

**J. Bernie Beasley, Jr., P.E.**  
Vice President

**Southern Nuclear  
Operating Company, Inc.**  
40 Inverness Center Parkway  
Post Office Box 1295  
Birmingham, Alabama 35201

Tel 205.992.7110  
Fax 205.992.0403

December 3, 2003



Docket Nos.: 50-348  
50-364

NL-03-2454

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant Units 1 & 2  
Exigent Technical Specification Revision Request  
Electrical Power Systems AC Sources - Operating

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90 and 10 CFR 50.91(a)(6), Southern Nuclear Operating Company (SNC), hereby requests an exigent amendment to Joseph M. Farley Nuclear Plant (FNP) Units 1 and 2 Operating Licenses NPF- 2 and NPF-8 respectively. The proposed changes to the Technical Specifications (TS) contained herein would revise TS 3.8.1, "Electrical Power Systems AC Sources – Operating," such that, with one emergency diesel generator (EDG) set inoperable, the allowed completion time in Action B is extended from 10 days to 13 days, provided that the other conditions of the statement are met. These TS changes will be in effect for Units 1 & 2 during December of 2003, for the 1C EDG only.

SNC is performing the 24 month preventative maintenance (PM) on EDG 1C which includes the 20 year PM task of replacing the cylinder liners. This EDG outage was started on November 30, 2003. Emergent problems have been encountered that could force the maintenance schedule to exceed 10 days.

The proposed license amendments are needed to avoid a potential shutdown in accordance with TS 3.8.1, which would require FNP Units 1 and 2 to be placed in Mode 3 within 6 hours after the 10 day allowed outage time has expired and Mode 5 within the following 36 hours. Therefore, FNP requests approval of this license amendment application on an exigent basis and issuance of the amendment no later than December 9, 2003.

Enclosure 1 contains a description of the proposed change, the supporting technical analysis and the no significant hazards consideration determination. Enclosure 2 includes the marked-up TS page for the proposed TS change. Enclosure 3 includes the TS page with the proposed change incorporated. TS Bases pages are included in Enclosure 2 and 3 for information only.

A001

This TS revision request represents a risk-informed licensing change. The proposed change meets the criteria of Regulatory Guide RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," for risk-informed changes.

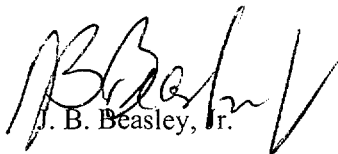
A copy of the proposed change has been sent to Dr. D. E. Williamson, the Alabama State Designee, in accordance with 10 CFR 50.91(b)(1).

This letter contains no new NRC commitments. If you have any questions, please advise.

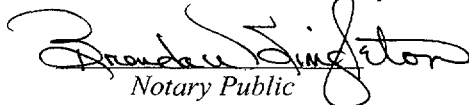
Mr. J. B. Beasley, Jr. states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

  
J. B. Beasley, Jr.

Sworn to and subscribed before me this 3<sup>rd</sup> day of December, 2003.

  
Notary Public

My commission expires: October 9, 2005

JBB/CHM/sdl

Enclosure 1: Description of the Proposed Change  
Enclosure 2: Marked-Up Technical Specifications Page  
Enclosure 3: Clean Typed Technical Specifications Page

U. S. Nuclear Regulatory Commission  
NL-03-2454  
Page 3  
December 3, 2003

cc: Southern Nuclear Operating Company  
Mr. J. D. Woodard, Executive Vice President  
Mr. D. E. Grissette, General Manager – Farley  
Document Services RTYPE: CFA04.054; LC # 13880

U. S. Nuclear Regulatory Commission  
Mr. L. A. Reyes, Regional Administrator  
Mr. S. E. Peters, NRR Project Manager – Farley  
Mr. T. P. Johnson, Senior Resident Inspector – Farley

Alabama Department of Public Health  
Dr. D. E. Williamson, State Health Officer

Joseph M. Farley Nuclear Plant Units 1 & 2  
Exigent Technical Specification Revision Request  
Electrical Power Systems AC Sources - Operating

Enclosure 1

Description of the Proposed Change

Joseph M. Farley Nuclear Plant Units 1 & 2  
Exigent Technical Specification Revision Request  
Electrical Power Systems AC Sources - Operating

Enclosure 1

Description of the Proposed Change

**1.0 Description**

Pursuant to 10 CFR 50.90 and 10 CFR 50.91(a)(6), Southern Nuclear Operating Company (SNC), hereby requests an exigent amendment to Joseph M. Farley Nuclear Plant (FNP) Units 1 and 2 Operating Licenses NPF- 2 and NPF-8 respectively. The proposed changes to the Technical Specifications (TS) contained herein would revise TS 3.8.1, "Electrical Power Systems AC Sources – Operating," such that, with one emergency diesel generator (EDG) set inoperable, the allowed completion time in Action B is extended from 10 days to 13 days, provided that the other conditions of the statement are met. These TS changes will be in effect for Units 1 & 2 during December of 2003, for the 1C EDG only.

SNC is performing the 24 month preventative maintenance (PM) on EDG 1C which includes the 20 year PM task of replacing the cylinder liners. This EDG outage was started on November 30, 2003. Emergent problems have been encountered that could force the maintenance schedule to exceed 10 days.

**2.0 Proposed Change**

The proposed change revises TS 3.8.1 Action B as follows:

**ACTIONS**

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One DG set inoperable	B.4 Restore DG set to OPERABLE status.	10 days

-----NOTES-----  
In December 2003,  
for the 1C DG only,  
the allowed  
completion time is  
extended to 13  
days for the  
preventive  
maintenance  
replacement of the  
cylinder liners.  
-----

↑  
Insert

### **3.0 Background**

#### **3.1 Electrical Power Systems AC Sources Description**

The unit Class 1E AC Electrical Power Distribution System AC sources consist of the offsite power sources and the onsite standby power sources (train A and train B emergency diesel generators (EDG)). As required by 10 CFR 50, Appendix A, General Design Criteria (GDC) 17, the design of the AC electrical power system provides independence and redundancy to ensure an available source of power to the Engineered Safety Feature (ESF) systems.

The onsite Class 1E AC Distribution System is divided into redundant load groups (trains) so that the loss of any one group does not prevent the minimum safety functions from being performed. Each train has connections to two preferred offsite power sources and a single EDG set. EDG set A consists of the 1-2A and 1C EDGs. EDG set B consists of the 1B EDG (Unit 1) and the 2B EDG (Unit 2).

Offsite power is supplied to the 230 kV and 500 kV switchyard(s) from the transmission network by six transmission lines. From the 230 kV switchyard, two electrically and physically separated circuits provide AC power, through startup auxiliary transformers, to the 4.16 kV ESF buses.

In addition to providing a pre-determined sequence of loading for the EDGs, the train A and train B automatic load sequencers also function to actuate the required ESF loads on the offsite circuits. When offsite power is available, the automatic load sequencers function to simultaneously start the required ESF loads upon receipt of a safety injection (SI) actuation signal.

The onsite standby power source is provided from 4 EDGs (1-2A, 1B, 2B, and 1C). The continuous service rating of each EDG is 2,850 kW for DG 1C and 4,075 kW for EDGs 1-2A, 1B, and 2B. EDG 1-2A and 1-C are assigned to the redundant load group train A. EDGs 1B and 2B are assigned to the redundant load group train B. Ratings of the EDGs satisfy the requirements of Regulatory Guide 1.9.

EDGs 1B and 2B are dedicated to train B of Unit 1 and Unit 2, respectively, and each EDG comprises a required EDG set for its associated unit. EDGs 1-2A and 1C are dedicated to train A, but are shared between both units and together comprise a required EDG set for both units. However, there are no design basis events in which EDG 1-2A or 1C are required to supply power to the safety loads of both units simultaneously. In all events, EDG 1-2A and 1C are assigned to only one of the two units depending on the event.

FNPP also has a fifth diesel generator (2C) that serves as a station blackout diesel which can be manually aligned to supply B train power to either unit and power LOSP loads. Diesel generator 2C was originally designed and built as an EDG and is the same model as the 1C EDG. It was later reclassified as the station blackout diesel. Diesel generator 2C is maintained to the same maintenance standards as the 1C EDG.

The 4.16 kV ESF busses are required to supply equipment essential for safe shutdown of the plant. These busses are supplied by two startup transformers on each unit connected to the offsite source during normal and emergency operating conditions. In the event one startup transformer on a unit fails, half of the emergency busses on that unit will be de-energized with their loss annunciated in the Main Control Room. The EDG serving the affected busses will start and LOSP loads will be sequenced onto those busses.

An EDG starts automatically on a SI signal or on an ESF bus degraded voltage or under voltage signal. After the EDG has started, it will automatically tie to its respective bus after offsite power is tripped as a consequence of ESF bus under voltage or degraded voltage, independent of or coincident with an SI signal. The EDGs will also start and operate in the standby mode without tying to the ESF bus on an SI signal alone. Following the trip of offsite power, a sequencer strips non-permanent loads from the ESF bus. When the EDG is tied to the ESF bus, each load is then sequentially connected to its respective ESF bus by the automatic load sequencer. The sequencing logic controls the permissive and starting signals to motor breakers to prevent overloading the EDG by automatic load application.

In the event of a loss of preferred offsite power, the ESF electrical loads are automatically connected to the EDGs in sufficient time to provide for safe reactor shutdown and to mitigate the consequences of a Design Basis Accident (DBA) such as a loss of coolant accident (LOCA). Within one minute after the initiating signal is received, all loads needed to recover the unit or maintain it in a safe condition are returned to service.

### 3.2 Emergency Diesel Generator 1C Cylinder Liner Preventive Maintenance

Due to the design of the 1C EDG (Fairbanks Morse 38TD8 – 1/8 opposed piston diesel), extensive engine disassembly including removal of the upper crankshaft is required to remove and replace cylinder liners. Emergent problems have been encountered that could force the maintenance schedule to exceed the current allowed outage time of 10 days. The proposed TS amendments provide an extension of the allowed outage time to 13 days which will provide sufficient time to complete the maintenance activities and return 1C EDG to service.

### 3.3 Compensatory Actions

During the period that EDG 1C is in the extended allowed outage time (three days) for the preventive maintenance activities, SNC will implement the following compensatory, risk-management measures:

- 1) Maintain all EDGs, other than 1C EDG, operable and the 2C station blackout diesel available, thus maximizing the available power sources.
- 2) Suspend maintenance and testing that affects reliability of the EDGs. This will maximize the availability of power sources.
- 3) Monitor the availability of all off-site power sources once per shift (eight hours). This will insure the on-shift crew is aware of current off-site power source availability.
- 4) Suspend maintenance or testing on the offsite power system in the onsite high voltage switch yard, thus minimizing the event frequency associated with inadvertent LOSP.
- 5) The risk of performing maintenance or surveillance testing on other risk significant systems, structures, and components will be assessed and managed for the current plant state per plant procedures.
- 6) Very high-risk plant evolutions as described in plant risk assessment procedures will be avoided.
- 7) Align the 2C Service Water (SW) pump to B train and select it to auto start in place of SW pump 2E. This will reduce the risk associated with required support equipment for Unit 2 SW pumps.
- 8) For both units, establish B train as the on-service train and maintain B train Component Cooling Water (CCW) pumps, SW pumps and Charging Pumps (CP) available to provide maximum dependability of Reactor Cooling Pump (RCP) seal cooling in the event of a LOSP thus minimizing the risk to the RCP seals.
- 9) Maintain the availability of the Unit 1 and 2 Turbine Driven Auxiliary Feedwater (TDAFW) pumps and the Motor Driven Auxiliary Feedwater (MDAFW) pumps to enhance the availability of an RCS heatsink.
- 10) Contact the system dispatcher to communicate the status of 1C EDG and the power needs of the plant thus minimizing the risk of inadvertent system power interruptions.
- 11) Brief operations personnel on the 1C EDG activities, including the compensatory measures in place. This brief will include actions to be taken should a LOSP occur. On-shift crews will receive this brief prior to assuming watch for the first time and following any period of scheduled days off. This will ensure that the on-shift crew is aware of the current equipment condition and thus reduce the risk of maintenance being authorized on the protected equipment.



### 3.4 Purpose of Proposed Amendment

This change will allow FNP to complete the 20 year preventative maintenance (PM) task of replacing the cylinder liners of EDG 1C as recommended by the EDG vendor, with the Units on-line and in a reasonable time frame of 13 days.

## 4.0 Technical Analysis

### 4.1 Electrical Power Systems AC Sources Safety Analysis Basis

The initial conditions of design bases accident and transient analyses assume ESF systems are operable. The AC electrical power sources are designed to provide sufficient capacity, capability, redundancy, and reliability to ensure the availability of necessary power to ESF systems so that the reactor core, Reactor Coolant System (RCS), and containment design limits are not exceeded.

The operability of the AC electrical power sources is consistent with the initial assumptions of the accident analyses and is based upon meeting the design basis of the unit. This results in 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.

The TS limiting condition for operation 3.8.1 requires two EDG sets capable of supplying the onsite Class 1E power distribution subsystems to ensure that sufficient AC power is available to meet the design basis accidents assuming a single failure affecting either train. TS 3.8.1 action B.4 states that with one EDG set inoperable, the inoperable EDG set must be returned to operable status within 10 days. The 10 day completion time takes into account the capacity and capability of the remaining AC sources, a reasonable time for repairs, and the low probability of a Design Basis Accident (DBA) occurring during this period. A completion time of 10 days is usually sufficient to perform necessary preventive or corrective maintenance required on the EDGs. However, emergent problems have been encountered that could force the maintenance schedule to exceed 10 days. The maintenance activities are being worked on a 24 hour per day schedule until completed. During the 13 day period, all DBA AC power requirements can be met with the operable B train EDGs, assuming no single failure. A redundant B train power supply is available with station blackout diesel 2C which can supply power to B train on either unit for LOSP loads. To minimize the possibility of a single failure affecting B train, SNC will align both units with B train as the on-service train. This will place the swing components for service water, component cooling water and charging on the B train. With no single failure, there are no situations in which entry into a 13 day completion time, due to work on the 1C EDG, would result in failure to meet an intended safety function. In addition, compensatory actions will be taken in order to minimize the small increase in risk during the additional three day period when 1C EDG is inoperable.

#### 4.2 ECCS Probabilistic Risk Assessment (PRA) Evaluation

##### Evaluation of Risk Impact

Risk-informed considerations for the proposed change consist of: maintaining defense-in-depth, quantifying the PRA to determine the change in core damage frequency (CDF) and large early release frequency (LERF) produced by the increased completion time for 1C EDG, continuation of an online risk management program to control performance of other risk significant tasks during the EDG maintenance, and consideration of specific compensatory measures to minimize risk.

The risk impact of the proposed change has been evaluated and found to be acceptable. Overall risk increases only incrementally and well within acceptable limits. In the absence of any definitive criteria for acceptance of temporary changes to the Technical Specifications, the effect on risk of the proposed increase in completion time for maintenance of 1C EDG has been evaluated using Regulatory Guide RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated July 1998, employing an adoption of and the NRC's 3-tier approach suggested in RG 1.177, "An Approach for Plant-Specific Risk-Informed Decision making: Technical Specifications," dated August 1998, specifically:

- Tier 1 - PRA Capability and Insights
- Tier 2 - Avoidance of Risk-Significant Plant Configurations
- Tier 3 - Risk-Informed Configuration Risk Management

Although the Regulatory Guides (RG) stipulate evaluation of the proposed change on the total risk, this evaluation only quantifies the on-line risk from internal events while at power, which is then balanced against the risk associated with the alternative of shutting down Units 1 and 2. There are risks associated with manually shutting down the units from a stable condition, including the risk during the power and mode transition periods, and the risk while shutdown. NUREG-1024, "Technical Specifications - Enhancing the Safety Impact," states:

Allowable outage times that are too short will subject the plant to unnecessary trips, transients, and fatigue cycling.

The proposed completion time extension provides the additional safety benefit of averting the transitional risk associated with shutting down the unit. Therefore, it is judged that the relative safety significance of the proposed completion time extension is low and the potential consequences of the request are preferable to the potential consequences associated with transitioning to and maintaining the units shutdown and their eventual transition back to full power operation.

## Tier 1: PRA Capability and Calculation of Risk Increase

Risk-informed support for the proposed change is based on an evaluation of PRA calculations performed to quantify the change in CDF and LERF resulting from the increased completion time for the 1C EDG.

### PRA Capability

The scope, level of detail, and quality of the FNP PRA are sufficient to support a technically defensible and realistic evaluation of the risk change for this proposed completion time extension. The FNP PRA addresses internal events at full power only.

The FNP PRA is based on the original Plant Farley PRA that was performed to support the Individual Plant Examination (1993). Since 1993, several updates have been made to incorporate plant and procedure changes, update plant-specific reliability and unavailability data, improve the fidelity of the model, incorporate Westinghouse Owners' Group (WOG) peer review comments, and support other applications, such as on-line maintenance and risk-informed in-service inspection.

The FNP PRA is a living program that is maintained through a periodic review and update process. Peer certification of the FNP PRA using the WOG peer review certification guidelines was performed in August 2001. Certification was performed by a team of independent PRA experts from U.S. nuclear utility PRA groups and PRA consulting organizations. This intensive peer review involved approximately two person-months of engineering effort by the review team and provided a comprehensive assessment of the strengths and limitations of each element of the PRA. On the basis of its evaluation, the certification team determined that, with certain findings and observations addressed, the quality of all elements of the PRA would be of sufficient quality to support risk significant evaluations with defense-in-depth input. None of the unresolved findings identified by the peer review team involved modeling of the EDG system or the use of EDG in the event tree models. Therefore, none of the peer review findings would affect calculations of the change in risk associated with this submittal.

SNC is confident that the results of this risk evaluation are technically sound and consistent with the expectations for PRA quality set forth in RGs 1.174 and 1.177.

### Calculation of Risk Increase

To determine the effect of the proposed 13 day completion time for maintenance of 1C EDG, the guidance suggested in RGs 1.174 was used. Since the proposed completion time increase is a one-time occurrence, the incremental increase in annualized core damage frequency ( $\Delta CDF$ ) and the incremental increase in annualized large early release frequency ( $\Delta LERF$ ) for the extension of the completion time from 10 days to 13 days represent the increase in risk due to that three day period. The calculated  $\Delta CDF$  for the proposed change is  $6.2E-8$  for Unit 1 and  $4.4E-7$  for Unit 2. The calculated  $\Delta LERF$  for the proposed change is  $5.8E-12$  for Unit 1 and  $3.4E-10$  for Unit 2.

The final results of the risk evaluation are compared with the risk significance criteria from RGs 1.174. The calculated values for  $\Delta CDF$  and  $\Delta LERF$  demonstrate that the proposed 1C EDG completion time change has only a small quantitative impact on plant risk, as they are less than the RG 1.174 acceptance criteria.

### Tier 2: Avoidance of Risk-Significant Plant Configurations

There is reasonable assurance that risk-significant plant equipment configurations will not occur when 1C EDG is out of service (OOS) consistent with the proposed TS change. Increases in risk posed by potential combinations of equipment OOS will be managed under the site procedures.

### Tier 3: Risk-informed Configuration Risk Management

BNP's configuration risk management program is governed by procedure BNP-0-ACP-52.1, "Guidelines for Scheduling of On-Line Maintenance," which ensures that on-line risk is appropriately evaluated prior to performing any maintenance activity. This program provides guidance for managing plant trip risk, probabilistic risk, and safety function degradation from on-line maintenance, external or internal conditions, as required by 10 CFR 50.65(a)(4) of the Maintenance Rule. The procedure addresses risk management practices in the maintenance planning and maintenance execution phases for Modes 1 through 3.

### PRA Summary

The final results of the risk evaluation were compared with the risk significance criteria from RGs 1.174. The calculated values for  $\Delta CDF$  and  $\Delta LERF$  demonstrate that the proposed 1C EDG completion time change has only a small quantitative impact on plant risk.

In addition, it is judged that the relative safety significance of the proposed completion time extension is low and the potential consequences of the request are preferable to the potential consequences associated with transitioning to and maintaining the units shutdown.

## 5.0 Regulatory Analysis

### 5.1 No Significant Hazards Consideration

In 10 CFR 50.92(c), the Nuclear Regulatory Commission (NRC) provides the following standards to be used in determining the existence of a significant hazards consideration:

...a proposed amendment to an operating license for a facility licensed under 50.21(b) or 50.22, or for a testing facility 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) Involve a significant reduction in the margin of safety.

Southern Nuclear Operating Company (SNC) has reviewed the proposed amendment request and determined that its adoption does not involve a significant hazards consideration based upon the following discussion:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The emergency diesel generators (EDG) provide onsite electrical power to vital systems should offsite electrical power be interrupted. The EDGs are not an initiator to any accident previously evaluated. Therefore, this extended period of operation with the EDG out-of-service will not increase the probability of an accident previously evaluated.

The EDGs act to mitigate the consequences of design basis accidents that assume a loss of offsite power. For that purpose, redundant EDGs are provided to protect against a single-failure. During the Technical Specification ten day Completion Time, an operating unit is allowed by the Technical Specifications to remove one of the EDGs from service, thereby losing this single-failure protection. This operating condition is considered acceptable. The consequences of a design basis accident coincident with a failure of the redundant EDG during the period of 13 days are the same as those during the ten days Completion Time. Therefore, during the period of non-compliance, there is no significant increase in consequences of an accident previously evaluated.

Therefore, the proposed changes will not result in a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different accident from any accident previously evaluated?

Response: No.

There are no new failure modes or mechanisms created due to plant operation for an extended period to perform repairs and post-maintenance testing of 1C EDG. Extended operation with an inoperable 1C EDG does not involve any modification in the operational limits or physical design of plant systems. There are no new accident precursors generated due to the extended allowed completion time.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

Plant operation for 13 days with an inoperable 1C EDG, has been shown to have a very small impact on plant risk using the criteria of RG 1.174. During the extended allowable completion time, the electrical power system maintains the ability to perform its safety function of providing an available source of power to the Engineered Safety Feature (ESF) systems as assumed in the accident analyses. During the extended maintenance and test period, appropriate compensatory measures will be implemented to restrict high-risk activity.

Therefore, the change does not involve a significant reduction in a margin of safety as defined in the basis for any Technical Specification.

## 5.2 Applicable Regulatory Requirements/Criteria

Since the mid-1980s, the NRC has been reviewing and granting improvements to TS that are based, at least in part, on PRA insights. In its final policy statement on TS improvements of July 22, 1993, the NRC stated that it expects that licensees, in preparing their Technical Specification related submittals, will utilize any plant-specific PSA (probabilistic safety assessment) or risk survey and any available literature on risk insights and PSAs. Similarly, the NRC staff will also employ risk insights and PSAs in evaluating Technical Specifications related submittals. Further, as a part of the Commission's ongoing program of improving Technical Specifications, it will continue to consider methods to make better use of risk and reliability information for defining future generic Technical Specification requirements. The NRC reiterated this point when it issued the revision to 10 CFR 50.36, "Technical Specifications," in July 1995.

In August 1995, the NRC adopted a final policy statement on the use of PRA methods in nuclear regulatory activities that improve safety decision making and regulatory efficiency. The PRA policy statement included the following points:

1. The use of PRA technology should be increased in all regulatory matters to the extent supported by state-of-the-art in PRA methods and data and in a manner that compliments the NRC's deterministic approach and supports the NRC's traditional defense-in-depth philosophy.
2. PRA and associated analyses (e.g., sensitivity studies, uncertainty analyses, and importance measures) should be used in regulatory matters, where practical within the bounds of the state-of-the-art, to reduce unnecessary conservatism associated with current regulatory requirements.
3. PRA evaluations in support of regulatory decisions should be as realistic as practicable and appropriate supporting data should be publicly available for review.

In conclusion, based on the deterministic and PRA considerations discussed in this submittal, (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.

## **6.0 Environmental Consideration**

Southern Nuclear has evaluated the proposed changes and determined the changes do not involve (1) a significant hazards consideration, (2) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (3) a significant increase in the individual or cumulative occupational exposure. Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), and an environmental assessment of the proposed changes is not required.

## **7.0 References**

1. Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated July 1998.
2. Regulatory Guide 1.177, "An Approach for Plant-Specific Risk-Informed Decisionmaking: Technical Specifications," dated August 1998:

Joseph M. Farley Nuclear Plant Units 1 & 2  
Exigent Technical Specification Revision Request  
Electrical Power Systems AC Sources - Operating

Enclosure 2

Marked Up Proposed Technical Specifications Page



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.3.2 Perform SR 3.8.1.6 for OPERABLE DG set.	24 hours
	<u>AND</u>	<div data-bbox="1384 378 1529 449" style="border: 1px solid black; padding: 2px; display: inline-block;">Insert</div> <div data-bbox="1037 463 1500 966" style="border: 2px solid black; border-radius: 50%; padding: 10px; margin-top: 10px;"> <p>-----NOTES----- In December 2003, for the 1C DG only, the allowed completion time is extended to 13 days for the preventive maintenance replacement of the cylinder liners. -----</p> </div>
	B.4 Restore DG set to OPERABLE status.	10 days
	<u>AND</u>	13 days from discovery of failure to meet LCO
C. Two required offsite circuits inoperable.	C.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.	13 hours from discovery of Condition C concurrent with inoperability of redundant required features
	<u>AND</u>	
	C.2 Restore one required offsite circuit to OPERABLE status.	24 hours

## BASES

---

### ACTIONS

#### B.2 (continued)

In this Condition, the remaining OPERABLE DG set and offsite circuits are adequate to supply electrical power to the onsite Class 1E Distribution System. Thus, on a component basis, single failure protection for the required feature's function may have been lost; however, function has not been lost. The 4 hour Completion Time takes into account the OPERABILITY of the redundant counterpart to the inoperable required feature. Additionally, the 4 hour Completion Time takes into account the capacity and capability of the remaining AC sources, a reasonable time for repairs, and the low probability of a DBA occurring during this period.

#### B.3.1 and B.3.2

Required Action B.3.1 provides an allowance to avoid unnecessary testing of OPERABLE DG(s). If it can be determined that the cause of the inoperable DG set does not exist on the OPERABLE DG set, SR 3.8.1.6 does not have to be performed. If the cause of inoperability exists on other DG(s), the other DG set would be declared inoperable upon discovery and Condition E of LCO 3.8.1 would be entered. Once the failure is repaired, the common cause failure no longer exists, and Required Action B.3.1 is satisfied. If the cause of the initial inoperable DG set cannot be confirmed not to exist on the remaining DG set, performance of SR 3.8.1.6 suffices to provide assurance of continued OPERABILITY of that DG set.

In the event the inoperable DG set is restored to OPERABLE status prior to completing either B.3.1 or B.3.2, the plant corrective action program will continue to evaluate the common cause possibility. This continued evaluation, however, is no longer under the 24 hour constraint imposed while in Condition B.

According to Generic Letter 84-15 (Ref. 7), 24 hours is reasonable to confirm that the OPERABLE DG set is not affected by the same problem as the inoperable DG set.

Insert

#### B.4

**In December 2003, for the 1C DG only, the allowed completion time is extended to 13 days for the preventive maintenance replacement of the cylinder liners.**

Operation may continue in Condition B for a period that should not exceed 10 days.

(continued)

Joseph M. Farley Nuclear Plant Units 1 & 2  
Exigent Technical Specification Revision Request  
Electrical Power Systems AC Sources - Operating

Enclosure 3

Cleaned Typed Technical Specifications Page

Affected Pages

3.8.1-3

B 3.8.1-10

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.3.2 Perform SR 3.8.1.6 for OPERABLE DG set.  <u>AND</u>	24 hours  -----NOTES----- In December 2003, for the 1C DG only, the allowed completion time is extended to 13 days for the preventive maintenance replacement of the cylinder liners. -----
	B.4 Restore DG set to OPERABLE status.	10 days  <u>AND</u>  13 days from discovery of failure to meet LCO
C. Two required offsite circuits inoperable.	C.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.  <u>AND</u>	13 hours from discovery of Condition C concurrent with inoperability of redundant required features
	C.2 Restore one required offsite circuit to OPERABLE status.	24 hours

BASES

---

ACTIONS

B.2 (continued)

In this Condition, the remaining OPERABLE DG set and offsite circuits are adequate to supply electrical power to the onsite Class 1E Distribution System. Thus, on a component basis, single failure *protection for the required feature's function may have been lost*; however, function has not been lost. The 4 hour Completion Time takes into account the OPERABILITY of the redundant counterpart to the inoperable required feature. Additionally, the 4 hour Completion Time takes into account the capacity and capability of the remaining AC sources, a reasonable time for repairs, and the low probability of a DBA occurring during this period.

B.3.1 and B.3.2

Required Action B.3.1 provides an allowance to avoid unnecessary testing of OPERABLE DG(s). If it can be determined that the cause of the inoperable DG set does not exist on the OPERABLE DG set, SR 3.8.1.6 does not have to be performed. If the cause of inoperability exists on other DG(s), the other DG set would be declared inoperable upon discovery and Condition E of LCO 3.8.1 would be entered. Once the failure is repaired, the common cause failure no longer exists, and Required Action B.3.1 is satisfied. If the cause of the initial inoperable DG set cannot be confirmed not to exist on the remaining DG set, performance of SR 3.8.1.6 suffices to provide assurance of continued OPERABILITY of that DG set.

In the event the inoperable DG set is restored to OPERABLE status prior to completing either B.3.1 or B.3.2, the plant corrective action program will continue to evaluate the common cause possibility. This continued evaluation, however, is no longer under the 24 hour constraint imposed while in Condition B.

According to Generic Letter 84-15 (Ref. 7), 24 hours is reasonable to confirm that the OPERABLE DG set is not affected by the same problem as the inoperable DG set.

B.4

In December 2003, for the 1C DG only, the allowed completion time is extended to 13 days for the preventive maintenance replacement of the cylinder liners.

Operation may continue in Condition B for a period that should not exceed 10 days.

(continued)