



Douglas R. Gipson  
Senior Vice President  
Nuclear Generation

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

November 22, 1995  
NRC-95-0124

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

- References: 1) Fermi 2  
NRC Docket No. 50-341  
NRC License No. NPF-43
- 2) NRC Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators," dated May 31, 1994

Subject: Proposed Technical Specification Change (License Amendment) -  
Emergency Diesel Generator Action Statements, Surveillance  
Requirements and Reports

Pursuant to 10CFR50.90, Detroit Edison hereby proposes to amend Operating License NPF-43 for the Fermi 2 plant by modifying Technical Specification Action statements 3.8.1.1.b and 3.8.1.1.d, Surveillance requirements 4.8.1.1.2.a, 4.8.1.1.3 and 4.8.1.2, Table 4.8.1.1.2-1 and Bases 3/4.8.1, 3/4.8.2 and 3/4.8.3.

This application proposes to change the allowed out-of-service time for one onsite AC electrical power division from 72 hours to 7 days. Currently, Technical Specification (TS) Action statement 3.8.1.1.b establishes a 72 hour Action when one or two diesel generators (EDGs) are out-of-service in one division of onsite AC electrical power. This change is proposed on the basis of 1) the small impact of the extended allowed out-of-service time on plant risk during operations; 2) the improved outage scheduling flexibility and shutdown risk if the 18 month diesel generator inspection is performed on-line; 3) the depth in offsite power supplies; and 4) station blackout capability.

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This proposal also includes the changes contained in Generic Letter 94-01 (Reference 2) eliminating accelerated testing and special reports for diesel generator failures. The following commitment is being made as required as a condition of Generic Letter 94-01:

Detroit Edison will implement a maintenance program for monitoring and maintaining EDG performance consistent with the provisions of 10 CFR 50.65 and the guidance of Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, as applicable to EDGs within 90 days of the issuance of the approved license amendment.

Generic Letter 94-01 includes a discussion of expected provisions in Regulatory Guide 1.160. Detroit Edison commits to following Regulatory Guide 1.160, Revision 1, dated January 1995. This statement is being made to clarify the commitment and to ensure consistency between this commitment and Detroit Edison's implementation of the Maintenance Rule (10CFR50.65).

The change to the allowed out-of-service time is being submitted as a Cost Beneficial Licensing Action. This proposal involves a small effect on safety and will save an estimated \$27 million over the life of the plant, not including costs of replacement power. Cost savings are based on reducing refueling outage critical paths and by reducing contractor and overtime costs.

The description and evaluation of the changes are included in Attachment 1 to this letter. Attachment 2 contains the proposed Technical Specification page revisions.

Detroit Edison requests that this amendment be approved with an implementation time period of "within 60 days."

Approval is requested by March 31, 1996 so that emergency diesel generator inspections can be performed prior to the next refueling outage, scheduled for September 1996.

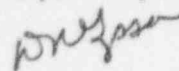
Detroit Edison has evaluated the proposed Technical Specification change against the criteria of 10CFR50.92 and determined that No Significant Hazards Consideration is involved. The Fermi 2 Onsite Review Organization has approved and the Nuclear Safety Review Group has reviewed the proposed Technical Specification and concurs with the enclosed determinations. In accordance with

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10CFR50.91, Detroit Edison is providing a copy of this letter to the State of Michigan.

If you have any questions, please contact Lynne Goodman at (313) 586-4097.

Sincerely,



Attachments

cc: T. G. Colburn  
M. J. Jordan  
H. J. Miller  
A. Vogel  
Supervisor, Electric Operators, Michigan  
Public Service Commission, J. R. Padgett

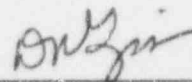
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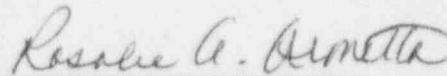
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I, DOUGLAS R. GIPSON, do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.



DOUGLAS R. GIPSON  
Senior Vice President

On this 22nd day of November, 1995 before me personally appeared Douglas R. Gipson, being first duly sworn and says that he executed the foregoing as his free act and deed.



Notary Public

ROSALIE A. ARMETTA  
NOTARY PUBLIC - MONROE COUNTY, MI  
MY COMMISSION EXPIRES 10/11/98

ATTACHMENT 1

DESCRIPTION AND EVALUATION OF  
PROPOSED TECHNICAL SPECIFICATION CHANGE TO  
EMERGENCY DIESEL GENERATOR  
ACTION STATEMENTS, SURVEILLANCE  
REQUIREMENTS AND REPORTS

## **INTRODUCTION**

The purpose of this proposed amendment is to modify Technical Specification 3/4.8.1 to:

1. Increase the allowed out-of-service time for one onsite AC electrical power division from 72 hours to 7 days.
2. Implement the provisions of Generic Letter 94-01 to delete the accelerated testing schedule and special reporting of diesel generator failures from the Technical Specifications based on implementation of the Maintenance Rule (10CFR50.65) monitoring and maintenance provisions for emergency diesel generators (EDGs).

The specific articles to be revised are as follows:

Action Statement 3.8.1.1.b is being revised. Currently, it specifies an allowed out-of-service time of 72 hours whether one or both EDGs are inoperable in one of the required divisions of onsite AC electrical power. Otherwise, the plant is to be in at least hot shutdown within the next 12 hours and cold shutdown within the following 24 hours. Other actions to be taken are also specified. The proposed change does not affect the other compensatory actions. It increases the allowed out-of-service time to 7 days if one or both EDGs are inoperable in one of the required divisions of onsite AC electrical power.

Action Statement 3.8.1.1.d which covers the situation when both divisions of onsite AC electrical power are inoperable is being revised. The time frame for restoring one division to operable status is not changed. The time frame for restoring the second division is revised to match the proposed Action Statement 3.8.1.1.b. Both divisions are required to be restored within 7 days of the initial loss. Additionally, Action Statement 3.8.1.1.d is reformatted to improve its usability.

Surveillance requirement 4.8.1.1.2.a currently requires testing in accordance with the frequency specified in Table 4.8.1.1.2-1. This submittal will establish the frequency as at least once per 31 days. Table 4.8.1.1.2-1 provides test frequencies of 31 days and 7 days, with the frequency selected being based on past failure rate. This request proposes to delete Table 4.8.1.1.2-1 since the frequency will be established in

specification 4.8.1.1.2.a. These changes are in accordance with Generic Letter 94-01.

Surveillance requirement 4.8.1.1.3 covering reports of diesel generator failures is being deleted by this submittal. This change is also in accordance with Generic Letter 94-01.

Surveillance requirement 4.8.1.2 which lists AC electrical power surveillances to be performed when the plant is shutdown is being revised to delete Surveillance requirement 4.8.1.1.3, since the requirements of section 4.8.1.1.3 are being deleted.

Additionally, the Bases for Sections 3/4.8.1, 3/4.8.2, and 3/4.8.3 are proposed to be revised due to the changes in out-of-service duration and testing. Currently, the Bases states that the AC and DC source allowable out-of-service times are based on Regulatory Guide (RG) 1.93, "Availability of Electrical Power Sources," December 1974. The proposed 7 day out-of-service time is not included in RG 1.93, so this proposed change will state that the allowable out-of-service times are based, in part, on RG 1.93. The Bases also state that the surveillance requirements are in accordance with the recommendations of Regulatory Guide 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," December 1979; Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," Revision 1, August 1977; and Regulatory Guide 1.137, "Fuel-Oil Systems for Standby Diesel Generators," Revision 1, October 1979. This request proposes to qualify this Bases statement by adding "as modified by Generic Letter 94-01" and providing the title and date of Generic Letter 94-01. Eliminating the staggered test frequency for EDGs and failure reports does differ from the previous regulatory guidance.

## **EVALUATION**

### **Description of Fermi 2 Offsite and Onsite AC Power**

Fermi 2 Technical Specification 3.8.1.1 requires two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system.

Offsite power is available for the auxiliary power requirements of Fermi 2 and is comprised of two physically independent circuits supplied at two different voltage levels, 345kV and 120kV.

Three (3) transmission lines, named for the stations they connect to (Swan Creek, Luzon, and Shoal), provide 120kV power from the Detroit Edison Electrical System

to the 120kV Switchyard located at the Fermi 1 site. The 120kV Switchyard is an arrangement of buses, breakers, disconnects, transformers, and transmission lines which connect the Combustion Turbine Generators (CTGs-located at Fermi 1), and Fermi 2 Division 1 Essential Safeguard Feature (ESF) and Balance of Plant (BOP) loads with the Detroit Edison Electrical System. Only one (1) of the above redundant 120kV lines is required to comply with Fermi 2 Technical Specifications in supplying one of the two required physically independent offsite circuits.

Two (2) transmission lines, Brownstown No. 1 and Brownstown No. 2, provide 345kV power from the Detroit Edison Electrical System to the 345kV Switchyard located at the Fermi 2 site. The 345kV Switchyard is an arrangement of buses, breakers, disconnects, transformers, and transmission lines which connect the Fermi 2 Main Turbine Generator (MTG-2) and Fermi 2 Division 2 ESF and BOP loads with the Detroit Edison Electrical System. Fermi 2 exports its generating capability via MTG -2, interconnecting via the 345 kV Switchyard to the Detroit Edison Electrical System. Only one (1) of the above redundant 345 kV lines is required to comply with Fermi 2 Technical Specifications in supplying one of the two required physically independent offsite circuits.

The Fermi 2 Class 1E distribution system consists of two physically and electrically independent and redundant power trains, Division 1 and Division 2, supplying electrical power to safety-related equipment. The ESF buses are divided into two (2) divisions, with different offsite power sources to each division, as discussed above. Each of the two (2) ESF divisions, Division 1 and 2, consist of four (4) separate buses. The loads on each ESF division are split between two (2) Emergency Diesel Generators. Either Division 1 or Division 2 has the capability and the capacity to supply the ESF AC power loads required for safe shutdown.

Manually operated tie breakers are provided to cross-tie Division 1 and Division 2 ESF Buses. These tie breakers are normally maintained in the open and disconnected position. Administrative controls limit the operation of these breakers to when the plant is in the shutdown condition. Interlocks are also provided to prevent tying the two divisions together.

Four (4) EDGs, each connected to their respective ESF Buses, provide an emergency source of power upon loss of the offsite power sources. In the event of a loss of offsite power, each EDG will receive an automatic start signal. Load shedding and bus isolation will occur automatically. Following load shed and bus isolation, each EDG output breaker will automatically close, energizing the associated ESF Buses. Essential loads will then be automatically connected to their respective ESF Buses sequentially. Each EDG will receive a start signal on the following signals:

- a. Loss of voltage
- b. Degraded voltage
- c. ESF actuation signal (High Drywell Pressure or Level 1-Low Reactor Water Level)
- d. Manual start

Any of the above conditions will initiate a start signal to the EDGs. However, if a fault exists on an ESF Bus, the associated EDG will not start and its output breaker will not close to energize the ESF Bus.

Four (4) Combustion Turbine Generators (CTG) at the Fermi 1 site can be used to supply power to Division 1 ESF Buses when a loss of offsite and onsite power occurs (Station Blackout). CTG 11 Unit 1 is designed with a black start capability. Plant procedures provide for operation of the CTGs and the Electrical System under station blackout conditions.

The Fermi 2 Electrical Power System is described in the Fermi 2 Updated Final Safety Analysis Report (UFSAR) Section 8. The safety related function of the EDGs is to provide an onsite standby source of AC electrical power to shut down and maintain the reactor in a safe condition under all conditions including a Loss of Coolant Accident (LOCA) coincident with a Loss of Offsite Power (LOOP) event.

#### Evaluation of Increases in Allowed Out-of-Service Time for One Division of Onsite AC Power

This submittal proposes to change the allowed out-of-service time for one division of AC onsite power from 72 hours to 7 days. This change is proposed on the basis of 1) the small impact of the extended allowed out-of-service time on plant risk during operation, 2) the improved outage schedule flexibility if the 18 month EDG inspection is performed on-line, 3) the expected decrease in critical path time in outages starting with the sixth refueling outage and decrease in outage cost starting with the fifth refueling outage if the 18 month inspection is performed on-line, 4) the improvement in shutdown risk if EDG inspections are performed with the plant on-line vs. shutdown, 5) the depth in offsite power supplies provided by the five transmission lines, and 6) that CTG 11 Unit 1 has been analyzed and proceduralized to fulfill emergency power needs during a station blackout event.

### Effect on EDG Availability

Currently, the availability and reliability for the Fermi 2 EDGs are high. Fermi 2 is committed to a 0.95 target reliability for the EDGs. Actual reliability exceeds 95%. The Fermi 2 Nuclear Generation Business Plan Reports monitor the total unavailability of the EDGs. EDG unavailability refers to the period of time the EDGs are unable to perform their required function when required. Between 1991 and 1993 Fermi 2 maintained an average unavailability of approximately 0.3 % for the EDGs. The unavailability for 1994 was 0%, however, during much of 1994, not all EDGs were required to be functional due to the extended plant shutdown. During the first three quarters of 1995, a total average unavailability of 0.32 % was maintained.

Information was gathered by the Maintenance Rule Task Force from January 1991 to September 1995, relating to EDG Unavailability due to Functional Failures. The data shows the highest rolling 12 month EDG unavailability due to functional failures over this time period ranged from 0.01 % for the best performing EDG to 0.41% for the worst performer.

Detroit Edison estimates that with the proposed Technical Specification changes in effect, the average planned hours of unavailability per EDG will increase by about 96 hours during each operating cycle. Therefore, the increase in planned unavailability as a result of the proposed Technical Specification changes, will be small. Monitoring of EDG unavailability will continue and will continue to receive attention as the Maintenance Rule program is implemented.

The main reason Detroit Edison is requesting this amendment is in order to perform the 18 month diesel inspection on-line. A 7 day out-of-service time will allow the inspection to be done on-line since the inspection is expected to take about 4 days (96 hours). Even if the increased time out-of-service is assumed to take 7 days for each diesel generator, the additional unavailability expected for each EDG would be 7 days each cycle. The total unavailability would then be expected to be about 1.7%. No additional unplanned out-of-service time is expected as a result of the longer time period in the Action statement, since most periods of unavailability are considerably less than the existing 72 hours out-of-service time in Technical Specifications. Neither extending the allowable out-of-service time nor performing the 18 month inspections on-line should negatively impact the performance of the diesel, so the unplanned unavailability should not increase. The total unavailability should only be increased by the additional planned on-line maintenance.

The conservatively estimated total future EDG unavailability of about 1.7% is still less than the estimated nuclear industry average EDG maintenance unavailability during operation of 2% as documented in NUREG/CR-5994, "Emergency Diesel Generator: Maintenance and Failure Unavailability, and Their Risk Impacts," 1994.

#### Probabilistic Safety Assessment

To further assess the increased out-of-service time's effect on plant safety, the effect of the change on the risk of core damage was evaluated using the plant's Probabilistic Safety Assessment model. The conservative assumption was made that increasing the Technical Specification out-of-service time from 72 hours to 7 days would add one 7 day EDG outage for each diesel each cycle. This is conservative because the planned added on-line inspection is expected to take about 4 days. It allows some margin for other EDG work or problems arising during the inspection. As discussed earlier, this change in Technical Specifications is not expected to increase the unplanned unavailability during operations.

RISKMAN, a linked event tree code, was used to perform the evaluation. Both the IPE (Individual Plant Examination) model and the current Fermi 2 plant model were used in the assessment. The current model was used because it includes modifications made to the plant since the IPE and other enhancements that have been made to the model and runs with version 6.01 of RISKMAN. Version 6.01 includes several features that provide additional capabilities for evaluating the output and increased flexibility with regard to performing sensitivity studies. Review of recent upgrades to the current model is still in progress, so the IPE model was also used for this analysis. The IPE model was also used because it represents the version that was used to generate the IPE results submitted to the NRC.

For the analysis using the IPE model, new terms were added to the diesel system equations. The terms represented one additional 7 day outage for each diesel generator during any given fuel cycle (16 months of operation) as well as the current assumptions for maintenance and testing. Because of the complexity needed to eliminate cross terms involving concurrent maintenance of intra-divisional diesels, these terms were not developed. The diesel equations were then quantified and the results were used to quantify the event trees.

For the analysis using the current Fermi 2 RISKMAN model, the maintenance alignment terms for the diesels were modified to include an additional 7 day outage during each fuel cycle. It was assumed that each diesel would experience an extended outage once during every 16 months of operation. The alignments were set up such that inter-divisional cross maintenance terms were excluded. The current

potential for concurrent intra-divisional maintenance was maintained, but concurrent intra-divisional maintenance during the additional 7 day extended EDG outages was not assumed. Split fractions for the diesels were re-quantified using the new maintenance alignments. The master frequency file was then re-generated using the new split fractions. The event trees were quantified with the new master frequency file giving a modified core damage frequency (CDF) that incorporates the extended diesel out-of-service time.

Incorporating the additional 7 day out-of-service time for each diesel into the IPE model increased the CDF by 1.9 percent. Using the current PSA model, increasing the expected outage time for each diesel generator by 7 days every fuel cycle resulted in a 1.7 percent increase in the base CDF. The increase obtained from use of both models is quite small.

The above analyses assumed four separate 7 day EDG outages for each cycle, one for each EDG. This assumption was made because the expected use of the additional out-of-service time is to perform an extended outage for each EDG each cycle. The Technical Specification, however, does not differentiate between one or both diesel generators being inoperable in a division since both are needed for the AC electrical power source to be considered operable. Therefore another case was analyzed assuming that during one of the four 7 day EDG outages each cycle, the second EDG in the out-of-service EDG's division also becomes inoperable for the same 7 days. This case was analyzed using the current Fermi 2 RISKMAN model. The resulting increase in the base CDF was approximately  $1 \times 10^{-6}/\text{yr}$ , which is still a small increase in CDF. As discussed above, this scenario does not represent the expected use of the increased out-of-service time. It was performed as a bounding type situation. If a second EDG became inoperable while an EDG was out-of-service, every effort would be made to restore the EDG as soon as possible.

The PSA evaluation only considers the increase in risk associated with the additional diesel maintenance that would occur during Operational Condition 1. An assessment of the reduced risk due to the expected increase in availability of the diesel generators during shutdown operation was not made because Fermi 2 currently does not have a shutdown risk model.

Considering the small expected increase in CDF associated with the extended out-of-service time for the diesel generators and the fact that the reduced risk during shutdown was not included in the analysis, a Technical Specification that would increase the allowed out-of-service time for the diesel generators from 72 hours to 7 days would not significantly impact the risk of a core damage event nor have an impact on public health and safety.

### Shutdown Risk

Another way of evaluating the effect of the change on plant safety is to address the impact on shutdown safety. While the impact on shutdown risk was not quantitatively evaluated, there are qualitative observations that can be made. Per NUREG/CR-5994, the risk impact of EDG maintenance during power operation and many stages of shutdown are comparable. This is especially true for the early stages of an outage (e.g., before the refueling stage is reached).

Since Fermi 2 has 4 diesel generators, one diesel generator is out-of-service for much of a refueling outage for maintenance, inspection, or testing. Detroit Edison's shutdown risk philosophy is currently based on a defense in depth approach. One goal is to maintain EDGs in both divisions of onsite AC electrical power in an operable status whenever possible. If the 18 month inspection is performed on-line, EDG availability during outages will significantly improve.

Outage scheduling flexibility will also improve if the EDGs are not required to be out-of-service as much as currently during an outage. Other surveillance testing and maintenance will be easier to schedule with improved EDG availability during outages. The increased flexibility will help in scheduling future refueling outage activities to be more efficient and reduce shutdown risk.

### On-Line Maintenance

Performing the periodic EDG inspections on-line will result in a more balanced allocation of component maintenance tasks between power operation and refueling outages. During power operation, management and maintenance will be able to focus more on the preparations and successful implementation of the EDG inspection, since it will be a major planned activity rather than one of many refueling outage tasks. Detroit Edison will have more flexibility in selecting personnel to perform the maintenance and more flexibility in scheduling the EDG outage to avoid simultaneous outages of risk significant equipment.

Detroit Edison controls the combinations of risk significant systems that may be scheduled for on-line maintenance. Preplanning is performed, including staging of materials and parts to reduce the likelihood of delays during on-line maintenance activities. Work is scheduled to minimize the out-of-service time so that important equipment can be returned to service promptly. Normally, work on EDGs is performed around the clock if the EDG is out-of-service while the plant is operating.

With one or both EDGs in one AC electrical power division inoperable, Action statement 3.8.1.1.c delineates the additional conditions that must be satisfied to permit plant operation to continue. Action 3.8.1.1.c requires a verification that all required systems, subsystems, trains, components, and devices that depend on the remaining onsite AC electrical power division as a source of emergency power are operable. Otherwise, reactor shutdown is required. Scheduling of EDG maintenance or inspections will be in accordance with plant processes to evaluate work on equipment important to risk and to ensure the requirements of Action 3.8.1.1.c are met. Both of these methods help insure performing the periodic diesel generator inspection on-line will have a negligible impact on public health and safety.

#### Changes Since Original Out-of-Service Time Was Established

There have been changes since original licensing both in plant capability and method of evaluating risk to plant safety. In response to the station blackout rule, Detroit Edison established the capability of coping with a station blackout, which is the loss of all offsite power concurrent with turbine trip and unavailability of the onsite emergency AC power system. This capability is described in Section A.1.155 of the Updated Final Safety Analysis Report. As described earlier, CTG 11 Unit 1 has black start capability and can provide power to Division 1 ESF loads needed during a station blackout event.

The Fermi 2 Probabilistic Safety Assessment (PSA) provides a means of evaluating risk that was not available at the time the EDG out-of-service times were established. This tool provides insights into the risk of an activity that are useful in combination with other means of evaluation. For the proposed change, this tool shows a low increase in on-line plant risk.

Looking at plant risk while the reactor is shutdown has received increased attention over the years. Detroit Edison evaluates planned outage activities to determine if established defense in depth goals are met. Considerable attention is placed on availability of electrical power. Additionally, the industry trend towards shorter outages makes the importance of evaluating equipment availability greater and minimizing unnecessary out-of-service time more important.

Lastly, the NRC and industry have recognized the benefit of modifying regulatory requirements to reduce costs when the impact on safety is small. The change proposed in this application meets this criteria.

### Other Plants

The proposed EDG out-of-service time can be compared to other units' EDG out-of-service times. There are approximately 40 nuclear units that have a 7 day or greater allowed out-of service time for one EDG. Their situation is comparable to this request for a 7 day out-of-service time for one division of onsite AC power, since the majority of these units have 2 EDGs per unit (or 3 or less EDGs per 2 unit station which has shared EDG(s)), rather than the Fermi 2 configuration of 2 EDGs per division of onsite AC power. NUREG/CR-5994 was the major source for this information.

### Evaluation of Generic Letter 94-01 Changes

In Generic Letter 94-01, the NRC staff found that a commitment to implement a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of the maintenance rule and consistent with the guidance of RG 1.160 would provide a basis for the staff to approve a licensee request to remove the accelerated testing and special reporting requirements for EDGs from their plant Technical Specifications. The justification is that the maintenance program will assure EDG performance, so the specific requirements for accelerated testing and special reporting no longer are needed.

This submittal provides the requested commitment as stated in the cover letter. The proposed Technical Specification changes are consistent with the guidance in Generic Letter 94-01, with the following additions. This request includes revising Surveillance Requirement 4.8.1.2 since it refers to Surveillance Requirement 4.8.1.1.3 on EDG special reporting. The reference to section 4.8.1.1.3 is being deleted for consistency. Detroit Edison is also proposing a change to the Bases to refer to Generic Letter 94-01 since this change differs from the Regulatory Guidance currently listed.

### **SIGNIFICANT HAZARDS CONSIDERATION**

In accordance with 10CFR50.92, Detroit Edison has made a determination that the proposed amendment involves no significant hazards considerations. To make this determination, Detroit Edison must establish that operation in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety.

The proposed amendment will increase the allowed out-of-service time for one division of diesel generators, remove the provisions for accelerated testing and special reports, and revise the Bases due to these changes.

1. The proposed changes do not involve a significant increase in the probability or consequences of an accident. Changing the out-of-service time, surveillance frequency and reporting requirements for emergency diesel generators (EDGs) will not affect the initiation of an accident, since EDGs are not associated with any accident initiation mechanism. The proposed changes will not impact the plant design or method of EDG operation. The increased out-of-service time has been evaluated to have only a small impact on plant risk. Performing the EDG inspections during plant operations will decrease plant risk during plant outages. Deleting the accelerated testing provisions will not affect the consequences of an accident since the implementation of a maintenance and monitoring program for EDGs consistent with the provisions of the maintenance rule will assure EDG performance as discussed in Generic Letter 94-01. Deleting reporting requirements has no impact on consequences of an accident since reporting has no accident effect. Based on the amount of electrical system redundancy, the small increase in plant risk during operations and the decrease in plant risk during outages, this change will not result in a significant increase in the probability or consequences of an accident.
2. The proposed changes do not create the possibility of a new or different accident from any previously evaluated. The proposed changes do not modify the plant design or method of diesel operation. Therefore, no new accident initiator is introduced, nor is a new type of failure created. For these reasons, no new or different type of accident is created by these changes.
3. The proposed changes do not involve a significant reduction in a margin of safety. Since implementation of a maintenance program for the EDGs consistent with the Maintenance Rule will ensure that high EDG performance standards are maintained, the accelerated testing schedule is not needed to maintain the margin of safety. Deleting reporting requirements has no impact on safety or margin of safety. Increasing the allowed out-of-service time for one division of onsite AC power will slightly increase EDG unavailability during plant operation. However, this change does not impact the redundancy of offsite power supplies, the allowed out-of-service time if both divisions of power are not operable, or the ability to cope with a station blackout event. This request also does not change the Action statement for AC electrical power systems required when the plant is shutdown. The

increase in core damage frequency was assessed to be small by an evaluation using the plant PSA for the operating condition. Enabling the diesel generator inspections to be performed on-line will improve safety while shutdown by reducing EDG out-of-service time during outages. For these reasons, the proposed changes do not involve a significant reduction in the margin of safety.

### **ENVIRONMENTAL IMPACT**

Detroit Edison has reviewed the proposed Technical Specification changes against the criteria of 10CFR51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, nor significantly change the types or significantly increase the amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, Detroit Edison concludes that the proposed Technical Specifications meet the criteria given in 10CFR51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.

### **CONCLUSION**

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

Detroit Edison requests that the proposed license amendment be effective within 60 days of approval by the Commission.

**ATTACHMENT 2**  
**PROPOSED**  
**TECHNICAL SPECIFICATION**  
**CHANGES**