical grid to begin operating cycle 19.
20170513	Unit 2	The operators reduced the reactor power level from 100 percent to 62 percent for repairs to the generator isophase bus duct coolers. The operators returned the reactor power level to 100 percent about six hours later.
20170520	Unit 2	The operators reduced the reactor power level from 100 percent to 30 percent for repairs to a main steam isolation valve.
20170521	Unit 2	The operators returned the reactor power level to 100 perent.
20171126	Unit 2	The operators reduced the reactor power level to 37% due to problems with the motor-generators set for a recirculation pump.
20171205	Unit 2	The operators restored the reactor power level to 100 percent at 4:43 pm.
20171229	Unit 2	The operators reduced the reactor power level to 62% for power suppression testing to locate failed fuel rods.
20171229	Unit 2	The operators reduced the reactor power level to 62 percent for power suppression testing.
20180101	Unit 2	The operators restored the reactor power level to 100 percent at 9:29 am.
20180101 Unit 2 The operators completed power suppression testing at 9:29 am and took the reback up to full power.		The operators completed power suppression testing at 9:29 am and took the reactor back up to full power.

1/17/2022 Page 32 of 34

	Fer	<mark>mi en la companya di manana di ma</mark>
	N	ewport MI
Date	Reactor	Event Description
20180414	Unit 2	The reactor automatically scrammed at 10:40 am following failure of System Service Transformer 64.
20180506	Unit 2	The unit was connected to the electrical grid to end a forced outage.
20180508	Unit 2	The operators halted the ascension to rated power at 91.5 percent due to high violaritions on the north reactor feed pump. Power was reduced to 88 percent about 45 minutes later.
20180516	Unit 2	The operators reduced the reactor power level to 63 percent and removed the north reactor feed pump from service for repairs.
20180524	Unit 2	The operators reduced the reactor power level to 54 percent to return the north reactor feed pump to service.
20180525	Unit 2	The operators returned the reactor power level to 100 percent.
20180703	Unit 2	The reactor power level was reduced to 60 percent at $10:57\mathrm{pm}$ due to an AVR Thyristor failure.
20180705	Unit 2	The reactor power level was returned to 100 percent at 3:39 pm.
20180922	Unit 2	The reactor was shut down to enter Refueling Outage 19.
20181027	Unit 2	The unit was connected to the electrical grid to begin operating cycle 20.
20181203	Unit 2	The operators reduced the reactor power level to 83 percent at 5;25 am due to a generator field ground alarm. The operators returned the reactor power level to 100 percent at 12:42 pm.
20181204	Unit 2	The operators reduced the reactor power level to 85 percent at 3;15 am due to a generator field ground alarm. The operators returned the reactor power level to 100 percent at 5:43 am.
20181206	Unit 2	The reactor was shut down due to a ground on the generator rotor.
20190101	Unit 2	The unit was connected to the electrical grid at 4:57 pm to end a forced outage.
20200110	Unit 2	The operators reduced the reactor power level to 61 percent for power suppression testing to find and mitigate fuel rod leaker(s).
20200112	Unit 2	The operators achieved rated reactor power.

1/17/2022 Page 33 of 34

	Fer	mi
	N	ewport MI
Date	Reactor	Event Description
20200122	Unit 2	The operators reduced pressure control valve
20200123	Unit 2	The operators achieved
20200215	Unit 2	The operators reduced steam leak.
20200216	Unit 2	The operators achieved
20200321	Unit 2	The reactor was shut d
20200805	Unit 2	The unit was connected
20210516	Unit 2	The operators shut dow
20210524	Unit 2	The unit was connected
20210711	Unit 2	The operators reduced tube leak.

1/17/2022 Page 34 of 34