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

December 10, 2003

Mr. Mano K. Nazar
American Electric Power
Senior Vice President and Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT 2 - ISSUANCE OF EMERGENCY AMENDMENT REGARDING ONE-TIME ALLOWED OUTAGE TIME EXTENSION FOR AB EMERGENCY DIESEL GENERATOR (TAC NO. MC1498)

Dear Mr. Nazar:

The Commission has issued the enclosed Amendment No. 264 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit 2. The amendment consists of changes to the Operating License in response to your application dated December 9, 2003. This request was treated as an emergency amendment in accordance with 10 CFR 50.91(a)(5).

The amendment revises the Operating License to add a license condition to allow a one-time extension of the allowed outage time for the AB emergency diesel generator.

A copy of our related safety evaluation is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

David L Hood for

Mohammed A. Shuaibi, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-316

Enclosures: 1. Amendment No. 264 to DPR-74
2. Safety Evaluation

cc w/encls: See next page

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INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 264
License No. DPR-74

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Indiana Michigan Power Company (the licensee) dated December 9, 2003, 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 Facility Operating License as indicated in the attachment to this license amendment.

3. This license amendment is effective as of its date of issuance and shall be implemented immediately.

FOR THE NUCLEAR REGULATORY COMMISSION

L. Raghavan, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Operating License

Date of Issuance: December 10, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 264

FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 50-316

Replace the following page of Facility Operating License No. DPR-74 with the attached revised page. The changes are identified by marginal lines indicating the areas of change.

| REMOVE | INSERT |
|---|---|
| 5 | 5 |

(s) Deleted by Amendment No. 261

(t) Deleted by Amendment 63

(u) Deleted by Amendment No. 261

(v) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the station chemistry manual and shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;

2. Identification of the procedures used to measure the values of the critical parameters;

3. Identification of process sampling points;

4. Procedure for the recording and management of data;

5. Procedures defining corrective actions for off control point chemistry conditions; and

6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective actions.

(w) Deleted by Amendment No. 261

(x) Deleted by Amendment No. 261

(y) Deleted by Amendment No. 261

(z) The 72-hour allowed outage time of Technical Specification 3.8.1.1 Action "b" which was entered at 0923, on December 7, 2003, may be extended one time by an additional 72 hours to complete repair and testing of the 2 AB diesel generator.

D. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Donald C. Cook Nuclear Plant Security Plan," with revisions submitted

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WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO AMENDMENT NO. 264 TO FACILITY OPERATING LICENSE NO. DPR-74

## INDIANA MICHIGAN POWER COMPANY

## DONALD C. COOK NUCLEAR PLANT, UNIT 2

## DOCKET NO. 50-316

## 1.0 INTRODUCTION

By application dated December 9, 2003, the Indiana Michigan Power Company (the licensee) requested an amendment to the Operating License for the Donald C. Cook Nuclear Plant (D.C. Cook), Unit 2. The proposed amendment would revise the Operating License to add a license condition to allow a one-time extension of the allowed outage time (AOT) for the Unit 2 AB emergency diesel generator (EDG). The extension would allow continued operation of the unit while repairs and related testing of the EDG are completed. On December 7, 2003, at 9:23 a.m. (eastern standard time), the licensee declared the Unit 2 AB EDG inoperable and then entered the 72-hour Action Statement of Technical Specification (TS) 3.8.1.1, Action b, to perform routine TS surveillance testing. During this testing, the AB EDG experienced load oscillations from a maximum of 3700 kilowatts to 2200 kilowatts. The results of the TS surveillance testing indicated that the EDG could not perform its intended function and as a result, the licensee replaced the electronic and hydraulic governor components in the EDG. Slow speed starts of the EDG were commenced to perform tuning evolutions that ensure proper speed control during EDG start by either the electronic or hydraulic governor. During one of the tuning evolutions, one of the 12 fuel injector pumps was found to be seized. Testing following repair of the fuel injector pump identified a fuel leak. The fuel line was replaced; however, the fuel leak persisted. Following troubleshooting, the licensee made the decision to replace the fuel injector pump a second time to eliminate the fuel leak.

The licensee determined that the completion of repairs and testing to establish operability will not be completed prior to expiration of the 72-hour AOT. Therefore, the licensee requested that the proposed amendment be processed as an emergency amendment as discussed in Section 5.0 of this safety evaluation.

## 2.0 REGULATORY EVALUATION

### 2.1 Applicable Regulations and Regulatory Guidance

General Design Criterion (GDC) 17, "Electric power systems," of Appendix A, "General Criteria for Nuclear Power Plants," to 10 CFR Part 50 requires, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components (SSCs) that are important to safety. The onsite system is required to have sufficient independency, redundancy, and testability to perform its safety function, assuming a single failure. Electric power from the offsite power system is required to have two physically independent circuits that are designed and located so as to minimize, to the extent practical, the

likelihood of their simultaneous failure under operating and postulated accident and environmental conditions. In addition, this criterion requires provisions to minimize the probability of losing electric power from the remaining electric power supplies as a result of a loss of power from the unit, the offsite transmission network, or the onsite power supplies.

GDC 18, "Inspection and testing of electric power systems," requires that electric power systems that are important to safety be designed to permit appropriate periodic inspection and testing.

The regulation at 10 CFR 50.63, "Loss of all alternating current power," requires that all nuclear power plants must have the capability to withstand a loss of all alternating current (AC) power for an established period of time.

The regulation at 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants" requires that preventive maintenance activities must not reduce the overall availability of the SSCs.

Regulatory Guide (RG) 1.93, "Availability of Electric Power Sources," provides guidance with respect to operating restrictions (i.e., AOTs) if the number of available AC power sources is less than that required by the TS limiting conditions for operation (LCOs). In particular, this guidance prescribes a maximum AOT of 72 hours for an inoperable AC power source.

RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," describes a risk-informed approach that is acceptable to the NRC for assessing the nature and impact of proposed licensing-basis changes by considering engineering issues and applying risk insights.

RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," describes a risk-informed approach that is acceptable to the NRC for assessing the nature and impact of proposed TS changes.

## 3.0 TECHNICAL EVALUATION

### 3.1 Risk Assessment Evaluation

In evaluating the risk information submitted by the licensee, the three-tiered approach documented in RG 1.177, "An approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," was followed, employing 3-tier approach.

Tier 1 - The first tier addresses the assessment of the risk impact of the proposed change for comparison to acceptance guidelines consistent with the NRC's Safety Goal Policy Statement, as documented in RG 1.174. In addition, the first tier aims at ensuring that the plant risk does not increase unacceptably during the period the equipment is taken out of service.

The second tier addresses the need to preclude potentially high-risk configurations that could result if equipment, in addition to that associated with the change, are taken out of service simultaneously.

The third tier addresses the establishment of an overall configuration risk management program for identifying risk-significant configurations resulting from maintenance or other operational activities, and taking appropriate compensatory measures to avoid such configurations.

3.2 Basis and Quality of Risk Assessment

The licensee used its PRA model and appropriate conservative assumptions to assess the risk increase associated with operation at power for a period of 3 additional days without an operable AB EDG. The risk consideration included maintaining defense-in-depth, quantifying the PRA to determine the change in core damage frequency (CDF) and large early release frequency (LERF) as a result of the proposed 72-hour AOT extension for the AB EDG. Also, the licensee is maintaining the continuous online risk management program to control the performance of other risk-significant tasks during the EDG maintenance with consideration of specific compensatory measures to minimize risk.

The dominant accident sequences contributing to the assessed risk increase include the occurrence of conditions due to the unavailability of and demand for the use of the AB EDG. The assumption of the accident analysis and design basis of the units demand maintaining at least one train of the onsite or offsite AC sources operable during accident conditions in the event of an assumed loss of all offsite power or all onsite AC power sources.

TS LCO 3.8.1.1 requires two EDG sets capable of supplying the onsite Class 1E power distribution subsystems for design-basis accidents (DBAs) assuming single failure affecting either train. TS 3.8.1.1, Action b, states that with one EDG set inoperable, the inoperable EDG set must be returned to operable status within 3 days. Under the proposed change for a 72-hour AOT extension, all DBA AC power requirements can be met with the operable EDG without a single failure.

The NRC staff evaluated the quality of the PRA models, major assumptions, and data used in the risk assessment. This evaluation compared the applicable findings from the NRC staff's review of the PRA (developed as part of the licensee's individual plant evaluation) with the NRC's Standardized Plant Analysis Risk Model (SPAR), Version 3.0.1, for D. C. Cook Unit 2, as well as findings from similar evaluations of similar plants. The NRC staff found them acceptable.

3.3 Risk Impact of the Proposed Change (Tier 1)

An acceptable approach to risk-informed decisionmaking is to show that the proposed change to the licensing basis meets several key principles. One of these principles is to show that the proposed change results in a small increase in risk in terms of CDF and LERF, and is consistent with the NRC's Safety Goal Policy Statement. Acceptance guidelines for meeting this principle are presented in RG 1.174. Therefore, in accordance with the RG 1.174 guidelines, the licensee's proposed change to allow for a one-time- extension of an additional 72 hours for the AB EDG results in an acceptable increase in risk which is small and consistent with the NRC's Safety Goal Policy Statement.

The licensee used its PRA model of D.C. Cook Unit 2 to calculate risk increases due to the proposed AOT extension of 72 hours. Both the incremental conditional core damage probability (ICCDP) and the incremental conditional large early release probability (ICLERP) were assessed. These quantities are a measure of the increase in probability of core damage and

large early release, respectively, during a single outage assumed to last for the entire duration allowed by the proposed change. Based on the proposed 72-hour extension, the results are:

ICCDP: 7.5E-7

ICLERP: 1.3E-7

The acceptance guidance criteria are 5.0E-7 for ICCDP and 5.0E-8 for ICLERP, respectively, as outlined in RG 1.177 and RG 1.174 for permanent changes. The guideline criteria were based on the baseline CDF, being smaller than 1.0E-4 / reactor-year. For a temporary change, the acceptance guidance criteria should be higher than that of a permanent change by an order of magnitude. Thus, the ICCDP (7.5E-7) and ICLERP (1.3E-7) are within the acceptable values of temporary increases. The proposed 72-hour extension will avoid additional risk associated with the plant shutdown and the transitional risk.

An NRC evaluation of the ICCDP using the SPAR model confirmed the risk increases due to the proposed 72-hour extension, with the provisions that some of the proposed compensatory measures on other maintenance activities that would not be performed during the 72-hour extended period. Because the proposed 72-hour extension is for one time only, the increase in CDF is numerically equal (approximately) to the assessed ICCDP value. Similarly, the increase in LERF is numerically equal (approximately) to the assessed ICLERP value. The baseline CDF will be changed for the 1-year period due to the proposed one-time, 72-hour extension of the AOT.

The mean CDF of D. C. Cook Unit 2 will increase by no more than 7.4E-7/year (during the 1-year period that the proposed change will be implemented).

The mean LERF of D. C. Cook Unit 2 will increase by no more than 1.2E-7/year (during the 1-year period that the proposed change will be implemented).

According to the guidelines of RG 1.174, the estimated increases in the mean values of CDF and LERF are small and of low risk significance.

External events are not considered in the analysis. For the proposed short duration of 72 hours, the probability of having earthquakes or other natural events is small. The risk of potential fire hazards can be minimized during this extended period under the proposed compensatory measures by reducing or even eliminating certain maintenance activities on SSCs that impact fire protection systems.

3.3 Avoidance of High Risk Plant Configurations (Tier 2)

The licensee used its PRA to identify dominant contributing sequences and associated cutsets to the estimated increase in risk, as well as major contributing failures and human errors. Insights from the risk assessment were used in identifying the eight monitoring and compensatory measures to avoid plant configurations or conditions that may lead to significant risk increases during implementation of the proposed 72-hour AOT extension. The NRC staff finds that the proposed precautions, as well as their proposed implementation, are adequate for preventing plant configurations or conditions that may increase risk significantly.

3.4 Risk-Informed Configuration Risk Management (Tier 3)

The intent of the risk-informed configuration risk management is to ensure that plant safety is maintained and monitored during an extended outage. A formal commitment to maintain a configuration risk management program is required on the part of a utility prior to implementation of a risk-informed TS whenever such TS is entered and risk-significant components are taken out of service. The licensee has programs in place for D. C. Cook Unit 2 to comply with 10 CFR 50.65(a)(4) to assess and manage risk from proposed maintenance activities. These programs can support the licensee's decisionmaking regarding the appropriate actions to control risk whenever a risk-informed TS is entered.

3.5 Deterministic Evaluation

TS 3.8.1.1 currently requires that two separate and independent EDGs be operable in Modes 1, 2, 3, and 4. TS 3.8.1.1, Action b, requires that an inoperable EDG be restored to an operable status within 72 hours or the unit must be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours. The licensee has proposed to add a license condition to extend the AOT for an additional 72 hours. The proposed license condition is as follows:

> The 72-hour allowed outage time of Technical Specification 3.8.1.1 Action "b" which was entered at 0923, on December 7, 2003, may be extended one time by an additional 72 hours to complete repair and testing of the 2 AB diesel generator.

The licensee will take compensatory measures in order to minimize the small increase in risk during the 72-hour extension of the AOT. Maintenance and testing during the AOT extension will be rescheduled for both units and warranted to minimize risk of unit transients.

The NRC staff has evaluated the proposed amendment request and concludes that extending the AOT for an additional 72 hours, on a one-time basis, to complete the repair of Unit 2 AB EDG is acceptable. The NRC staff's conclusion is based on the following:

> All the other onsite and offsite emergency power systems are fully operable and will be maintained operable during the extension.
>
> Compensatory measures to be taken by the licensee during the extension.

3.6 Summary

The NRC staff has concluded that the proposed one-time extension of the AOT for the AB EDG is acceptable. This conclusion is based, in part, on the availability and reliability of offsite power sources and the redundant EDG and the low likelihood of the loss of these power sources during the 72-hour extended time period that the AB EDG may remain out of service. In addition, the licensee has taken compensatory measures limiting activities that have the potential to result in a plant transient or adversely impact the availability of onsite or offsite power supplies. Therefore, the NRC staff finds that there is no undue risk to public health and safety associated with granting the 72-hour AOT extension.

4.0 REGULATORY COMMITMENTS

During the 72-hour extension, the licensee has committed to implement the following compensatory measures (as stated):

- No work will be performed on shared safety significant systems (i.e., essential service water, nonessential service water, plant air compressors, motor driven auxiliary feed pumps, and chemical and volume control system), and their applicable supporting systems, that could render the system inoperable or unavailable. By limiting work on these systems and related equipment, they remain available to provide either cross-unit support in case of a trip and subsequent failure on the affected unit, and/or assure that back-up capability exists to compensate for unexpected failures in shared systems (such as the plant air or nonessential service water system) such that a single failure in these systems will not result in a single or dual unit trip.

- No work will be performed that could potentially jeopardize unit operation (e.g., condenser waterbox flushing, pump swaps, etc). This is not meant to prevent operator actions to switch equipment in response to any failures or extenuating circumstances outside those considered that occur during the extended allowed outage time. This provision is intended to eliminate any challenge to unit operation that might result from operational changes in plant alignment or switching operating equipment for elective reasons.

- No surveillance testing on plant equipment will be performed that could jeopardize plant operation (e.g., starting or stopping pumps, stroking valves, taking instrument channels out of service, etc.) during the additional time the EDG is out of service. However, non-intrusive surveillance testing (e.g., rod position verification, instrument channel checks, leak rates, etc.) may be performed.

- The essential service water screenhouse condition currently meets CNP's [Cook Nuclear Plant's] Level 1 (least vulnerable) status. In accordance with plant procedural requirements, screen house vulnerability is evaluated daily based on equipment status, planned evolutions, plant operating mode, wind conditions, lake wave height, fish conditions, and traveling screen debris loading. During the allowed outage time extension:

- No elective actions will be taken that would increase screen house vulnerabilities.

- No heat sink alignment changes will be made. No elective changes in the alignment or operation of this equipment will be allowed.

- Main condenser and feed pump condenser differential pressure will be monitored at a frequency commensurate with the screenhouse walkdowns. This is intended to provide added assurance that condensate and feed systems will not initiate a plant transient.

- The integrity of the other on-site power supplies, including the station batteries will be maintained.

The following actions will be taken to provide increased assurance of grid stability:

- No test or maintenance activities that could reduce switchyard reliability will be performed.

- Periodically, the projected grid voltage following postulated unit trip will be verified to indicate a stable grid. Assuring that grid conditions are expected to remain stable serves to reduce the grid as an initiator for loss of offsite power to the units.

- Indiana Michigan Power Company (I&M) will contact the system dispatcher to ensure that no short-term activities adversely affecting grid stability are planned or have transpired.

- I&M will confirm that the system dispatcher will notify the control room or Shift Manager in the event system degradation or perturbations do occur so that an appropriate plant response can be determined.

- I&M will confirm that no severe weather is forecast during the allowed outage time extension at the time of its initiation. Any forecast of severe weather during the allowed outage time extension will be evaluated by the Shift Manager for potential impact on offsite power sources (with assistance from the Fort Wayne Transmission Dispatch Center). If adverse impact is identified such that grid stability is at risk, then with concurrence of the Plant Manager or Director of Operations, the unit will be shut down in an orderly manner. Currently, no severe weather is expected during the extended allowed outage time extension.

- Special Operations Start-of-the-Shift briefings will be conducted in each unit on use of the 69 kV emergency power backup in case of loss of offsite power or station blackout, and use of the chemical and volume control system unit cross tie. These briefings will include review of the associated procedures and initiating indications.

- I&M will ensure the recovery of the EDG is of the highest priority and will exit the proposed action following satisfactory completion of the final operability runs.

The above compensatory measures have been entered as regulatory commitments in the licensee's Commitment Management System which complies with Nuclear Energy Institute Document 99-04, Revision 0, "Guidelines for Managing NRC Commitment Changes." The NRC staff has reviewed the compensatory measures and how they will be controlled and finds that the licensee's commitments provide adequate assurance that safe plant operation will not be affected by the extended AOT for the Unit 2 AB EDG.

## 5.0 EMERGENCY CIRCUMSTANCES

The NRC's regulations at 10 CFR 50.91 contain provisions for issuance of an amendment where the Commission finds that emergency circumstances exist, in that a licensee and the Commission must act quickly and that time does not permit the Commission to publish a *Federal Register* notice allowing 30 days for prior public comment. The emergency exists in this case in that the proposed amendment is needed to allow the licensee to preclude an unnecessary plant shutdown. The NRC staff has determined that the licensee used its best efforts to make a timely application and that the licensee could not reasonably have foreseen the problem that led to this license change request.

In its December 9, 2003, application, the licensee stated that the emergency situation resulted from the testing and repair to address EDG load oscillations and subsequent failure of the fuel injector pump and a fuel leak. The licensee indicated that correction and retesting of the Unit 2 AB EDG would exceed the 72 hours currently allowed by TS 3.8.1.1, Action "b," which requires that the unit be shutdown if the AB EDG is not operable. The licensee has determined that the risk of extending the 72-hour AOT by an additional 72 hours does not warrant subjecting the unit to a shutdown transient. Since the NRC staff could not process a routine or exigent license amendment within 72 hours, the licensee requested an emergency license amendment to preclude an unnecessary shutdown

The failure of the Unit 2 AB EDG could not have been avoided. The original failure occurred during TS-required testing of the EDG. The expected outcome of any surveillance is demonstration that the component is operable. The load swings which occurred during the required testing could not have been anticipated. The original EDG repair to address the load swings would have been completed within the 72-hour AOT. However, the subsequent failure of the fuel injector pump and the fuel leak which required replacement of the fuel line and a second replacement of the fuel injector pump will result in delaying restoration of the EDG beyond the 72-hour AOT.

The EGM that was in service at the time of the load oscillations had been installed in September 2003 to increase EDG reliability due to concerns regarding potentially age-degraded capacitors that contributed to failures of other EDGs during the previous year. The refurbished spare EGM had met the applicable monthly full load surveillance test requirements prior to the test conducted December 7, 2003. As a result, failure of the EDG to successfully pass the surveillance was not anticipated.

D.C. Cook Unit 2 has previously experienced a failure of a fuel injector pump. The root-cause evaluation determined that this failure was likely debris-induced. Analysis of the fuel oil following the December 7, 2003, load oscillations demonstrated the fuel oil was not contaminated with debris. Therefore, the licensee does not believe these failures are related.

The sequence of failures resulting from the initial EDG load oscillations could not have been foreseen. The licensee will conduct a comprehensive root-cause analysis evaluation with a multi-disciplinary team, including external component experts.

Accordingly, the Commission has determined that emergency circumstances exist pursuant to 10 CFR 50.91(a)(5) and could not have been avoided, that the submittal of information was timely, and that the licensee did not create the emergency condition.

## 6.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulation at 10 CFR 50.92(c) states that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility 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) result in a significant reduction in a margin of safety. The NRC staff has made a final determination that no significant hazards consideration is involved for the proposed amendment and that the amendment should be issued as allowed by the criteria contained in 10 CFR 50.91. The NRC staff's final determination is presented below:

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

Probability of Occurrence of an Accident Previously Evaluated

The proposed change is a one-time extension of the AOT for the Unit 2 AB EDG that will allow continued operation of Unit 2 during repairing and retesting. The Unit 2 AB EDG function is only mitigative and is not needed unless an accident occurs. The Unit 2 AB EDG does not affect any accident initiators or precursors. The extension of the AOT does not affect the Unit 2 AB EDG interaction with any system whose failure or malfunction can initiate an accident. Therefore, the probability of occurrence of an accident previously evaluated is not significantly increased.

Consequences of an Accident Previously Evaluated

The Unit 2 AB EDG functions to mitigate a loss of offsite power by supplying electric power to vital components. The risk evaluation performed by the licensee in support of the proposed change demonstrates that the consequences of an accident are not significantly increased. Therefore, the consequences of an accident previously evaluated are not significantly increased.

2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The requested change is to allow Unit 2 to continue operation while the AB EDG is being repaired and retested. There are no new failure modes for the Unit 2 AB EDG created and the Unit 2 AB EDG is not an initiator of any new or different kind of accident. The proposed extension of the AOT would not affect the interaction of the Unit 2 AB EDG with any system whose failure or malfunction can initiate an accident. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed amendment will not result in a significant reduction in a margin of safety.

The margins of safety applicable to the proposed change are those associated with the availability of the Unit 2 AB EDG to perform its mitigative function. The licensee's risk evaluation performed to support this amendment demonstrates that the slight decrease in availability is not significant. When the Unit 2 AB EDG is returned to operation, there will be no reduction in the safety margins associated with its capacity (e.g., voltage current, frequency of electric power). Therefore, the proposed change does not involve a significant reduction in margin of safety.

## 7.0 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.

## 8.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a

surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final finding that the amendment involves no significant hazards consideration. 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.

9.0 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 Contributors: J. Chung
O. Chopra

Date: December 10, 2003