

Entergy Nuclear Northeast Entergy Nuclear Operations, Inc. James A. FitzPatrick NPP P.O. Box 110 Lycoming, NY 13093 Tel 315 349 6024 Fax 315 349 6480

T. A. Sullivan Vice President, Operations-JAF

September 14, 2001 JAFP-01-0214

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station O-P1-17 Washington, DC 20555-0001

SUBJECT: James A. FitzPatrick Nuclear Power Plant Docket No. 50-333 Proposed One-Time-Only Emergency Change to the Technical Specifications Regarding Reserve A-C Power Allowable Out-Of-Service Time (JPTS-01-003) (TAC No. MB-2889)

Dear Sir:

This application for an emergency amendment to the James A. FitzPatrick Technical Specifications (TS) proposes a one time only change to Specification 3.9.B.1 and associated Bases. Specifically, this change extends the Limiting Condition for Operation (LCO) allowable out of service time for one incoming Reserve A-C Power line (115KV line #3) and/or one reserve station transformer inoperable from 7 days to 14 days during the period commencing September 9, 2001 and extending through September 23, 2001.

The applicability of this proposed one-time-only change is limited to the period cited in order to ensure sufficient time to complete the review, installation and testing of any required modifications. This change is needed to ensure continued long term reliability of 115 kV Reserve A-C Power line #3 under any combination of normal, safe shutdown, and engineered safeguards loads.

The requested extension is supported by probabilistic evaluations presented in the attached supplement. The change in Core Damage Frequency (CDF) is small and is not considered significant. The risk associated with this one-time extension is less than the risk associated with a forced shutdown. Risk will be further controlled by the Configuration Risk Management Program (CRMP) which restricts the number and combination of system/trains allowed to be simultaneously unavailable during the scheduled work.

The signed original of the Application for Amendment to the Operating License is enclosed for filing. Attachment I contains the proposed new TS pages and Attachment II is the Safety Evaluation for the proposed changes. A markup of the affected TS pages is included as Attachment III.

A copy of this application and the associated attachments are being provided to the designated New York State official in accordance with 10 CFR 50.91.

United States Nuclear Regulatory Commission

Attn: Document Control Desk

Subject: Proposed One-Time-Only Emergency Change to the Technical Specifications Regarding Reserve A-C Power Allowable Out-Of-Service Time (JPTS-01-003)

Page –2-

There are no new commitments made in this letter. If you have any questions, please contact Mr. Andrew Halliday at 315-349-6055.

Very truly yours,

Sullivan

cc: next page Attachments as stated

cc: Regional Administrator U. S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

> Office of the Resident Inspector U. S. Nuclear Regulatory Commission P.O. Box 136 Lycoming, NY 13093

Mr. G. Vissing, Project Manager Project Directorate I Division of Licensing Project Management U. S. Nuclear Regulatory Commission Mail Stop OWFN 8C2 Washington, DC 20555

Mr. F. William Valentino, President New York State Energy Research and Development Authority Corporate Plaza West 296 Washington Avenue Extension Albany, NY 12203-6399

BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of Entergy Nuclear Operations, Inc. James A. FitzPatrick Nuclear Power Plant

Docket No. 50-333

APPLICATION FOR AMENDMENT TO OPERATING LICENSE

)

Entergy Nuclear Operations, Inc. requests an emergency amendment to the Technical Specifications (TS) contained in Appendix A to Facility Operating License DPR-59 for the James A. FitzPatrick Nuclear Power Plant. This application is filed in accordance with Section 10 CFR 50.90 of the Nuclear Regulatory Commission's regulations.

This application for an amendment to the James A. FitzPatrick Technical Specifications (TS) proposes a limited duration, one time only change to Specification 3.9.B.1 and associated Bases. Specifically, this change extends the Limiting Condition for Operation (LCO) allowable out of service time for one incoming Reserve A-C Power line (115KV line #3) and/or one reserve station transformer inoperable from 7 days to 14 days during the period commencing September 9, 2001 and extending through September 23, 2001.

The applicability of this proposed one-time-only change is limited to the period cited in order to ensure sufficient time to complete the review, installation and testing of any required modifications. This change is needed to ensure continued long term reliability of 115 kV Reserve A-C Power line #3 under any combination of normal, safe shutdown, and engineered safeguards loads.

The signed original of the Application for Amendment to the Operating License is enclosed for filing. Attachment I contains the proposed new TS pages and Attachment II is the Safety Evaluation for the proposed changes. A markup of the affected TS pages is included as Attachment III.

Entergy Nuclear Operations, Inc.

T. A. Sullivan Vice President, Operations-JAF

STATE OF NEW YORK COUNTY OF OSWEGO Subscribed and sworn to before me this $\underline{14}$ day of \underline{SopT} 2001.

Notary Public

REVISED TECHNICAL SPECIFICATION PAGES

ONE-TIME-ONLY CHANGE TO THE TECHNICAL SPECIFICATIONS REGARDING RESERVE A-C POWER ALLOWABLE OUT-OF-SERVICE TIME

(JPTS-01-003)

Entergy Nuclear Operations, Inc. JAMES A. FITZPATRICK NUCLEAR POWER PLANT Docket No. 50-333 DPR-59 3.9 (cont'd)

B. Emergency A-C Power System

The availability of electric power shall be as specified in 3.9.A, except as specified in 3.9.B.1, 3.9.B.2, 3.9.B.3, and 3.9.B.4, except when the reactor is in the cold condition:

- From and after the time that incoming power is available from only one line or through only one reserve station service transformer, continued reactor operation is permissible for a period not to exceed 7* days unless the line or reserve transformer is made operable earlier provided that during such 7* days both Emergency Diesel Generator Systems are operable. At the end of the 7*th day, if the condition still exists, the reactor shall be placed in a cold condition within 24 hours.
- 2. From and after the time that incoming power is not available from any line or through either reserve station transformer, continued reactor operation is permissible for a period not to exceed 7 days, provided that both redundant Emergency Diesel Generator Systems are operable, all core and containment cooling systems are operable and the shutdown cooling systems are operable. At the end of the seventh day, if the condition still exists, the Reactor shall be placed in a cold condition within 24 hours.

4.9 (cont'd)

B. Emergency A-C Power System

- Once each month, each pair of diesel generators which forms a redundant Emergency Diesel Generator System shall be manually initiated to demonstrate its ability to start, accelerate, and force parallel; after connection to the bus, the paralleled pair will be loaded to 5,200 KW, this load will be maintained until both generators are at steady state temperature conditions. During this period the generators' load sharing capability will be checked.
- 2. Once per month the diesel starting air compressors shall be checked for proper operation and their ability to recharge air receivers.

^{*}From September 9, 2001 through September 23, 2001, with 115 kV line #3 and/or one reserve station service transformer inoperable, continued reactor operation under this condition is permissible for a period not to exceed 14 days, provided 115 kV line #4 is operable.

3.9 BASES

The general objective of this specification is to assure an adequate source of electrical power to operate the auxiliary equipment during plant operation, to operate facilities to cool and lubricate the plant during shutdown, and to operate the engineered safeguards and Emergency Core Cooling Systems equipment following a loss-of-coolant accident. There are three sources of power available: namely, the normal a-c power source, the reserve a-c power source and the emergency a-c power source.

- A. Normal and Reserve A-C Power Systems
 - 1. Normal plant a-c service power is supplied from a transformer connected to the main generator. This transformer is sized to carry 100 percent of plant auxiliary loads during normal operation. This transformer is not considered as a source of shutdown power since it is not available during shutdown conditions.
 - 2. Reserve plant a-c service power is supplied from two transformers connected to the 115 Kv transmission system. Each of these transformers is sized to: (a) carry 50 percent of the plant auxiliary loads during station startup, and as a back-up supply for the normal source of a-c power; (b) to provide for maintenance and repair of equipment while retaining redundancy of power sources; and (c) as the primary source of a-c power for the engineered safeguards and Emergency Core Cooling Systems equipment.

If one of the sources of reserve a-c power is not available the plant shall be permitted to run for 7* days provided that both emergency diesel generator systems are operable.

B. Emergency A-C Power System

Emergency a-c power is supplied from two on-site redundant Emergency Diesel Generator Systems. Each system is designed to carry the redundant engineered safeguards loads for emergency core cooling required for safe shutdown of the plant and to maintain the plant in a safe shutdown condition following a loss of coolant accident with concurrent loss of normal and reserve a-c power sources.

*From September 9, 2001 through September 23, 2001, with 115 kV line #3 and/or one reserve station service transformer inoperable, continued reactor operation under this condition is permissible for a period not to exceed 14 days, provided 115 kV line #4 is operable.

SAFETY EVALUATION

ONE-TIME-ONLY CHANGE TO THE TECHNICAL SPECIFICATIONS REGARDING RESERVE A-C POWER ALLOWABLE OUT-OF-SERVICE TIME

(JPTS-01-003)

Entergy Nuclear Operations, Inc. JAMES A. FITZPATRICK NUCLEAR POWER PLANT Docket No. 50-333 DPR-59

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 1 of 7

I. DESCRIPTION

This application for an emergency amendment to the James A. FitzPatrick Technical Specifications (TS) proposes a limited duration, one time only change to Specification 3.9.B.1 and associated Bases. Specifically, this change extends the Limiting Condition for Operation (LCO) allowable out of service time for the 115kV line #3 inoperable from 7 days to 14 days during the period commencing September 9, 2001 and extending through September 23, 2001.

The requirement for an emergency amendment occurred primarily due to the additional time required for engineering to validate the program which models grid voltage. A significant number of calculations were required to be validated and/or revised. A root cause is in progress to determine cause for entry into this limiting condition of operation.

The applicability of this proposed one-time-only change is limited to the period cited in order to allow sufficient time to complete the review, installation and testing of any required modifications. These activities are needed to assure operability of 115 kV Reserve A-C Power line #3.

The specific changes are as follows:

Technical Specification 3.9.B.1 (page 216) and Bases for Technical Specification 3.9.B (page 223).

Add the following note qualifying the stated 7 day allowable outage time:

" From September 9, 2001 through September 23, 2001, with 115 kV line #3 and/or one reserve station service transformer inoperable, continued reactor operation under this condition is permissible for a period not to exceed 14 days, provided 115 kV line #4 is operable."

II. PURPOSE OF THE PROPOSED CHANGE

The proposed Technical Specification change is required to complete activities needed to assure operability of 115 kV Reserve A-C Power line #3 while minimizing associated risk. A quantitative assessment of risk associated with extending the current 7 day allowable outage time to 14 days on a one time basis indicates less risk associated with this one time extension than with the risk associated with a plant shutdown. The proposed change thus minimizes total risk.

Reserve power 115 kv line #3 was declared inoperable at 0730 hours on September 9, 2001, due to concerns regarding the capacity and capability of the line as the sole offsite power source to maintain adequate voltage on plant 4 kV Emergency Buses 10500 and 10600 under certain design basis accident (DBA) scenarios. Specifically, with 115 kV line #4 out of service when operating at power in the RUN Mode, and in the event of a DBA loss of coolant accident (LOCA), the normal power supply for plant normal and engineered safeguards loads may be lost due to a main turbine generator trip that follows the reactor scram. When the normal plant power source is lost due to a main turbine generator trip, power is automatically transferred from the Normal Station Service Transformer (NSST) 71T-4 to Reserve Station Service Transformers (RSSTs)

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 2 of 7

71T-2 and 71T-3 which are connected through a 115 kV bus to 115 kV lines #3 and #4 in the 115 kV switchyard. The plant 4 kV Emergency Buses are in turn powered from the secondary side of transformers 71T-2 and 71T-3.

Preliminary evaluation of 4 kV Emergency Bus voltage for the scenario described above indicated that the combined loading due to non-engineered safeguard loads that remain connected to the non-Class 1E Buses 10300 and 10400 and the sequenced starting of engineered safeguard loads could result in exceeding the setpoint of the Degraded Voltage protection system. This would result in tripping the 4 kV Emergency Bus feed(s) from the offsite emergency source, with loads resequencing onto the onsite emergency source(s).

Modifications and administrative controls will be in place that will alleviate the deficiencies described, restoring 115 kV Reserve A-C Power line #3 to operability under any combination of normal, safe shutdown, and engineered safeguards loads. The requested change is needed to allow adequate time for reviewing, installing and testing any needed modifications. The proposed modifications will change the Reserve Station Service Transformers 71T-2 and 71T-3 high voltage taps from the 116 kV position to the 113 kV position and still allow operation of the 4.16 kV buses near rated voltage conditions. The tap setting changes still keep secondary voltage at acceptable limits through all loading conditions.

The transformer (71T-2 or 71T-3) shall be de-energized prior to adjustment of the tap setting. Work shall not continue on the second transformer until the first is operable. Prior to de-energizing the second transformer, an inspection shall be completed on the first. The test requirements will include measuring the high voltage winding resistance, conducting a transformer turns ratio verification test and energizing the transformer and loading the reserve bus.

Since these modifications would involve high energy switchyard work, an allowable outage time has been requested that will provide adequate time for careful planning and performance of the work, with allowances for inclement weather, and with due consideration for industrial safety.

The change includes conditions of both the 115 kV #3 line and/or one reserve station transformer inoperable, consistent with Specification 3.9.B.1 and as needed for any modifications and testing. Should any additional offsite power source (line #4) or onsite power sources (any of four EDG's) become inoperable, a 24 hour action statement is required while this one-time AOT extension is in effect.

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 3 of 7

III. SAFETY IMPLICATIONS OF THE PROPOSED CHANGE

This proposed change extends the allowable outage time for one Reserve A-C Power line, specifically the 115 kV #3 line, and/or one reserve transformer from 7 days to 14 days on a one time limited basis.

The proposed changes have been evaluated to determine that current regulations and applicable requirements continue to be met, that adequate defense-in-depth and sufficient safety margins are maintained, and that any increases in core damage frequency (CDF) are small and consistent with the NRC Safety Goal Policy Statement, and the acceptance criteria in Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," July 1998, and Regulatory Guide 1.177, "An Approach for Plant-Specific, Risk-Informed Decision Making: Technical Specifications," August 1999.

The justification for the use of a 7 day offsite circuit extended Completion Time (CT) is based upon a risk-informed and deterministic evaluation consisting of three main elements: 1) the availability of the redundant offsite power source, 2) the risk reduction which occurs when the modification is performed at power in lieu of performing a plant shutdown and startup, and 3) the implementation of the Configuration Risk Management Program (CRMP) administrative requirements with the 115 kV line #3 inoperable for the extended Completion Time (CT). The CRMP is used to assess the risk impact with the 115 kV line inoperable (as it is similarly applied to other maintenance and testing work) and helps ensure that there is no significant increase in the risk of a severe accident while maintenance on the reserve transformers is performed. These elements provide the bases for justification of the proposed Technical Specifications (TS) change by providing a high degree of assurance that power can be provided to the ESF buses during all Design Basis Accidents (DBAs) during the 115 kV line #3 extended Completion Time.

The assumptions used in the SBO analysis regarding the availability and reliability of the EDGs are unaffected by this proposed change.

The unavailability of the 115 kV line #3 has no effect on the capability of the preferred 115 kV line #4 to supply the required safety-related loads if it becomes necessary to safely shut down the plant.

James A. FitzPatrick Nuclear Power Plant is designed and operated consistent with the defense-in-depth philosophy. The plant has diverse power sources available to cope with a loss of the preferred AC power source (i.e. offsite power). The overall availability of the AC power sources to the ESF buses will not be reduced significantly as a result of performing the proposed modification with the unit on-line. In addition, the modification will further insure the continued long term reliability of the 115 kV line #3. It is therefore, acceptable, under certain controlled conditions, to extend the Completion Time and perform this modification intended to maintain the reliability of the offsite emergency power systems.

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 4 of 7

The impact of the proposed TS changes were evaluated and determined to be consistent with the defense-in-depth philosophy. The defense-in-depth philosophy in reactor design and operation results in multiple means to accomplish safety functions and prevent release of radioactive material.

Even with the 115 kV line #3 inoperable there are multiple means to accomplish safety functions and prevent release of radioactive material. The probabilistic risk evaluation confirms the results of the deterministic analysis, i.e., the adequacy of defense-in-depth and that protection of the public health and safety are ensured. System redundancy, independence, and diversity are maintained commensurate with the expected frequency and consequences of challenges to the system. Implementation of the proposed changes will be done in a manner consistent with the defense-in-depth philosophy. Station procedures will ensure consideration of prevailing conditions, including other equipment out of service, and implementation of compensatory actions to assure adequate defense-in-depth while 115 kV line #3 is inoperable, and while 71T-2 and 71T-3 are removed from service. No new potential common cause failure modes are introduced by these proposed changes and protection against common cause failure modes are introduced by these proposed changes and protection against common cause failure modes are introduced is not compromised. Independence of physical barriers to radionuclide release is not affected by these proposed changes.

Adequate defense against human errors are maintained. These proposed changes do not require any new operator response or introduce any new opportunities for human errors not previously considered. Qualified personnel will perform the activities whether they are performed on-line or during shutdown. No other new actions are necessary.

A probabilistic risk assessment was performed using the JAF Individual Plant Examination (IPE), Revision 1, April 1998. The IPE update was reviewed by outside consultants from Scientech. The updated IPE was reviewed as part of the BWR Owner's Group probabilistic safety assessment peer review certification process.

The current baseline CDF of James A. FitzPatrick is 2.44E-6 per year, not including external events. The JAF single top gate fault tree model was guantified by assuming that line #3 was out of service (set to logical TRUE) for all initiating events. The base CDF was subtracted to obtain the increase in CDF. The CCDP was completed by simple multiplication of the CDF increase by the duration for the CCDP. The conditional core damage probability (CCDP) of continued plant operation for an additional period of 7 days (one week) with 115 kV line #3 inoperable was determined to be 1.82E-7, which is less than the CCDP (5.0E-7) guidelines of Regulatory Guide 1.177. Further, the core damage probability (CDP) associated with plant shutdown with line #3 capable of providing power for normal shutdown loads is 9.62E-7. This calculation was performed by making a quantification using the single top gate model assuming that 115 kV line #3 is not available (setting to logical and TRUE). Then, all loss of power conversion system and turbine trip with power conversion system available transient initiating events (eg -T3 and T2) were set to logical TRUE in the minimal cutset listing. All other initiators (which will not occur during an immediate shutdown) were set to logical FALSE. After subsuming cutsets, this yielded the CDP of shutting down the plant immediately while line #3 is out. This is the basic methodology employed for quantifying a conditional probability of core damage given an immediate shutdown.

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 5 of 7

Thus, the requested one time change is judged to be acceptable based on the conditional core damage probability associated with the additional 7 day period being less than the Conditional Core Damage Probability (CCDP) guidelines of Regulatory Guide 1.177 (1.82E-7 versus 5.0E-7), and being less than the CDP associated with a normal shutdown (1.82E-7 versus 9.62E-7), which would otherwise be required.

The unavailability of the #4 115 kV line off-site supply (including planned maintenance time) is 3.54E-3. The unavailability of 71T-2 reserve transformer (including planned maintenance time) is 1.11E-3, and of 71T-3 (including planned maintenance time) is 3.20E-4. The 115 kV line #3 is proposed to remain energized and available for all planned modification work during this LCO. The 115 kV line #4 is proposed to remain energized and operable for this entire period. Either line can supply power to emergency buses through either 71T-2 or 71T-3.

In addition, methodologies associated with risk monitoring and contingency action planning currently exist at FitzPatrick and provide acceptable assurance of continued safe reactor operations during periods of equipment inoperability. The Configuration Risk Management Program (CRMP) will be applied throughout the duration of the extended outage. During the extended LCO, the ongoing maintenance activities will be monitored using administrative controls required by current Technical Specification 6.21 which:

- 1. Prohibit any planned work on any other trains or power buses, or any planned emergency diesel generator work (preplanned EDG work was postponed when the condition with the #3 115 kV line was identified.)
- 2. Require assessment of the condition of external environmental factors such as expected environmental conditions, severe weather and electrical system stability prior to removing transformers from service for the tap changes.

IV. EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

Operation of the JAF plant in accordance with the proposed amendment would not involve a significant hazards consideration as defined in 10 CFR 50.92 since it would not:

1. Involve an increase in the probability or consequences of an accident previously evaluated.

Loss of off-site emergency power is not an initiating event for any of the four categories of design basis accidents analyzed in the FSAR. Therefore, the proposed change does not involve an increase in the probability of an accident previously evaluated.

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 6 of 7

The consequences of a postulated accident occurring during the extended allowable out-of-service time are the same as the consequences of a postulated accident occurring during the existing allowable out-of-service time. Therefore, there is no increase in the consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not physically alter the plant or change any method in which the plant is operated. The change therefore will not create the possibility of a new or different kind of accident.

3. Involve a significant reduction in a margin of safety.

The CCDP due to this proposed change is calculated to be 1.82E-7, which falls below the threshold probability of 1E-6 for risk significance of temporary changes to the plant configuration in the EPRI PSA Applications Guide (Reference 1), and below the threshold 5.0E-7 CCDP guidelines of Regulatory Guide 1.177. Therefore, the proposed change does not increase the consequences of an accident previously evaluated because the CCDP associated with the change is below that considered significant. The change will rather, result in an increased margin of safety over the alternative of conducting a plant shutdown.

V. IMPLEMENTATION OF THE PROPOSED CHANGE

Implementation of the proposed changes will not adversely affect the ALARA or Fire Protection Program at the FitzPatrick plant, nor will the changes impact the environment. The proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the proposed amendment.

VI. CONCLUSION

Removing one 115 kV Reserve A-C Power line from service with the plant at power is currently evaluated using the JAF full-power IPE model which assessed the resultant CDF and CCDP. As described above, the CCDP falls below the EPRI PSA Applications Guide threshold for risk significance. Further, the core damage probability (CDP) associated with a normal plant shutdown with the #3 115 kV line capable of providing power for normal shutdown loads is 9.62E-7. Therefore, the allowable out-of-service time extension is not considered to be risk significant.

In addition, activities performed will restore the capability of the #3 115 kV line resulting in improved offsite power system reliability.

The Plant Operating Review Committee (PORC) and Safety Review Committee (SRC) have reviewed this proposed change to the TS and have concluded that it does not involve a significant hazards consideration and will not endanger the health and safety of the public.

Attachment II to JAFP-01-0214 SAFETY EVALUATION Page 7 of 7

VII. REFERENCES

- 1. EPRI TR-105396, PSA Applications Guide, August 1995
- 2. JAF-RPT-MULTI-02107, Rev. 1, JAF Individual Plant Examination, April 1998
- 3. USNRC, "<u>An Approach for Using Probabilistic Risk Assessment In Risk-Informed</u> <u>Decisions on Plant-Specific Changes to the Licensing Basis</u>", Regulatory Guide 1.174, July 1998
- 4. USNRC, "<u>An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical</u> <u>Specifications</u>", Regulatory Guide 1.177, August, 1998

Attachment III to JAFP-01-0214

MARKED-UP TECHNICAL SPECIFICATION PAGES

ONE-TIME-ONLY CHANGE TO THE TECHNICAL SPECIFICATIONS REGARDING RESERVE AC POWER ALLOWABLE OUT-OF-SERVICE TIME

(JPTS-01-003)

Entergy Nuclear Operations, Inc. JAMES A. FITZPATRICK NUCLEAR POWER PLANT Docket No. 50-333 DPR-59 JAFNPP

3.9 (cont'd)

B. Emergency A-C Power System

The availability of electric power shall be as specified in 3.9.A, except as specified in 3.9.B.1, 3.9.B.2, 3.9.B.3, and 3.9.B.4, except when the reactor is in the cold condition.

- 1: From and after the time that incoming power is available from only one line or through only one reserve station service transformer, continued reactor operation is permissible for a period not to exceed 7 days unless the line or reserve transformer is made operable earlier provided that during such 7 days both Emergency Diesel Generator Systems are operable. At the end of the 7th day, if the condition still exists, the reactor shall be placed in a cold condition within 24 hours.
- 2. From and after the time that incoming power is not available from any line or through either reserve station transformer, continued reactor operation is permissible for a period not to exceed 7 days, provided that both redundant Emergency Diesel. Generator Systems are operable, all core and containment cooling systems are operable and the shutdown cooling systems are operable. At the end of the seventh day, if the condition still exists, the Reactor shall be placed in a cold condition within 24 hours.

4.9 (cont'd)

B. Emergency A-C Power System

- 1. Once each month, each pair of diesel generators which forms a redundant Emergency Diesel Generator System shall be manually initiated to demonstrate its ability to start, accelerate, and force parallel; after connection to the bus, the paralleled pair will be loaded to 5,200 KW, this load will be maintained until both generators are at steady state temperature conditions. During this period the generators' load sharing capability will be checked.
- 2. Once per month the diesel starting air compressors shall be checked for proper operation and their ability to recharge air receivers.

INSERT A

216

JAFNPP

3.9 BASES

objective of this general The specification is to assure an adequate source of electrical power to operate the auxiliary equipment during plant operation, to operate facilities to cool and lubricate the plant during shutdown, and to operate the engineered safequards and Emergency Core Cooling Systems equipment following a loss-of-coolant accident. There are three sources of power available; namely, the normal a-c power source, the reserve a-c power and the emergency a-c power source source.

A. Normal and Reserve A-C Power Systems

- Normal plant a-c service power 1. is supplied from a transformer the main connected to generator. This transformer is sized to carry 100 percent of plant auxiliary loads during This operation. pormal transformer is not considered as a source of shutdown power available since it is not during shutdown conditions.
- 2. Reserve plant a-c service power is supplied from two transformers connected to the 115 Kv transmission system. Each of these transformers is

sized to: (a) carry 50 percent of the plant auxiliary loads during station startup, and as a back-up supply for the normal source of a-c power: (b) to for maintenance and provide equipment while repair of retaining redundancy of power sources; and (c) as the primary source of a-c power for the safeguards and engineered Emergency Core Cooling Systems equipment.

If one of the sources of reserve a-c power is not available the plant shall be permitted to run for 7th days provided that both emergency diesel generator systems are operable.

B. Emergency A-C Power System

Emergency a-c power is supplied from two Emergency Diesel redundant on-site Each system is Systems. Generator the redundant to carry designed safequards loads for engineered emergency core cooling required for safe shutdown of the plant and to maintain the plant in a safe shutdown condition following a loss of coolant accident with concurrent loss of normal and reserve a-c power sources.



Attachment III to JAFP-01-0214

- - 7

MARKED-UP TECHNICAL SPECIFICATION PAGES

Insert A

From September 9, 2001 through September 23, 2001, with 115 kV line #3 and/or one reserve station service transformer inoperable, continued reactor operation under this condition is permissible for a period not to exceed 14 days, provided 115 kV line #4 is operable.