

October 29, 1993

Mr. Douglas R. Gipson
Senior Vice President
Nuclear Generation
Detroit Edison Company
6400 North Dixie Highway
Newport, Michigan 48166

Dear Mr. Gipson:

SUBJECT: FERMI-2 - ISSUANCE OF AMENDMENT TO ELIMINATE SHUTDOWN REQUIREMENT FROM REFUELING INTERVAL SURVEILLANCES (TAC NO. M86060)

The Commission has issued the enclosed Amendment No. 95 to Facility Operating License No. NPF-43 for the Fermi-2 facility. The amendment consists of changes to the Technical Specifications (TS) in response to your letter dated March 23, 1993.

The amendment revises the TS to eliminate the qualification on some 18-month surveillance requirements that the surveillance must be performed "during shutdown." This change is in accordance with staff guidance contained in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle " dated April 2, 1991.

A copy of our Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

Timothy G. Colburn, Sr. Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 95 to NPF-43
- 2. Safety Evaluation

cc w/enclosures:
See next page

27/10 CHB
BC:EELB
CBerlinger
09/27/93

* EELB should concur

OFFICE	LA:PD31	PM:PD31	OTSB	OGC <i>MMCA</i>	(A)D:PD31
NAME	CJamerson <i>CJ</i>	TColburn: <i>TC</i>	CGrimes <i>CG</i>		WDean <i>WD</i>
DATE	9/7/93	9/17/93	1/193	10/4/93	10/18/93

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P PDR



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

Docket No. 50-341

October 29, 1993

Mr. Douglas R. Gipson
Senior Vice President
Nuclear Generation
Detroit Edison Company
6400 North Dixie Highway
Newport, Michigan 48166

Dear Mr. Gipson:

SUBJECT: FERMI-2 - ISSUANCE OF AMENDMENT TO ELIMINATE SHUTDOWN REQUIREMENT
FROM REFUELING INTERVAL SURVEILLANCES (TAC NO. M86060)

The Commission has issued the enclosed Amendment No. 95 to Facility Operating License No. NPF-43 for the Fermi-2 facility. The amendment consists of changes to the Technical Specifications (TS) in response to your letter dated March 23, 1993.

The amendment revises the TS to eliminate the qualification on some 18-month surveillance requirements that the surveillance must be performed "during shutdown." This change is in accordance with staff guidance contained in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle " dated April 2, 1991.

A copy of our Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Timothy G. Colburn, Sr.".

Timothy G. Colburn, Sr. Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 95 to NPF-43
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Douglas R. Gipson
Detroit Edison Company

Fermi-2

cc:

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Director - Nuclear Licensing
Detroit Edison Company
Fermi-2
6400 North Dixie Highway
Newport, Michigan 48166

July 1993

DATED: October 29, 1993

AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. NPF-43-FERMI-2

Docket File

NRC & Local PDRs

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G. Hill (2), P1-22

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W. Shafer, R-III

cc: Plant Service list



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DETROIT EDISON COMPANY

DOCKET NO. 50-341

FERMI-2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95
License No. NPF-43

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Detroit Edison Company (the licensee) dated March 23, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

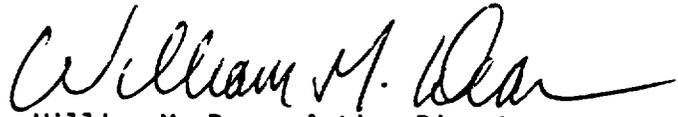
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-43 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 95 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. DECo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance with full implementation within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



William M. Dean, Acting Director
Project Directorate III-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 29, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 95

FACILITY OPERATING LICENSE NO. NPF-43

DOCKET NO. 50-341

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE

3/4 1-19*
3/4 1-20
3/4 7-3a
3/4 7-4
3/4 8-3*
3/4 8-4
3/4 8-11
3/4 8-12*
B 3/4 0-3*
B 3/4 0-4

INSERT

3/4 1-19*
3/4 1-20
3/4 7-3a
3/4 7-4
3/4 8-3*
3/4 8-4
3/4 8-11
3/4 8-12*
B 3/4 0-3*
B 3/4 0-4

*Overleaf page provided to maintain document completeness. No changes contained on these pages.

REACTIVITY CONTROL SYSTEMS

3/4.1.5 STANDBY LIQUID CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.1.5 The standby liquid control system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 5*

ACTION:

- a. In OPERATIONAL CONDITION 1 or 2:
 1. With one pump and/or one explosive valve inoperable, restore the inoperable pump and/or explosive valve to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.
 2. With the standby liquid control system otherwise inoperable, restore the system to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 5*:
 1. With one pump and/or one explosive valve inoperable, restore the inoperable pump and/or explosive valve to OPERABLE status within 30 days or insert all insertable control rods within the next hour.
 2. With the standby liquid control system otherwise inoperable, insert all insertable control rods within 1 hour.

SURVEILLANCE REQUIREMENTS

4.1.5 The standby liquid control system shall be demonstrated OPERABLE:

- a. At least once per 24 hours by verifying that:
 1. The temperature of the sodium pentaborate solution is greater than or equal to 48°F.
 2. The available volume of sodium pentaborate solution is within the limits of Figure 3.1.5-1.
 3. The temperature of the pump suction piping is greater than or equal to 48°F.

*With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

REACTIVITY CONTROL SYSTEMS
SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days by:
1. Verifying the continuity of the explosive charge.
 2. Determining that the concentration of boron in solution is within the limits of Figure 3.1.5-1 by chemical analysis.*
 3. Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. Demonstrating that, when tested pursuant to Specification 4.0.5, the minimum flow requirement of 41.2 gpm at a pressure of greater than or equal to 1215 psig is met.
- d. At least once per 18 months by:
1. Initiating one of the standby liquid control system loops, including an explosive valve, and verifying that a flow path from the pumps to the reactor pressure vessel is available by pumping demineralized water into the reactor vessel. The replacement charge for the explosive valve shall be from the same manufactured batch as the one fired or from another batch which has been certified by having one charge of that batch successfully fired. Both injection loops shall be tested in 36 months.
 2. Demonstrating that the pump relief valve setpoint is less than or equal to 1400 psig and verifying that the relief valve does not actuate during recirculation to the test tank.
 3. Demonstrating that all piping between the storage tank and the explosive valves is unblocked by pumping from the storage tank to the test tank and then draining and flushing the piping with demineralized water.**
 4. Demonstrating that the storage tank heaters are OPERABLE for mixing by verifying the expected temperature rise of the sodium pentaborate solution in the storage tank after the heaters are energized.
- e. At least once per 18 months sample and analyze the sodium pentaborate solution to verify that the Boron-10 Isotope enrichment exceeds 65 atom percent.

*This test shall also be performed anytime water or boron is added to the solution or when the solution temperature drops below the 48°F limit.

**This test shall also be performed whenever the solution temperature drops below the 48°F limit and may be performed by any series of sequential, overlapping or total flow path steps such that the entire flow path is included.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.1.2 The emergency equipment cooling water system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per 18 months by verifying that each automatic valve servicing nonsafety-related equipment actuates to its isolation position and the associated EECW pump automatically starts on an automatic actuation test signal.

PLANT SYSTEMS

EMERGENCY EQUIPMENT SERVICE WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.3 Two independent emergency equipment service water (EESW) system subsystems shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE emergency equipment service water pump, and
- b. An OPERABLE flow path capable of taking suction from the associated ultimate heat sink and transferring the water through the associated EECW heat exchanger.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, and 5.

ACTION:

With one EESW system subsystem inoperable, declare the associated EECW system subsystem inoperable and take the ACTION required by Specification 3.7.1.2.

SURVEILLANCE REQUIREMENTS

4.7.1.3 The emergency equipment service water system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per 18 months by verifying the EESW pump automatically starts upon receipt of an actuation test signal.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be determined OPERABLE at least once per 7 days by verifying correct breaker alignments and indicated power availability.

4.8.1.1.2 Each of the above required diesel generators shall be demonstrated OPERABLE:

- a. In accordance with the frequency specified in Table 4.8.1.1.2-1 on a STAGGERED TEST BASIS by:
 1. Verifying the fuel level in the day fuel tank.
 2. Verifying the fuel level in the fuel storage tank.
 3. Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day fuel tank.
 4. Verifying the diesel starts from ambient condition and accelerates to at least 900 rpm in less than or equal to 10 seconds.* The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal. The diesel generator shall be started for this test by using one of the following signals:
 - a) Manual.
 - b) Simulated loss-of-offsite power by itself.
 - c) Simulated loss-of-offsite power in conjunction with an ESF actuation test signal.
 - d) An ESF actuation test signal by itself.
 5. Verifying the diesel generator is synchronized, loaded to greater than or equal to an indicated 2500-2600 kW in less than or equal to 150 seconds,* and operates with this load for at least 60 minutes.
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
 7. Verifying the pressure in all diesel generator air start receivers to be greater than or equal to 215 psig.

*All diesel generator starts for the purpose of this Surveillance Requirement may be preceded by an engine prelube period. The diesel generator start (10 sec)/load (150 sec) from ambient conditions shall be performed at least once per 184 days in these surveillance tests. All other engine starts for the purpose of this surveillance testing may be preceded by other warmup procedures recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. By removing accumulated water:
 - 1. From the day tank at least once per 31 days and after each occasion when the diesel is operated for greater than 1 hour, and
 - 2. From the storage tank at least once per 31 days.
- c. By sampling new fuel oil in accordance with ASTM D4057-88 prior to addition to the storage tanks and:
 - 1. By verifying in accordance with the tests specified in ASTM D975-91 prior to addition to the storage tanks that the sample has:
 - a) An API Gravity of within 0.3 degrees at 60°F or a specified gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89 or an API gravity at 60°F of greater than or equal to 27 degrees but less than or equal to 39 degrees.
 - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes, if gravity was not determined by comparison with the supplier's certification.
 - c) A flash point equal to or greater than 125°F, and
 - d) A clear and bright appearance with proper color when tested in accordance with ASTM D4176-86.
 - 2. By verifying with 31 days of obtaining the sample that the other properties specified in Table 1 of ASTM D975-91 are met when tested in accordance with ASTM D975-91.
- d. At least once every 31 days by obtaining a sample of fuel oil from the storage tanks in accordance with ASTM D2276-88, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM D2276-88, Method A.
- e. At least once per 18 months by:
 - 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

3/4.0 APPLICABILITY

BASES (Con't)

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower CONDITION of operation.

Specifications 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL CONDITIONS or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in an OPERATIONAL CONDITION or other specified condition for which the individual Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL CONDITION for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are specified with an 18-month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed once each fuel cycle. Likewise, it is not the intent that surveillances with an 18-month interval be performed during power operation unless it is consistent with safe plant operation. The limitation of Specification 4.0.2 is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure

ELECTRICAL POWER SYSTEMS
SURVEILLANCE REQUIREMENTS (Continued)

2. There is no visible corrosion at either terminals or connectors, or the connection resistance of these items is less than 150×10^{-6} ohm, and
 3. The average electrolyte temperature of ten of the connected cells is above 60°F.
- c. At least once per 18 months by verifying that:
1. The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration,
 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion and coated with anticorrosion material,
 3. The resistance of each cell-to-cell and terminal connection is less than or equal to 150×10^{-6} ohm, and
 4. The battery charger will supply at least 100 amperes at a minimum of 129 volts for at least 4 hours.
- d. At least once per 18 months by verifying that either:
1. The battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for the design duty cycle (4 hours) when the battery is subjected to a battery service test, or
 2. The battery capacity is adequate to supply a dummy load of the following profile while maintaining the battery terminal voltage greater than or equal to 105 or 210 volts, as applicable:
 - a) Batteries 2PA and 2PB greater than or equal to 710 amperes during the initial 6 seconds of the test.
 - b) Batteries 2PA and 2PB greater than 182 amperes during the next 42 seconds of the test.
 - c) Batteries 2PA and 2PB greater than or equal to 54 amperes during the next 4 hours of the test.
 - d) Batteries 2PA and 2PB greater than or equal to 480 amperes during the last 6 seconds of the test.
- e. At least once per 60 months during shutdown by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. At this once per 60-month interval, this performance discharge test may be performed in lieu of the battery service test.
- f. At least once per 18 months performance discharge tests of battery capacity shall be given to any battery that shows signs of degradation or has reached 85% of the service life expected for the application. Degradation is indicated when the battery capacity drops more than 10% of rated capacity from its average on previous performance tests, or is below 90% of the manufacturer's rating.

TABLE 4.8.2.1-1
BATTERY SURVEILLANCE REQUIREMENTS

Parameter	CATEGORY A ⁽¹⁾		CATEGORY B ⁽²⁾	
	Limits for each designated pilot cell	Limits for each connected cell	Limits for each connected cell	Allowable ⁽³⁾ value for each connected cell
Electrolyte Level	>Minimum level indication mark, and < ¼" above maximum level indication mark	>Minimum level indication mark, and < ¼" above maximum level indication mark	>Minimum level indication mark, and < ¼" above maximum level indication mark	Above top of plates, and not overflowing
Float Voltage	≥2.13 volts	≥2.13 volts ⁽⁴⁾	≥2.13 volts ⁽⁴⁾	> 2.07 volts
Specific Gravity ⁽⁵⁾	≥ 1.195 ⁽⁶⁾	≥1.190	Average of all connected cells > 1.200	Not more than 0.020 below the average of all connected cells Average of all connected cells ≥ 1.190 ⁽⁶⁾

(1) For any Category A parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that within 24 hours all the Category B measurements are taken and found to be within their allowable values, and provided all Category A and B parameter(s) are restored to within limits within the next 6 days.

(2) For any Category B parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that the Category B parameters are within their allowable values and provided the Category B parameter(s) are restored to within limits within 7 days.

(3) Any Category B parameter not within its allowable value indicates an inoperable battery.

(4) May be corrected for average electrolyte temperature.

(5) Corrected for electrolyte temperature and level.

(6) Or battery charging current is less than 2 amperes when on float charge.

3/4.0 APPLICABILITY

BASES (Con't)

The time limits of Specification 3.0.3 allow 37 hours for the plant to be in COLD SHUTDOWN when a shutdown is required during POWER operation. If the plant is in a lower CONDITION of operation when a shutdown is required, the time limit for reaching the next lower CONDITION of operation applies. However, if a lower CONDITION of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other OPERATIONAL CONDITION, is not reduced. For example, if STARTUP is reached in 2 hours, the time allowed to reach HOT SHUTDOWN is the next 11 hours because the total time to reach HOT SHUTDOWN is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to POWER operation, a penalty is not incurred by having to reach a lower CONDITION of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into an OPERATIONAL CONDITION or condition of operation for another specification in which the requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher CONDITION of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower CONDITION of operation.

The shutdown requirements of Specification 3.0.3 do not apply in CONDITIONS 4 and 5, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.4 establishes limitations on a change in OPERATIONAL CONDITIONS when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher CONDITION of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the ACTION requirements if a change in CONDITIONS were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher CONDITIONS of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a change in OPERATIONAL CONDITIONS. Therefore, in this case, entry into an OPERATIONAL CONDITION or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

3/4.0 APPLICABILITY

BASES (Con't)

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower CONDITION of operation.

Specifications 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL CONDITIONS or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in an OPERATIONAL CONDITION or other specified condition for which the individual Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL CONDITION for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are specified with an 18-month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed once each fuel cycle. Likewise, it is not the intent that surveillances with an 18-month interval be performed during power operation unless it is consistent with safe plant operation. The limitation of Specification 4.0.2 is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated March 23, 1993, the Detroit Edison Company (DECo or the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would eliminate the qualification on some 18-month surveillance requirements that the surveillance be performed while the unit is shut down. The licensee submitted its request in accordance with guidance contained in the staff's Generic Letter 91-04.

2.0 EVALUATION

Generic Letter (GL) 91-04, "Changes in Technical Specifications Surveillance Intervals to Accommodate a 24-Month Fuel Cycle" was published on April 2, 1991. The purpose of the GL was to provide guidance to licensees wishing to take advantage of improvements in reactor fuels to increase the duration of the full cycle for their facilities. The guidance was based on lessons learned from the results of plant-specific reviews performed by the staff to accommodate changes to a 24-month fuel cycle.

The staff included in its guidance the following statement:

Licensees may omit the TS qualification that an 18-month surveillance is to be performed "during shutdown" when specifying the surveillance interval as ". . . at least once per REFUELING INTERVAL." Because the terms "Hot" and "Cold Shutdown" are defined in the TS as operating modes or conditions, the added restriction to perform certain surveillances during shutdown may be misinterpreted. This restriction ensures that a surveillance would only be performed when it is consistent with safe plant operation. However, this consideration is valid for other surveillances that are performed during power operation, plant startup, or shutdown, but is not addressed by restricting the conduct of these surveillances.

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The staff concludes that the TS need not restrict surveillances as only being performed during shutdown. Nevertheless, safety dictates that when refueling interval surveillances are performed during power operation, licensees give proper regard for their effect on the safe operation of the plant. If the performance of a refueling interval surveillance during plant operation would adversely affect safety, the licensee should postpone the surveillance until the unit is shut down for refueling or is in a condition or mode that is consistent with the safe conduct of that surveillance.

The staff also provided an updated model bases section for TS 4.0.2 for guidance to licensees who were considering this change. The updated model bases incorporated provisions which had been modified earlier in accordance with GLs 87-09, "Sections 3.0 and 4.0 of Standard Technical Specifications on the Applicability of Limiting Conditions for Operation and Surveillance Requirements," and 89-14, "Line-Item Improvements in Technical Specifications - Removal of the 3.25 Limit on Extending Surveillance Intervals," as well as those in GL 91-04.

While the licensee has not elected to increase the length of the fuel cycle from its current 18-month length, it has proposed to eliminate the qualification "during shutdown" from some 18-month surveillances. We have reviewed the licensee's request against the guidance provided in GL 91-04 and have determined that the licensee's request is acceptable. The licensee has provided an updated bases to TS 4.0.2 and has otherwise followed the guidance contained in GL 91-04 for this proposed TS change.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (58 FR 28055). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Colburn

Date: October 29, 1993