

Detroit
Edison

Douglas R. Gipson
Senior Vice President
Nuclear Generation

Fermi 2
6400 North Dixie Highway
Newport, Michigan 48166
(313) 586-5249

10CFR50.73

October 7, 1994
NRC-94-0084

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Reference: 1) Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43

Subject: Licensee Event Report (LER) No. 94-003-01

Please find enclosed Revision 1 to LER No. 94-003, dated October 7, 1994, for additional reportable conditions discovered on September 9, 1994. A copy of this LER is also being sent to the Regional Administrator, USNRC Region III.

The following commitments are being made in this LER:

1. A comprehensive review of the LOP and the LOP/LOCA procedures, schematics, load diagrams, design calculations and overlaps is being performed to ensure that all of the loads and logics are being properly tested. Likewise, a review of all other Technical Specification section 4.8 surveillance requirements is being performed to ensure that the surveillance procedures are adequate to perform the required testing. Finally, an overlap review of the 24, 34, 42, 54, 64 and 74 series procedures with the 44 series procedures is being performed to verify the adequacy of the overlap. Some of the 44 series procedures are also being reviewed.
2. The LOP and the LOP/LOCA procedures have been revised along with several other affected procedures identified during this review. Two new procedures were written to properly test the EDG start logic. These procedures are being performed to verify operability of the EDGs.

9410140058 941007
PDR ADDCK 05000341
S PDR

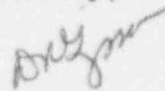
JE22

October 7, 1994
NRC-94-0084
Page 2

3. The surveillance procedure reviews discussed above will be completed prior to startup. If any additional discrepancies which violate Technical Specifications are identified, they will be reported in a subsequent revision to this LER.

If you have any questions, please contact Joseph E. Conen, Supervisor, Compliance, (313) 586-1960.

Sincerely,



Enclosure: NRC Forms 366, 366A

cc: T. G. Colburn
J. B. Martin
M. P. Phillips
K. R. Riemer
P. L. Torpey

Wayne County Emergency
Management Division

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBR 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Fermi 2

DOCKET NUMBER (2)

05000 -341

PAGE (3)

1 OF 10

TITLE (4)

Inadequate Emergency Diesel Generator Surveillance Testing

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	09	94	94	003	01	10	07	94	FACILITY NAME	DOCKET NUMBER
										05000
										05000
OPERATING MODE (9)		5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		000	20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)	
			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)	
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER	
			20.405(a)(1)(iii)		X 50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
			20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)			
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)			

LICENSEE CONTACT FOR THIS LER (12)

NAME

Joseph E. Conen, Supervisor, Compliance

TELEPHONE NUMBER (Include Area Code)

(313) 586-1960

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED
SUBMISSION
DATE (15)

MONTH DAY YEAR

YES

(If yes, complete EXPECTED SUBMISSION DATE)

X

NO

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On July 15, 1994 during a routine review of surveillance procedure 42.302.02, "Calibration and Logic System Functional Test of Division 1 4160 Volt Emergency Bus 64B and 11EA Undervoltage Circuits", it was determined that the permissive interlocks for the bus undervoltage relays have not been tested to the degree necessary to fully meet the requirements of Technical Specification section 3.3.3. Further testing deficiencies were identified on September 9, 1994 related to the starting and the loading of the Emergency Diesel Generators. All Emergency Diesel Generators were declared inoperable.

The cause of this event can be attributed to procedural deficiencies. The surveillance procedures used to test diesel start, load shed logic and load sequencing were inadequate in that they did not fully test all loads and all attributes of the logic. Corrective actions include revising the deficient procedures and performing the surveillances, reviewing similar surveillances, and creating electrical overlap drawings.

REQUIRED NUMBER OF DIGITS/CHARACTERS
FOR EACH BLOCK

BLOCK NUMBER	NUMBER OF DIGITS/CHARACTERS	TITLE
1	UP TO 46	FACILITY NAME
2	8 TOTAL 3 IN ADDITION TO 05000	DOCKET NUMBER
3	VARIES	PAGE NUMBER
4	UP TO 76	TITLE
5	6 TOTAL 2 PER BLOCK	EVENT DATE
6	7 TOTAL 2 FOR YEAR 3 FOR SEQUENTIAL NUMBER 2 FOR REVISION NUMBER	LER NUMBER
7	6 TOTAL 2 PER BLOCK	REPORT DATE
8	UP TO 18 -- FACILITY NAME 8 TOTAL -- DOCKET NUMBER 3 IN ADDITION TO 05000	OTHER FACILITIES INVOLVED
9	1	OPERATING MODE
10	3	POWER LEVEL
11	1 CHECK BOX THAT APPLIES	REQUIREMENTS OF 10 CFR
12	UP TO 50 FOR NAME 14 FOR TELEPHONE	LICENSEE CONTACT
13	CAUSE VARIES 2 FOR SYSTEM 4 FOR COMPONENT 4 FOR MANUFACTURER NPRDS VARIES	EACH COMPONENT FAILURE
14	1 CHECK BOX THAT APPLIES	SUPPLEMENTAL REPORT EXPECTED
15	6 TOTAL 2 PER BLOCK	EXPECTED SUBMISSION DATE

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
Fermi 2		05000-341		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 10
				94	- 003	- 01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Initial Plant Conditions:

Operational Condition: Defueled
Reactor Power: 0 percent
Reactor Pressure: 0 psig
Reactor Temperature: 97 degrees Fahrenheit

Description of the Event:

On July 15, 1994 during a routine review of surveillance procedure 42.302.02, "Calibration and Logic System Functional Test of Division 1 4160 Volt Emergency Bus 64B and 11EA Undervoltage Circuits", it was determined that the permissive interlocks [IEL] for the bus undervoltage relays [RLY] have not been tested to the degree necessary to fully meet the requirements of Technical Specification section 3.3.3, trip function number 5 for the loss of power load shed logic.

The Technical Engineering group was reviewing procedure 42.302.02 for the purpose of revising it to incorporate an implemented design change package which installed test switches [IS] on the busses. Changes were also being made to the independent verification procedural requirements. In addition, the reviewing engineer was verifying that proper test overlap existed between this procedure and related Instrumentation and Control [I&C] Residual Heat Removal [(RHR)(BO)] system logic functional test procedures as requested by I&C personnel performing overlap reviews.

During the overlap review, the reviewing engineer [utility, non-licensed] determined that neither procedure 42.302.02, which tests load shed electrical components in the RHR logic circuit, nor the related I&C logic functional test procedures fully tested the RHR pump [P] start logic. This part of the logic had not been tested with sufficient overlap to include the conductors which connect the I&C and electrical portions of the circuit. In addition, testing required to verify a switchgear breaker [BKR] cannot be closed following initiation of the undervoltage relay had not been included in the procedures. Engineering personnel concluded that Technical Specification logic functional test requirements had not been met.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Fermi 2	05000-341	94	- 003 -	01	3 OF 10

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Technical Specifications section 3.3.3 Action 35.b requires that an emergency diesel generator [(EDG)(EK)] be declared inoperable when its associated load shed logic is inoperable. Since the load shed logic had not been fully tested it is not considered operable, therefore, all four EDGs were declared inoperable, although they were otherwise functional.

As a result of further investigation, additional deficiencies have been discovered in the undervoltage logic functional test surveillance procedures. Similar problems were found in the logic functional test surveillance procedures for the other three Engineered Safety Feature [(ESF)(JE)] 4160 volt busses [BU]. Test overlap had not included the degraded voltage trip input to the non-interruptible air supply [LE] system isolation logic, the degraded voltage trip input to the bus feeder breaker position, and alternate automatic closure circuits for the EDG output breakers. The engineers also determined that the 480 volt load shed logic had not been fully tested. In addition, Technical Specification acceptance test criteria was not clearly identified in the surveillance procedures as is the usual practice.

It was also found that the EDGs had not been declared inoperable during test runs. When the EDG output breaker is closed the load shed logic is automatically disabled per design, therefore it is rendered inoperable. Since the load shed logic is inoperable during EDG test runs, the associated EDG should be declared inoperable in accordance with Technical Specification 3.3.3 Action 35.b. This was not done. However, because of the short duration of these test runs, normally about two hours, the investigation team could not identify any time where the associated Technical Specification action statements were not met.

Immediate action was taken to fully evaluate the load shed logic surveillance procedures. These procedures have been revised and successfully performed.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Fermi 2	05000-341	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 of 10
		94	- 003 -	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

On September 9, 1994, the plant was in Operational Condition 5 when additional electrical surveillance deficiencies were identified. It was determined that the 18 month Loss of Offsite Power (LOP) and Loss of Offsite Power with a concurrent Loss of Coolant Accident (LOP/LOCA) Emergency Diesel Generator (EDG) surveillance procedures did not fully test all of the loads and/or logic required by Technical Specifications 4.8.1.1.2.e.4.b and 4.8.1.1.2.e.6.b.

A technical review of these procedures for EDG 14 was being performed when a potential testing discrepancy was discovered with EDG 12. The EDG 12 procedure had specified verification that the Control Complex Heating, Ventilation and Air Conditioning (CCHVAC) System chiller was running following load shedding and reenergization of the emergency loads. This step was not performed as originally written. Because Division 1 was being used to satisfy Technical Specification operability requirements for core alterations, fuel load was halted.

An LER Team was formed on September 7, 1994, following the identification of this discrepancy, to determine the extent of the problem. The initial plan involved reviewing the LOP and the LOP/LOCA surveillance procedures, 24.307.01 through .04, for other discrepancies. It was determined that the CCHVAC testing discrepancy which prompted this review, although requiring a procedural clarification, did not violate Technical Specifications. Two Division 2 loads, however, were identified during this review on September 9, 1994 that were not being properly tested, Control Room Emergency Lighting and RHR Emergency Equipment Cooler 2. This violated Technical Specifications 4.8.1.1.2.e.4.b and 4.8.1.1.2.e.6.b. The equivalent loads for Division 1 were being appropriately tested by the procedure.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Fermi 2		05000-341	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	5 OF 10
			94	-- 003 --	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Management was informed of these findings and the investigation was expanded to include all other Technical Specification section 4.8 surveillances. Additionally, remaining cognizant of past procedural overlap issues, a review of associated non-I&C procedures was initiated. This review involves the identification of overlap points on the I&C overlap drawings, followed by the verification that these overlap points, with the exception of the I&C (44 series) overlap points, are being adequately covered by the corresponding referenced surveillance procedures [Operations (24 series), EDG Teardown Inspection (34 series), Electrical (42 series), Reactor Engineering (54 series), Radiation Protection (64 series) and Chemistry (74 series)]. Some of the 44 series procedures, which had been rigorously reviewed in the past for overlap, are also being checked during this review. All four EDG's were declared inoperable on September 11, 1994.

Additional discrepancies have been identified to date during this expanded review, some of which involve Technical Specification violations. The multiple pathways for initiating an EDG start through the ECCS actuation logic were not being separately tested in accordance with Technical Specification 4.3.3.2; and Emergency Equipment Cooling Water (EECW) actuation from the load sequencer was not being differentiated from EECW actuation on Reactor Building Closed Cooling Water (RBCCW) low pressure in accordance with Technical Specifications 4.8.1.1.2.e.4.b, 4.8.1.1.2.e.6.b and 4.8.1.1.2.e.11.

Additionally, procedural discrepancies have been identified in which the acceptance criteria would have permitted performance outside of the Technical Specification limits. In these cases, the data from the most recent testing has been verified to be within Technical Specification limits. Other procedural discrepancies are still being evaluated for their Technical Specification impact.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Fermi 2	05000-341	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	6 OF 10
		94	- 003 -	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Cause of the Event:

The cause of this event can be attributed to procedural deficiencies. The surveillance procedures used to test the load shed logic were inadequate in that they did not fully test all attributes of this logic. The procedures for testing the load shed logic were initially prepared in the first quarter of 1988 when it was discovered by the Technical Specification Improvement Group that load shed logic functional testing was not being performed (refer to LER 87-048-09). Recognizing the need to prepare logic functional surveillance tests, but not fully understanding the depth of test overlap required, combined with the complexity of these circuits, resulted in less than adequate test overlap in the procedures.

Subsequent to their initial approval in 1988, there were no major revisions to these procedures that would have initiated a review of sufficient depth to discover this problem. However, in 1991 I&C personnel performing required periodic overlap verifications requested electrical maintenance personnel to verify proper overlap between portions of the procedure under their responsibility with those of the I&C group. The reviewer, again not fully understanding the requirements for logic functional testing, did not recognize the problem. Responsibility for the procedures in question was transferred to Technical Engineering in January 1993 where they currently reside.

The surveillance procedures used to perform the LOP and LOP/LOCA tests were inadequate in that they failed to document the energization of two autoconnected loads, Division 2 Control Room Emergency Lighting and the Division 2 RHR Emergency Equipment Cooler 2. They also failed to properly test all combinations of the ECCS actuation logic for auto start of the EDGs and they did not specifically verify EECW actuation from the load sequencer.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MN86 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (5)			PAGE (3)
Fermi 2		05000-341		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	7 OF 10
				94	- 003 -	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The two Division 2 autoconnected loads on EDG-14 that were not included in the procedure had also been absent from earlier revisions of the LOP and LOP/LOCA procedures. The corresponding Division 1 loads however, have been procedurally verified since the conclusion of the Technical Specification Improvement Program (TSIP) in 1988 (Control Room Emergency Lighting) and since initial plant operation (RHR Emergency Equipment Cooler 2). The reason for this discrepancy between divisions could not be specifically determined; however, it is apparent that the opportunity for inclusion of both loads for both divisions existed during the TSIP. Similarly, the failure of the procedures to fully test the EECW emergency start logic from the load sequencer could have been identified during the TSIP, but was not. Incorporation of the changes from Technical Specification Amendment 99 this outage provided the first review of sufficient depth since the TSIP to have surfaced these problems.

The identification of the failure to adequately test all logic paths within the ECCS actuation logic for the auto start function of the EDGs resulted from a heightened awareness of the requirements for logic functional testing and the greater knowledge level and experience of the personnel performing this review. These personnel were instrumental in the resolution of the inadequate logic functional testing of the unvoltage logic. The complexity of the logic circuitry along with the understanding of what constituted logic functional testing during 1988 when the TSIP was performed may help explain why this discrepancy was not identified prior to this outage.

Since 1988 the electrical system engineers responsible for these procedures have acquired considerable experience. The electrical system engineers are closely associated with I&C system engineers; working in the same group and in the same area. This synergism has created an environment whereby the electrical engineers have gained knowledge from the I&C engineers in areas such as logic functional testing. This is evidenced by the fact that the electrical engineers identified the procedure inadequacies described above.

The causes of the other discrepancies are still being evaluated.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
Fermi 2		05000-341		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	8 OF 10
				94	003	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Analysis of the Event:

4160 Volt ESF busses are equipped with undervoltage relaying. This relaying will initiate a load shed sequence to remove pre-determined electrical loads from the bus. The same relaying will automatically initiate an EDG start. Once started, the EDG output breaker will close. An automatic sequencer will control the rate of loading on the bus to ensure that the required loads are reenergized and to prevent an EDG overload that otherwise would be caused by the combined starting currents of all the components powered by that bus.

The logic associated with the undervoltage relaying has been tested satisfactorily using the revised procedures. Similarly, the loads and logic associated with the LOP and the LOP/LOCA procedures are also being tested using the new and revised procedures. Testing to date indicates that the two Division 2 loads and the EECW start logic are functioning properly. Additionally, the EDG start logic has been partially tested using the new procedures; and, based upon the results of the testing performed to date, it is expected that this logic will also be shown to be functioning properly. Therefore, although testing required to meet Technical Specifications had not been performed adequately in the past, it is concluded at this point that the required loads and logic have been functioning properly; and thus, there was no threat to the health or safety of the public.

Corrective Actions:

Undervoltage calibration and logic functional test procedures (42.302.XX series) have been revised for the 4160 Volt busses 64B, 65E, 64C, and 65F respectively to correct the identified deficiencies. Procedures for the 480 volt busses 72EA, 72EB, 72EC, 72ED, 72B, 72C, 72E, and 72F have also been revised to correct their deficiencies. The deficiencies noted above along with several other deficiencies found during the review process have been corrected. The revised procedures have been performed with satisfactory results.

Prior to startup a complete review of related electrical surveillances requiring calibration or functional testing will be completed.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
Fermi 2		05000-341		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	9 OF 10
				94	003	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The 30-day load shed channel functional surveillances have been revised to incorporate changes made in the 42.302.XX series procedures and these have been performed with satisfactory results.

A comprehensive review of the LOP and the LOP/LOCA procedures, schematics, load diagrams, design calculations and overlaps is being performed to ensure that all of the loads and logics are being properly tested. Likewise, a review of all other Technical Specification section 4.8 surveillance requirements is being performed to ensure that the surveillance procedures are adequate to perform the required testing. Finally, an overlap review of the 24, 34, 42, 54, 64 and 74 series procedures with the 44 series procedures is being performed to verify the adequacy of the overlap. Some of the 44 series procedures are also being reviewed.

The LOP and the LOP/LOCA procedures have been revised along with several other affected procedures identified during this review. Two new procedures were written to properly test the EDG start logic. These procedures are being performed to verify operability of the EDGs.

The surveillance procedure reviews discussed above will be completed prior to startup. If any additional discrepancies which violate Technical Specifications are identified, they will be reported in a subsequent revision to this LER.

NPP-CT1-04, "Surveillance/Fire Protection Procedure Maintenance" will be revised to provide an improved logic functional test definition and specific requirements for electrical surveillances. Training on the revised procedural requirements will be provided to the electrical and I&C system engineers. This will be completed by February, 1995.

A set of electrical surveillance overlap drawings will be created and maintained. This will be completed by February, 1996.

Test overlap requirements will be periodically reviewed in the I&C continuing training program.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Fermi 2	05000-341	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	10 OF 10
		94	003	01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Previous Similar Events:

Previous failures to meet Technical Specification surveillance requirements are documented in LER 87-048-09.

Failed Component Data:

There were no failed components.