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MAY 0 6 2003

U.S. Nuclear Regulatory Commission
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Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENT NO. 254 TO LICENSE NFP-14
AND PROPOSED AMENDMENT NO. 219 TO LICENSE NFP-22:
REVISED RESPONSE TO GL 94-02:
LONG-TERM STABILITY SOLUTION
PLA-5620

References: 1) *Letter, V. Nerses (USNRC) to R. G. Byram (PPL), "Susquehanna Steam Electric Station Units 1 and 2 (TAC NOS. MA2271 and MA2445)" (Amendments 184 and 158), dated July 30, 1999.*

2) *Letter, R. G. Schaaf (USNRC) to R. G. Byram (PPL), "Susquehanna Steam Electric Station, Units 1 and 2 - Issuance of Amendment Re: Change of Implementation Date for Amendment No 184 for Unit 1 and Amendment No. 158 for Unit 2 (TAC Nos. MB2837 and MB2838)," dated October 29, 2001.*

3) *Letter, J. S. Post (GE) to USNRC, "Stability Reload Licensing Calculations Using Generic DIVOM Curve" (10 CFR Part 21 Report), dated August 31, 2001.*

4) *PLA-4195, R. G. Byram (PPL) to USNRC, "Susquehanna Steam Electric Station Response to Generic Letter 94-02: Long Term Solutions and Upgrade of Interim Operating Recommendations for Thermal - Hydraulic Instabilities in Boiling Water Reactor," dated September 12, 1994.*

Pursuant to 10 CFR 50.90, PPL Susquehanna, LLC (PPL), proposes to amend the Susquehanna Steam Electric Station Units 1 and 2 (SSES) Technical Specifications (TS). The proposed change would delete SSES TS 3.3.1.3, "Oscillation Power Range Monitor (OPRM) Instrumentation," and revise TS 3.4.1, "Recirculation Loops Operating." Reference 1 approved changes to the SSES TS that incorporated TS 3.3.1.3 and revised TS 3.4.1 to address the Long-Term Stability Solution. Prior to implementation of these changes in the SSES TS, Reference 2 approved a change to the implementation date to November 1, 2003 to provide additional time to address the issues identified in Reference 3.

A001

The Reference 3 10 CFR Part 21 report issued by General Electric (GE) on August 31, 2001 identified a non-conservative deficiency in the OPRM trip setpoint methodology. Given this deficiency, the OPRM system cannot be declared operable until a revised NRC-approved methodology providing a valid basis for the trip setpoints is available and adopted for the SSES OPRM system. On February 20, 2003 representatives of the BWROG met with NRC to discuss the progress and plans for generic resolution of the Part 21 deficiency. During this meeting, the BWROG identified plans for submittal to the NRC that would provide the basis for generic resolution in 2005. As such, implementation of the approved OPRM TS on November 1, 2003 would result in immediately declaring the OPRM system inoperable. The approved amendments would place both SSES Units in a 120-day action prior to requiring plant shutdown. The shutdown of both SSES Units would be required to remain in effect until the OPRM system could be declared operable.

The amendment proposed herein would nullify approved TS Amendments that are not yet implemented, which effectively results in no change to current SSES operation. The proposed deletion of TS 3.3.1.3 and the revision to TS 3.4.1 approved in Reference 1 would formally reinstate the currently implemented requirements, which define appropriately conservative restrictions to plant operation and operator response to thermal hydraulic instability events. The reinstated requirements impose interim corrective actions (ICAs) to address the potential for thermal hydraulic instability events, which were originally developed in response to Bulletin 88-07, Supplement 1. Furthermore, the PPL response to Generic Letter 94-02 (Reference 4) provided commitments that incorporated an expanded stability region and power distribution control definition to strengthen thermal hydraulic instability prevention. The resultant plant operating procedure and operator training modifications will remain in place until the design issues with the OPRM system have been resolved.

Withdrawal of the pending TS requirements for OPRM implementation will not adversely affect the continued protection of the health and safety of the public. PPL expects to resubmit a request for license amendment applicable to the final OPRM design when the design issues with the OPRM system have been resolved. This is consistent with the intent of the PPL response to Generic Letter 94-02 (Reference 4) in that PPL remains committed to supporting the industry efforts to resolve the technical issues to the satisfaction of the NRC Staff. At this time the resolution dates, and therefore resubmittal dates, remain to be determined.

The need for this change has been discussed with the SSES NRC Project Manager.

The proposed changes have been approved by the SSES Plant Operations Review Committee and reviewed by the Susquehanna Review Committee. In accordance with 10 CFR 50.91(b)(1), PPL is sending a copy of this letter to the Pennsylvania Department of Environmental Protection.

PPL requests approval of this change prior to October 1, 2003 (i.e., prior to the current required implementation date for the OPRM system). It is requested that the amendment implementation date be within 30 days of issuance to allow orderly implementation.

If you have any questions, please contact Mr. Michael Crowthers at (610) 774-7766.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Executed on: May 6, 2003

B. L. Shriver
Sr. Vice-President and Chief Nuclear Officer

Enclosure:
PPL Evaluation of the Proposed Change

Attachments:
Attachment 1 - Proposed Technical Specification Changes (mark-up)
Attachment 2 - Proposed Technical Specification Changes (retyped)
Attachment 3 - List of Regulatory Commitments

copy: NRC Region I
Mr. S. L. Hansell, NRC Sr. Resident Inspector
Mr. R. V. Guzman, NRC Project Manager
Mr. R. Janati, DEP/BRP

ENCLOSURE to PLA-5620

PPL Evaluation

REVISED RESPONSE TO GL 94-02: LONG-TERM STABILITY SOLUTION

PPL EVALUATION

1.0 DESCRIPTION

This letter is a request to amend Operating Licenses NPF-14 and NPF-22 for PPL Susquehanna, LLC (PPL), Susquehanna Steam Electric Station Units 1 and 2 (SSES) respectively. The proposed change deletes SSES Technical Specifications (TS) 3.3.1.3, "Oscillation Power Range Monitor (OPRM) Instrumentation," and revises TS 3.4.1, "Recirculation Loops Operating." These changes would reverse approved TS Amendments 184 (Unit 1) and 158 (Unit 2) (Reference 1) that are not yet implemented, which effectively results in no change to the current SSES operation. Extension of the implementation date until November 1, 2003 was approved by Amendments 196 (Unit 1) and 172 (Unit 2) (Reference 2). The implementation requirements associated with Amendments 196 (Unit 1) and 172 (Unit 2) would also be superceded with this proposed amendment.

The proposed amendment would formally reinstate the requirements currently governing operation, which define appropriately conservative restrictions to plant operation and operator response to thermal hydraulic instability events.

PPL expects to resubmit a request for license amendment applicable to the final OPRM design when the design issues with the OPRM system have been resolved. This is consistent with the intent of the PPL response to Generic Letter 94-02 (Reference 3) in that PPL remains committed to supporting the industry's efforts to resolve the technical issues to the satisfaction of the NRC Staff. At this time the resolution dates, and therefore resubmittal dates, remain to be determined.

PPL requests approval of this change prior to October 1, 2003 (i.e., prior to the current required implementation date for the OPRM system). It is requested that the amendment implementation date be within 30 days of issuance to allow orderly implementation.

2.0 PROPOSED CHANGE

The proposed change would delete SSES Technical Specifications (TS) 3.3.1.3, "Oscillation Power Range Monitor (OPRM) Instrumentation" and revise TS 3.4.1, "Recirculation Loops Operating," to remove changes previously approved in SSES Amendments 184 (Unit 1) and 158 (Unit 2) (Reference 1). Extension of the implementation date until November 1, 2003 was subsequently approved by Amendments 196 (Unit 1) and 172 (Unit 2) (Reference 2). The implementation requirements associated with Amendments 196 (Unit 1) and 172 (Unit 2) would also be superceded with this proposed amendment.

This change would undo these approved TS Amendments that are not yet implemented, which effectively results in no change to the current SSES operation. The proposed deletion of TS 3.3.1.3 and the revision to TS 3.4.1 would formally reinstate the currently implemented requirements, which define appropriately conservative restrictions to plant operation and operator response to thermal hydraulic instability events. The reinstated requirements impose interim corrective actions (ICAs) to address the potential for thermal hydraulic instability events, which were originally developed in response to Bulletin 88-07, Supplement 1. Furthermore, the PPL response to Generic Letter 94-02 (Reference 3) provided commitments that incorporated expanded stability region and power distribution control definition to strengthen thermal hydraulic instability prevention.

3.0 BACKGROUND

General Design Criterion (GDC) 10 of Appendix A to 10 CFR Part 50 requires that the reactor core and associated coolant, control, and protection systems be designed with appropriate margin to assure that specified acceptable fuel design limits will not be exceeded during any condition of normal operation, including the effects of anticipated operational occurrences. Additionally, GDC 12 requires that the reactor core and associated coolant, control, and protection systems be designed to assure that power oscillations which can result in conditions exceeding acceptable fuel design limits are either not possible, or can be reliably and readily detected and suppressed.

Under certain conditions, boiling water reactor cores may exhibit thermal hydraulic instabilities. These instabilities are characterized by periodic power and flow oscillations. If the oscillations become large enough, the fuel cladding integrity minimum critical power ratio (MCPR) safety limit and GDC 10 and 12 requirements may be challenged. Based on this possibility, SSES is currently operating with certain interim corrective actions (ICAs) to address the potential for thermal hydraulic instability events, which were originally developed in response to Bulletin 88-07, Supplement 1. Furthermore, the PPL response to Generic Letter 94-02 (Reference 3) provided commitments that incorporated expanded stability region and power distribution control definition to strengthen thermal hydraulic instability prevention. The plant operating procedures and operator training pursuant to implementation of the ICAs will continue to remain in place until the OPRM system is declared OPERABLE.

These requirements limit the probability of an instability event by restricting the duration of any entry into the regions of the power to flow map most susceptible to instability under anticipated entry conditions. Operator actions are also required by the ICAs when conditions consistent with the onset of thermal hydraulic oscillations are observed. These actions result in the suppression of conditions required for an instability event and thereby prevent any potential challenge to the MCPR safety limit.

As committed to in response to GL 94-02 (Reference 3), an OPRM system was installed at SSES consistent with the Asea Brown Boveri Combustion Engineering (ABB-CE) Option III long-term solution for the thermal hydraulic instability issue. The intent of this OPRM system is to provide an RPS trip function to provide automatic detection and suppression of conditions that might result in a thermal hydraulic instability event and provide elimination of the manual ICAs. Implementation of SSES Amendments 184 (Unit 1) and 158 (Unit 2) requires that the OPRM system, including RPS trip function, be fully operable. Additionally implementation eliminates the ICAs from the Technical Specifications.

SSES TS Amendments 184 (Unit 1) and 158 (Unit 2) were issued by the NRC on October 29, 2001 (Reference 1). Extension of the implementation date until November 1, 2003 was subsequently approved as Amendments 196 (Unit 1) and 172 (Unit 2) (Reference 2). This deferral was based on a 10CFR Part 21 report issued by General Electric (GE) on August 31, 2001 (Reference 4), which identified a non-conservative deficiency in the OPRM trip setpoint methodology. The OPRM system can not be declared operable until a revised NRC-approved methodology providing a valid basis for the trip setpoints is available and adopted for the SSES OPRM system.

From August 2001 through February 2003 the BWROG has performed analyses and has met with the NRC to review resolution status and plans. On February 20, 2003 representatives of the BWROG met with the NRC to discuss the progress and plans for generic resolution of the OPRM system design issue. During this meeting the BWROG representatives identified plans for submittal to the NRC that would provide the basis for generic resolution in 2005.

Precedent for the amendment proposed by PPL is found in the withdrawal and NRC acceptance of OPRM TS submittals by a number of utilities (refer to References 5, 6, 7, 8, and 9). NRC acceptance of the OPRM TS withdrawal by these utilities approved continued operation of these facilities with ICAs similar to those currently implemented for SSES. In these cases the amendment request withdrawal was made prior to NRC issuance of an approved amendment. The situation for SSES is different. At SSES the "withdrawal" necessitates an amendment request since Amendments 196 (Unit 1) and 172 (Unit 2) have been issued.

4.0 TECHNICAL ANALYSIS

There are no safety consequences as a result of this change. The amendment proposed herein would undo approved TS Amendments 196 (Unit 1) and 172 (Unit 2) that are not yet implemented, which effectively results in no change to the current SSES operation. Implementation of SSES Amendments 196 (Unit 1) and 172 (Unit 2) requires that the OPRM system, including RPS trip function, be fully operable.

The proposed change to delete TS 3.3.1.3 and revise TS 3.4.1 would formally reinstate the currently implemented requirements, which define appropriately conservative restrictions to plant operation and operator response to thermal hydraulic instability events. The reinstated requirements impose interim corrective actions (ICAs) to address the potential for thermal hydraulic instability events, which were originally developed in response to Bulletin 88-07, Supplement 1. Furthermore, the PPL response to Generic Letter 94-02 (Reference 4) provided commitments that incorporated expanded stability region and power distribution control definition to strengthen thermal hydraulic instability prevention.

NRC granted deferred implementation of the OPRM TS until November 1, 2003 in SSES Amendments 196 (Unit 1) and 172 (Unit 2) (Reference 2). In this evaluation, the NRC noted that the existing ICAs "are intended to insure that the plant is not operated under combinations of thermal power and core flow that are conducive to thermal-hydraulic instability." The evaluation concluded that these ICAs will "provide adequate core protection." The deferral was based on a 10 CFR Part 21 report issued by GE on August 31, 2001 (Reference 5), which identified a deficiency in the OPRM trip setpoint methodology. As stated in the NRC safety evaluation approving this deferral (Reference 2):

> "The NRC Staff expects that the deficiency can be resolved on a generic basis, and that the staff would review any proposed resolution before implementation at any specific facility."

At this time, the generic resolution is not yet resolved. On February 20, 2003 representatives of the Boiling Water Reactor Owner's Group (BWROG) Detect and Suppress Methodology subcommittee met with the NRC to discuss the progress and plans for generic resolution of the OPRM system design issue. During this meeting the BWROG representatives identified plans for submittal to the NRC that would provide the basis for generic resolution in 2005. Final resolution date and, therefore, formal resubmittal of the OPRM TS, remains to be determined.

This proposed amendment is needed because the OPRM set-point specified in the LCO 3.3.1.3 does not provide adequate Minimum Critical Power Ratio (MCPR) safety limit protection for anticipated reactor instability events (as identified in the 10 CFR 21 Report).

The OPRM system can not be declared operable until a revised methodology that provides a valid and safe basis for the trip setpoints is adopted. If this proposed amendment is not approved prior to November 1, 2003, both of the SSES Unit 1 and Unit 2 OPRM systems will have to be declared inoperable. The resulting actions would place both SSES Units in a 120-day limitation prior to requiring plant shutdown actions. This shutdown of both SSES Units would be required to remain in effect until the OPRM system could be declared OPERABLE.

In summary, the TS changes granted by SSES Amendments 196 and 172 cannot be implemented and need to be replaced with the changes proposed herein to continue the safe operation of SSES Units 1 and 2. The changes proposed herein define appropriately conservative restrictions to plant operation and operator response to thermal hydraulic instability events. Approval of this proposed change is appropriate based on:

(1) The stated NRC position to resolve the issue generically prior to imposing implementation;

(2) The acceptability of continuing operation with the ICAs; and

(3) The nature of and extended resolution plan for the unresolved setpoint issue.

In conclusion: (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.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a 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; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The proposed amendment revises Susquehanna Steam Electric Station Units 1 and 2 (SSES) Technical Specifications (TS). The change deletes SSES Technical Specifications (TS) 3.3.1.3, "Oscillation Power Range Monitor (OPRM) Instrumentation" and revises TS 3.4.1, "Recirculation Loops Operating" to remove changes previously approved in Amendments 184 and 158 for SSES Units 1 and 2 respectively and required to be implemented by November 1, 2003 by Amendments 196 and 172. The revised TS 3.4.1 would formally reinstate the SSES TS requirements that have been in effect since November 1989 (Amendments 93 and 60) and are currently governing operation.

PPL Susquehanna, LLC (PPL) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

The OPRM system is not an initiator to any accident sequence analyzed in the Final Safety Analysis Report (FSAR). The changes do not involve a physical change to structures, systems, or components (SSCs) since the RPS trip function has not been installed and does not alter the method of operation or control of SSCs since the OPRM system has not be declared OPERABLE. The current assumptions in the safety analysis regarding accident initiators and mitigation of accidents (including assumed protection of fuel design limits) are unaffected by these changes. No additional failure modes or mechanisms are being introduced and the likelihood of previously analyzed failures remains unchanged.

Operation in accordance with the proposed Technical Specification (TS) ensures that the protection from thermal hydraulic instabilities remains as previously evaluated and the protection for fuel design limits remain as described in the FSAR. Therefore, the mitigative functions will continue to provide the protection assumed by the existing analysis.

Therefore, this change does not involve 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 kind of accident from any accident previously evaluated?**

Response: No.

The proposed change does not involve a physical alteration of the plant. No new equipment is being introduced, and installed equipment is not being operated in a new or different manner. There are no setpoints affected by this change at which protective or mitigative actions are initiated. This change will not alter the manner in which equipment operation is initiated, nor will the functional demands on credited equipment be changed. No alterations in the procedures that ensure the plant remains within analyzed limits are being proposed, and no changes are being made to the procedures relied upon to respond to an off-normal event as described in the FSAR. As such, no new failure modes are being introduced. The change does not alter assumptions made in the safety analysis and licensing basis.

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

Response: No.

The margin of safety is established through equipment design, operating parameters, and the setpoints at which automatic actions are initiated. The proposed change is acceptable because the required protection from thermal hydraulic instabilities remains as previously evaluated and the protection for fuel design limits remain as described in the FSAR. Operation in accordance with the proposed TS ensures that the margin of safety is maintained. Therefore, the change does not involve a significant reduction in a margin of safety.

5.2 Applicable Regulatory Requirements/Criteria

General Design Criterion (GDC) 10 of Appendix A to 10 CFR Part 50 requires that the reactor core and associated coolant, control, and protections systems be designed with appropriate margin to assure that specified acceptable fuel design limits will not be exceeded during any condition of normal operation, including the effects of anticipated operational occurrences. Additionally, GDC 12 requires that the reactor core and associated coolant, control, and protection systems be designed to assure that power oscillations which can result in conditions exceeding acceptable fuel design limits are either not possible, or can be reliably and readily detected and suppressed.

Under certain conditions, boiling water reactor (BWR) cores may exhibit thermal hydraulic instabilities. These instabilities are characterized by periodic power and flow oscillations. If the oscillations become large enough, the fuel cladding integrity minimum critical power ratio (MCPR) safety limit and GDC 10 and 12 requirements may be challenged. Based on this possibility, SSES is currently operating with certain interim corrective actions (ICAs) to address the potential for thermal hydraulic instability events, which were originally developed in response to Bulletin 88-07, Supplement 1.

Generic Letter 94-02, "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in Boiling Water Reactors," required further efforts for long term corrective actions. The PPL response to Generic Letter 94-02 (Reference 3) provided commitments that incorporated expanded stability region and power distribution control definition to strengthen thermal hydraulic instability prevention. When the design issues with the OPRM system have been resolved, supporting the ability of the OPRM system to perform its intended function, PPL will resubmit a request for license amendment applicable to the final OPRM design. This is consistent with the intent of the PPL response to Generic Letter 94-02 (Reference 3) in that PPL remains committed to supporting the industry efforts to resolve the technical issues to the satisfaction of the NRC Staff.

SSES FSAR Sections 3.1 and 3.13 provide detailed discussion of SSES compliance with the applicable regulatory requirements and guidance, which is not impacted by this amendment. SSES FSAR Section 4.4.4.6 discusses the thermal-hydraulic stability analysis. For reload cores, a confirmatory analysis is performed to demonstrate the continued applicability of the core stability regions, which assure that the ICAs remain valid for each cycle. The analysis is based on comparison of core stability performance (i.e., variations in decay ratio for operating conditions at representative state points near the stability exclusion region) to previously analyzed cycles.

6.0 ENVIRONMENTAL CONSIDERATIONS

10 CFR 51.22(c)(9) identifies certain licensing and regulatory actions, which are eligible for categorical exclusion from the requirement to perform an environmental assessment. A proposed amendment to an operating license for a facility does not require an environmental assessment if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite; or (3) result in a significant increase in individual or cumulative occupational radiation exposure. PPL Susquehanna, LLC has evaluated the proposed change and has determined that the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Accordingly, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with issuance of the amendment. The basis for this determination, using the above criteria, follows:

Basis

As demonstrated in the No Significant Hazards Consideration Evaluation, the proposed amendment does not involve a significant hazards consideration.

There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite. The proposed change does not involve any physical alteration of the plant (no new or different type of equipment will be installed) or change in methods governing normal plant operation.

There is no significant increase in individual or cumulative occupational radiation exposure. The proposed change does not involve any physical alteration of the plant (no new or different type of equipment will be installed) or change in methods governing normal plant operation.

7.0 REFERENCES

1. Letter, V. Nerses (USNRC) to R. G. Byram (PPL), "Susquehanna Steam Electric Station, Units 1 and 2 (TAC Nos. MA2271 and MA2445)" (Issuance of Amendments 184 [Unit 1] and 158 [Unit 2]), dated July 30, 1999.

2. Letter, R. G. Schaaf (USNRC) to R. G. Byram (PPL), "Susquehanna Steam Electric Station, Units 1 and 2 - Issuance of Amendment RE: Change of Implementation Date for Amendment No. 184 for Unit 1 and Amendment No. 158 for Unit 2 (TAC Nos. MB2837 and MB2838)" (Issuance of Amendments 196 [Unit 1] and 172 [Unit 2]), dated October 29, 2001.

3. PLA-4195, R. G. Byram (PPL) to USNRC, "Susquehanna Steam Electric Station Response to Generic Letter 94-02: Long Term Solutions and Upgrade of Interim Operating Recommendations for Thermal- Hydraulic Instabilities in Boiling Water Reactors," dated September 12, 1994.

4. Letter, J. S. Post (GE) to USNRC, "Stability Reload Licensing Calculations Using Generic DIVOM Curve" (10 CFR Part 21 Report), dated August 31, 2001.

5. Letter, USNRC to O. D. Kingsley, "Clinton Power Station Withdrawal of Amendment Request (TAC MB2133)," dated September 18, 2001.

6. Letter, USNRC to O. D. Kingsley, "Limerick Generating Station, Units 1 and 2 - Withdrawal of Amendment Request RE: Oscillation Power Range Monitor Reactor Scram Function (TAC NOS. MB2194 and MB2195)," dated January 28, 2002.

7. Letter, USNRC to H. W. Keiser, "Hope Creek Generating Station, Withdrawal of An Amendment Request, Oscillation Power Range Monitor (TAC No. MB0589)." dated November 28, 2001.

8. Letter, USNRC to O. D. Kingsley, "LaSalle County Station, Units 1 and 2 - Withdrawal of an Amendment Request (TAC Nos. MB0473 and MB0474)," dated October 4, 2001.

9. Letter, USNRC to O. D. Kingsley, "Peach Bottom Atomic Power Station, Units 2 and 3 - Withdrawal of Amendment Request RE: Oscillation Power Range Monitor Reactor Scram Function (TAC Nos. MB1165 and MB1166)," dated January 10, 2002.

Attachment 1 to PLA-5620

Proposed Technical Specification Changes (Markups)

(Units 1 & 2)

NOTE:

The LCO 3.4.1 inserts provided are the SSES TS Amendment 178 and 151 pages. The markups are editorial, to make the pages consistent between Unit 1 and Unit 2, and to correct format deficiencies.

TABLE OF CONTENTS (TECHNICAL SPECIFICATIONS)

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3.3 INSTRUMENTATION

3.3.1.3 Oscillation Power Range Monitor (OPRM) Instrumentation

LCO 3.3.1.3 Four channels of the OPRM instrumentation shall be OPERABLE. Each OPRM channel Period Based Algorithm (Sp) Allowable Value shall be less than or equal to 1.09 at a confirmation count permissive (Np) of 10.

APPLICABILITY: Thermal Power ≥ 25% RTP.

ACTIONS:

NOTE
Separate Condition entry is allowed for each channel.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One or more required channels inoperable.	A.1	Place channel in trip.	30 days
	OR		
	A.2	Place associated RPS trip system in trip.	30 days
	OR		
	A.3	Initiate alternate method to detect and suppress thermal hydraulic instability oscillations.	30 days
B. OPRM trip capability not maintained.	B.1	Initiate alternate method to detect and suppress thermal hydraullic instability oscillations.	12 hours
	AND		
	B.2	Restore OPRM trip capability	120 days
C. Required Action and associated Completion Time not met.	C.1	Reduce THERMAL POWER < 25% RTP.	4 hours

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SURVEILLANCE REQUIREMENTS

---NOTE---
When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the OPRM System maintains trip capability.

	SURVEILLANCE	FREQUENCY
SR 3.3.1.3.1	Perform CHANNEL FUNCTIONAL TEST.	184 days
SR 3.3.1.3.2	Calibrate the local power range monitors.	1000 MWD/MT average core exposure
SR 3.3.1.3.3	---NOTE--- Neutron detectors are excluded. --- Perform CHANNEL CALIBRATION.	24 months
SR 3.3.1.3.4	Perform LOGIC SYSTEM FUNCTIONAL TEST	24 months
SR 3.3.1.3.5	Verify OPRM is not bypassed when THERMAL POWER is ≥ 30% RTP and core flow ≤ 60 MLB/Hr.	24 months
SR 3.3.1.3.6	---NOTE--- Neutron detectors are excluded. --- Verify the RPS RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation.

OR

One recirculation loop may be in operation provided the following limits are applied when the associated LCO is applicable:

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR, and

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power—High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation.

e. Recirculation pump speed is ≤ 80%.

---Note---

Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

INSERT - 1 (UNIT - 1)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. No recirculation loops operating while in MODE 1	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. Recirculation loop flow mismatch not within limits.	B.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
C. No recirculation loops in operation while in MODE 2 OR Single Recirculation Loop required limits and setpoints not established within required time.	C.1 Be in MODE 3.	12 hours

INSERT - 2
(UNIT 1)

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INSERT -3
(UNIT 1)

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. ≤ 10 million lbm/hr when operating at < 75 million lbm/hr total core flow; and b. ≤ 5 million lbm/hr when operating at ≥ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limit specified in the LCO.	24 hours

INSERT 4
(UNIT 1)

(Figure 3.4.1-1)

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INSERT - 5
(UNIT 1)

INSERT 1
(UNIT 1)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1.

OR

One recirculation loop may be in operation provided the following limits are applied when the associated LCO is applicable with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1.

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR; and

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power—High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation; and

e. Recirculation pump speed is ≤ 80%.

---Note---
Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

INSERT 2 (UNIT 1)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Total core flow as a function of THERMAL POWER within Region I of Figure 3.4.1-1. OR No recirculation loops operating while in MODE 1.	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. --------NOTE---------- Only applicable when in Region II of Figure 3.4.1-1. ---------- Two or more APRM readings oscillating with one or more oscillating $\geq$ 10% of RTP peak-to-peak. OR Two or more LPRM upscale alarms activating and deactivating with a period $\geq$ 1 second and $\leq$ 5 seconds. OR Sustained LPRM oscillations > 10 w/cm^2 peak-to-peak with a period $\geq$ 1 second and $\leq$ 5 seconds. OR	B.1 Place the reactor mode switch in the shutdown position.	Immediately (continued)

INSERT 3
(UNIT 1)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued) Less than 50% of required LPRM upscale alarms OPERABLE.		
C. Total core flow as a function of THERMAL POWER within Region II of Figure 3.4.1-1.	C.1 Initiate action to restore total core flow as a function of THERMAL POWER outside of Region II.	Immediately
D. Recirculation loop flow mismatch not within limits.	D.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
E. No recirculation loops in operation while in MODE 2. OR Single Recirculation Loop required limits and setpoints not established within required time.	E.1 Be in MODE 3.	12 hours

INSERT - 4
(UNIT 1)

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. ≤ 10 million lbm/hr when operating at < 75 million lbm/hr total core flow; and b. ≤ 5 million lbm/hr when operating at ≥ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	Verify total core flow as a function of THERMAL POWER is outside of Region I and II of Figure 3.4.1-1.	24 hours
SR 3.4.1.3	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limit specified in the LCO.	24 hours

INSERT 5
(UNIT-1)

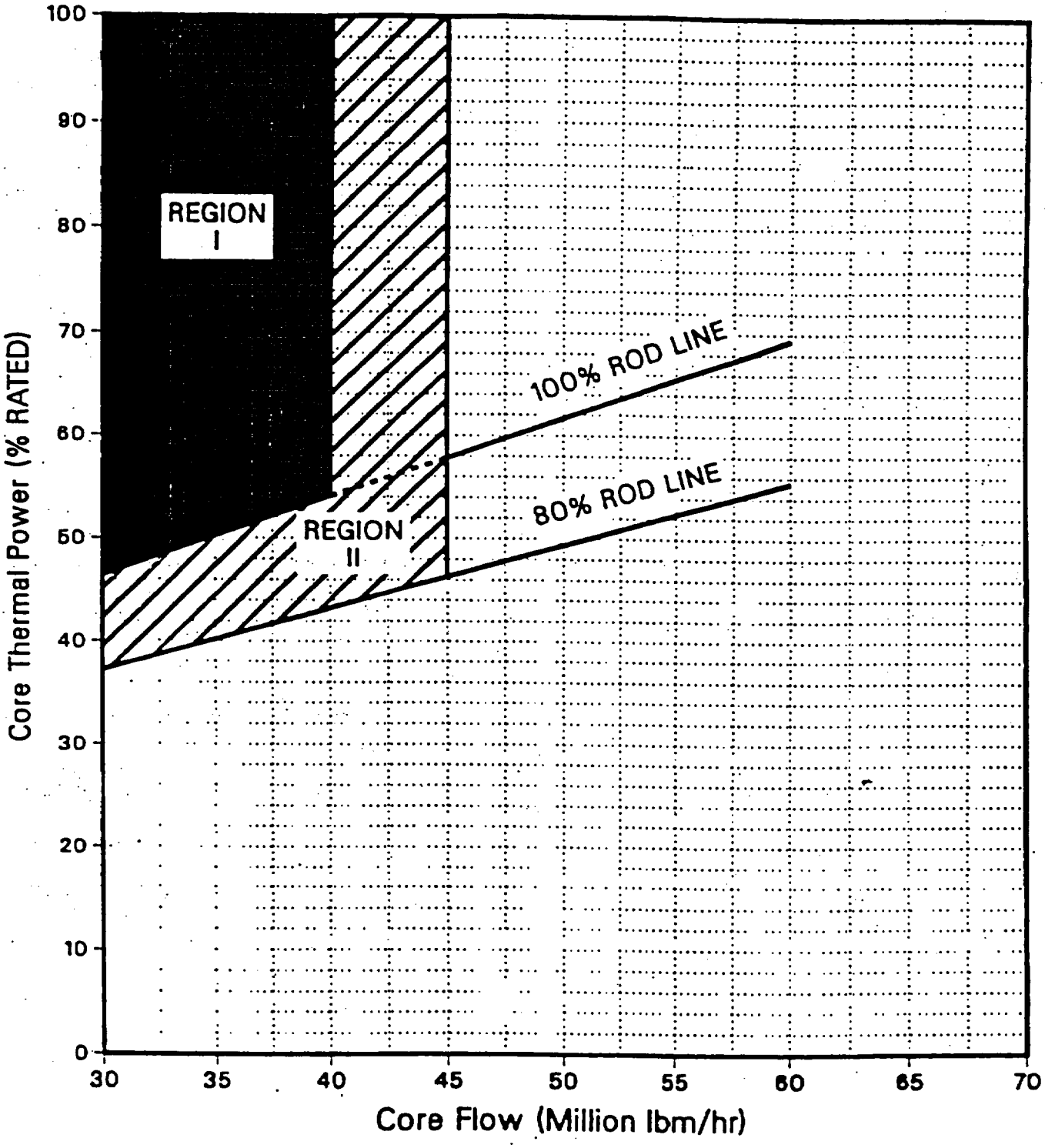

Figure 3.4.1-1

Thermal Power Stability Restrictions

TABLE OF CONTENTS (TECHNICAL SPECIFICATIONS)

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3.3 INSTRUMENTATION

3.3.1.3 Oscillation Power Range Monitor (OPRM) Instrumentation

LCO 3.3.1.3 Four channels of the OPRM instrumentation shall be OPERABLE. Each OPRM channel Period Based Algorithm (Sp) Allowable Value shall be less than or equal to 1.10 at a confirmation count permissive (Np) of 10.

APPLICABILITY: Thermal Power ≥ 25% RTP.

ACTIONS:

NOTE
Separate Condition entry is allowed for each channel.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One or more required channels inoperable.	A.1	Place channel in trip.	30 days
	OR		
	A.2	Place associated RPS trip system in trip.	30 days
	OR		
	A.3	Initiate alternate method to detect and suppress thermal hydraulic instability oscillations.	30 days
B. OPRM trip capability not maintained.	B.1	Initiate alternate method to detect and suppress thermal hydraullic instability oscillations.	12 hours
	AND		
	B.2	Restore OPRM trip capability	120 days
C. Required Action and associated Completion Time not met.	C.1	Reduce THERMAL POWER < 25% RTP.	4 hours

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SURVEILLANCE REQUIREMENTS

NOTE

When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the OPRM System maintains trip capability.

	SURVEILLANCE	FREQUENCY
SR 3.3.1.3.1	Perform CHANNEL FUNCTIONAL TEST	184 days
SR 3.3.1.3.2	Calibrate the local power range monitors.	1000 MWD/MT average core exposure
SR 3.3.1.3.3	NOTE Neutron detectors are excluded. Perform CHANNEL CALIBRATION.	24 months
SR 3.3.1.3.4	Perform LOGIC SYSTEM FUNCTIONAL TEST	24 months
SR 3.3.1.3.5	Verify OPRM is not bypassed when THERMAL POWER is ≥ 30% RTP and core flow ≤ 60 MLb/Hr.	24 months
SR 3.3.1.3.6	NOTE Neutron detectors are excluded. Verify the RPS RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation.

OR

One recirculation loop may be in operation provided the following limits are applied when the associated LCO is applicable:

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR, and

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power—High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation.

e. Recirculation pump speed is ≤ 80%

Note

Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

INSERT - 1
(UNIT 2)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. No recirculation loops operating while in MODE 1	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. Recirculation loop flow mismatch not within limits.	B.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
C. No recirculation loops in operation while in MODE 2 OR Single Recirculation Loop required limits and setpoints not established within required time.	C.1 Be in MODE 3.	12 hours

INSERT - 2
(unit -2)

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INSERT · 3
(UNIT 2)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. ≤ 10 million lbm/hr when operating at < 75 million lbm/hr total core flow; and b. ≤ 5 million lbm/hr when operating at ≥ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limits specified in the LCO.	24 hours

INSERT 4
(UNIT 2)

(Figure 3.4.1-1)

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INSERT 5
(UNIT 2)

INSERT - 1
(UNIT 2)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1,

OR

One recirculation loop may be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1 provided the following limits are applied when the associated LCO is applicable:

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR; and

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power–High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation; and

e. Recirculation pump speed is ≤ 80%.

---Note---
Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

INSERT - 2
(UNIT 2)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Total core flow as a function of THERMAL POWER within Region I of Figure 3.4.1-1. OR No recirculation loops operating while in MODE 1.	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. --------NOTE---------- Only applicable when in Region II of Figure 3.4.1-1. ---------- Two or more APRM readings oscillating with one or more oscillating ≥ 10% of RTP peak-to-peak. OR Two or more LPRM upscale alarms activating and deactivating with a period ≥ 1 second and ≤ 5 seconds. OR Sustained LPRM oscillations > 10 w/cm^2 peak-to-peak with a period ≥ 1 second and ≤ 5 seconds. OR	B.1 Place the reactor mode switch in the shutdown position.	Immediately (continued)

INSERT 3
(UNIT 2)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued) Less than 50% of required LPRM upscale alarms OPERABLE.		
C. Total core flow as a function of THERMAL POWER within Region II of Figure 3.4.1-1.	C.1 Initiate action to restore total core flow as a function of THERMAL POWER outside of Region II.	Immediately
D. Recirculation loop flow mismatch not within limits.	D.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
E. No recirculation loops in operation while in MODE 2. OR Single Recirculation Loop required limits and setpoints not established within required time.	E.1 Be in MODE 3.	12 hours

INSERT 4
(UNIT 2)

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. ≤ 10 million lbm/hr when operating at < 75 million lbm/hr total core flow; and b. ≤ 5 million lbm/hr when operating at ≥ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	Verify total core flow as a function of THERMAL POWER is outside of Region I and II of Figure 3.4.1-1.	24 hours
SR 3.4.1.3	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limits specified in the LCO.	24 hours

INSERT 5
(UNIT 2)

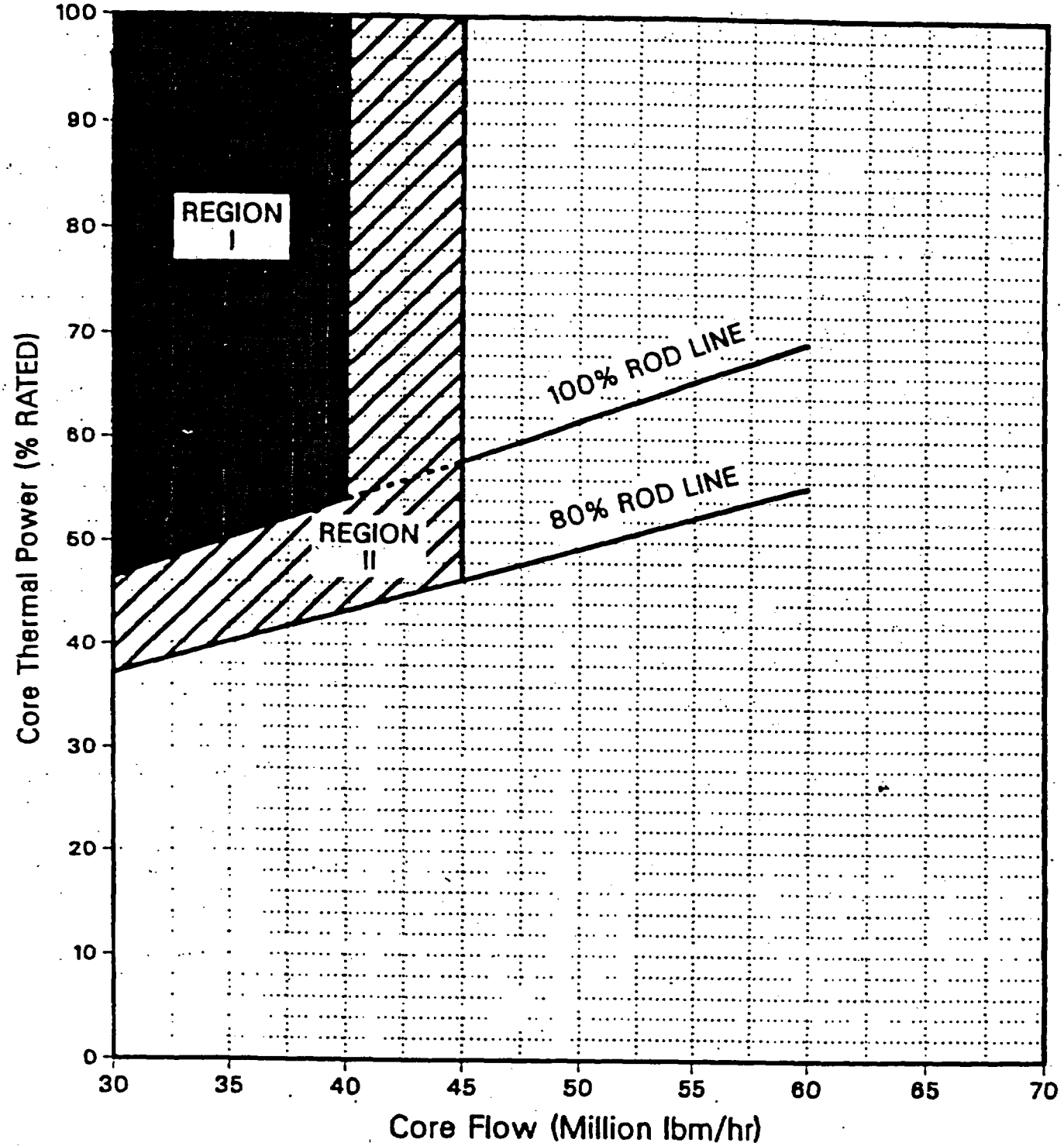

Figure 3.4.1-1

Thermal Power Stability Restrictions

Attachment 2 to PLA-5620

Proposed Technical Specification Changes (Retyped)

(Units 1 & 2)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1.

OR

One recirculation loop may be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1 provided the following limits are applied when the associated LCO is applicable.

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR;

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power—High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation; and

e. Recirculation pump speed is $\leq$ 80%.

---Note---

Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Total core flow as a function of THERMAL POWER within Region I of Figure 3.4.1-1. OR No recirculation loops operating while in MODE 1.	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. ----------NOTE---------- Only applicable when in Region II of Figure 3.4.1-1. ---------- Two or more APRM readings oscillating with one or more oscillating $\geq$ 10% of RTP peak-to-peak. OR Two or more LPRM upscale alarms activating and deactivating with a period $\geq$ 1 second and $\leq$ 5 seconds. OR Sustained LPRM oscillations $>$ 10 w/cm^2 peak-to-peak with a period $\geq$ 1 second and $\leq$ 5 seconds. OR Less than 50% of required LPRM upscale alarms OPERABLE.	B.1 Place the reactor mode switch in the shutdown position.	Immediately

(continued)

ACTION (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Total core flow as a function of THERMAL POWER within Region II of Figure 3.4.1-1.	C.1 Initiate action to restore total core flow as a function of THERMAL POWER outside of Region II.	Immediately
D. Recirculation loop flow mismatch not within limits.	D.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
E. No recirculation loops in operation while in MODE 2. OR Single Recirculation Loop required limits and setpoints not established within required time.	E.1 Be in MODE 3.	12 hours

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. $\leq$ 10 million lbm/hr when operating at $<$ 75 million lbm/hr total core flow; and b. $\leq$ 5 million lbm/hr when operating at $\geq$ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	Verify total core flow as a function of THERMAL POWER is outside of Region I and II of Figure 3.4.1-1.	24 hours
SR 3.4.1.3	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limit specified in the LCO.	24 hours

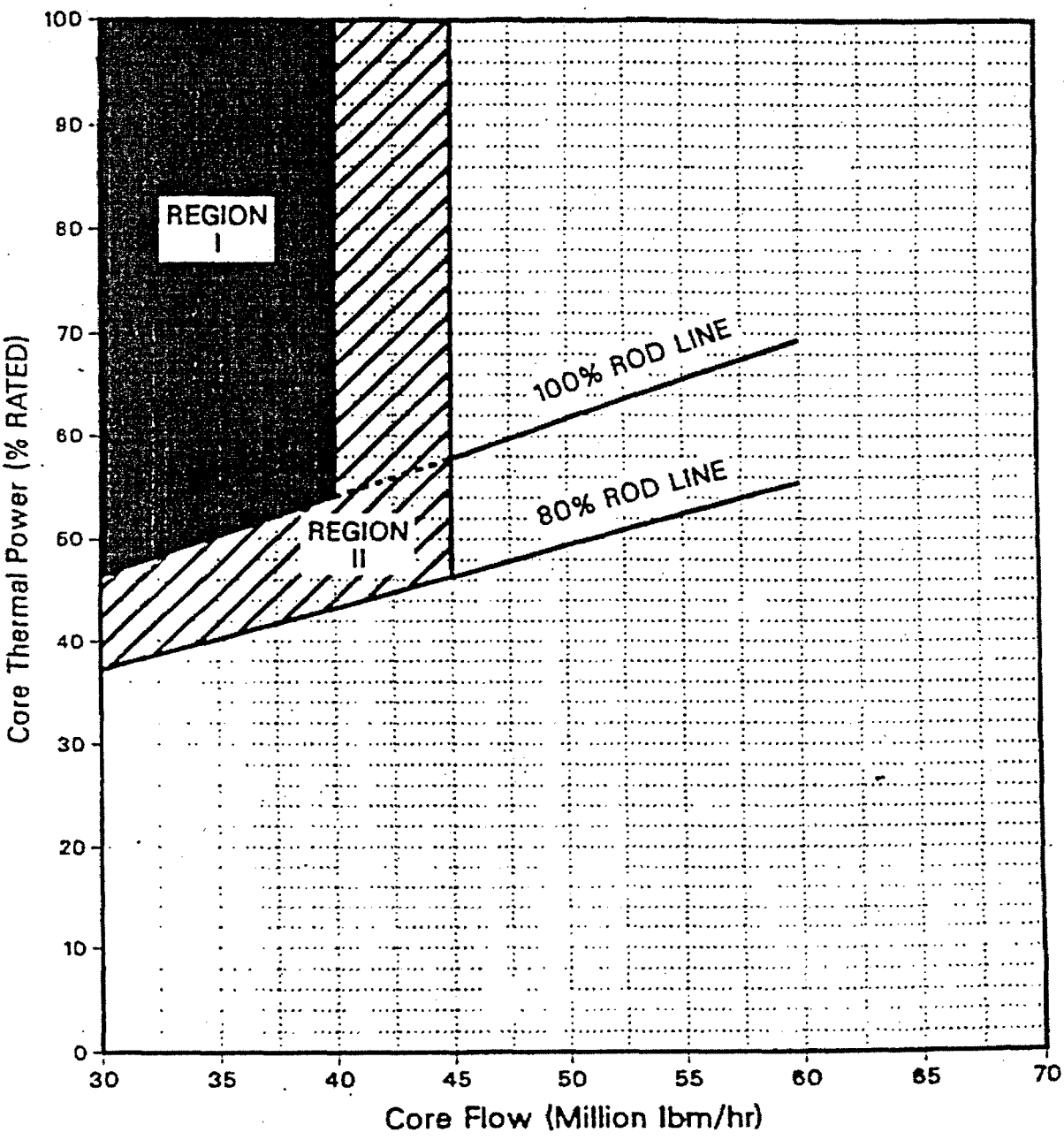

Figure 3.4.1-1

Thermal Power Stability Restrictions

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.1 Recirculation Loops Operating

LCO 3.4.1 Two recirculation loops with matched flows shall be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1.

OR

One recirculation loop may be in operation with a THERMAL POWER/core flow condition outside of Regions I and II of Figure 3.4.1-1 provided the following limits are applied when the associated LCO is applicable:

a. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," single loop operation limits specified in the COLR;

b. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," single loop operation limits specified in the COLR;

c. LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)," single loop operation limits specified in the COLR;

d. LCO 3.3.1.1, "Reactor Protection System (RPS) Instrumentation," Function 2.b (Average Power Range Monitors Flow Biased Simulated Thermal Power—High), Allowable Value of Table 3.3.1.1-1 is reset for single loop operation; and

e. Recirculation pump speed is $\leq$ 80%.

---Note---

Required limit and setpoint resets for single recirculation loop operation may be delayed for up to 12 hours after transition from two recirculation loop operation to single recirculation loop operation.

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Total core flow as a function of THERMAL POWER within Region I of Figure 3.4.1-1. OR No recirculation loops operating while in MODE 1.	A.1 Place reactor mode switch in the shutdown position.	Immediately
B. ----------NOTE---------- Only applicable when in Region II of Figure 3.4.1-1. ---------- Two or more APRM readings oscillating with one or more oscillating $\geq$ 10% of RTP peak-to-peak. OR Two or more LPRM upscale alarms activating and deactivating with a period $\geq$ 1 second and $\leq$ 5 seconds. OR Sustained LPRM oscillations $>$ 10 w/cm^2 peak-to-peak with a period $\geq$ 1 second and $\leq$ 5 seconds. OR Less than 50% of required LPRM upscale alarms OPERABLE.	B.1 Place the reactor mode switch in the shutdown position.	Immediately

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Total core flow as a function of THERMAL POWER within Region II of Figure 3.4.1-1.	C.1 Initiate action to restore total core flow as a function of THERMAL POWER outside of Region II.	Immediately
D. Recirculation loop flow mismatch not within limits.	D.1 Declare the recirculation loop with lower flow to be "not in operation."	2 hours
E. No recirculation loops in operation while in MODE 2. OR Single Recirculation Loop required limits and setpoints not established within required time.	E.1 Be in MODE 3.	12 hours

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.4.1.1	----------NOTE---------- Not required to be performed until 24 hours after both recirculation loops are in operation. ---------- Verify recirculation loop jet pump flow mismatch with both recirculation loops in operation is: a. $\leq$ 10 million lbm/hr when operating at $<$ 75 million lbm/hr total core flow; and b. $\leq$ 5 million lbm/hr when operating at $\geq$ 75 million lbm/hr total core flow.	24 hours
SR 3.4.1.2	Verify total core flow as a function of THERMAL POWER is outside of Region I and II of Figure 3.4.1-1.	24 hours
SR 3.4.1.3	----------NOTE---------- Only required to be met during single loop operations. ---------- Verify recirculation pump speed is within the limit specified in the LCO.	24 hours

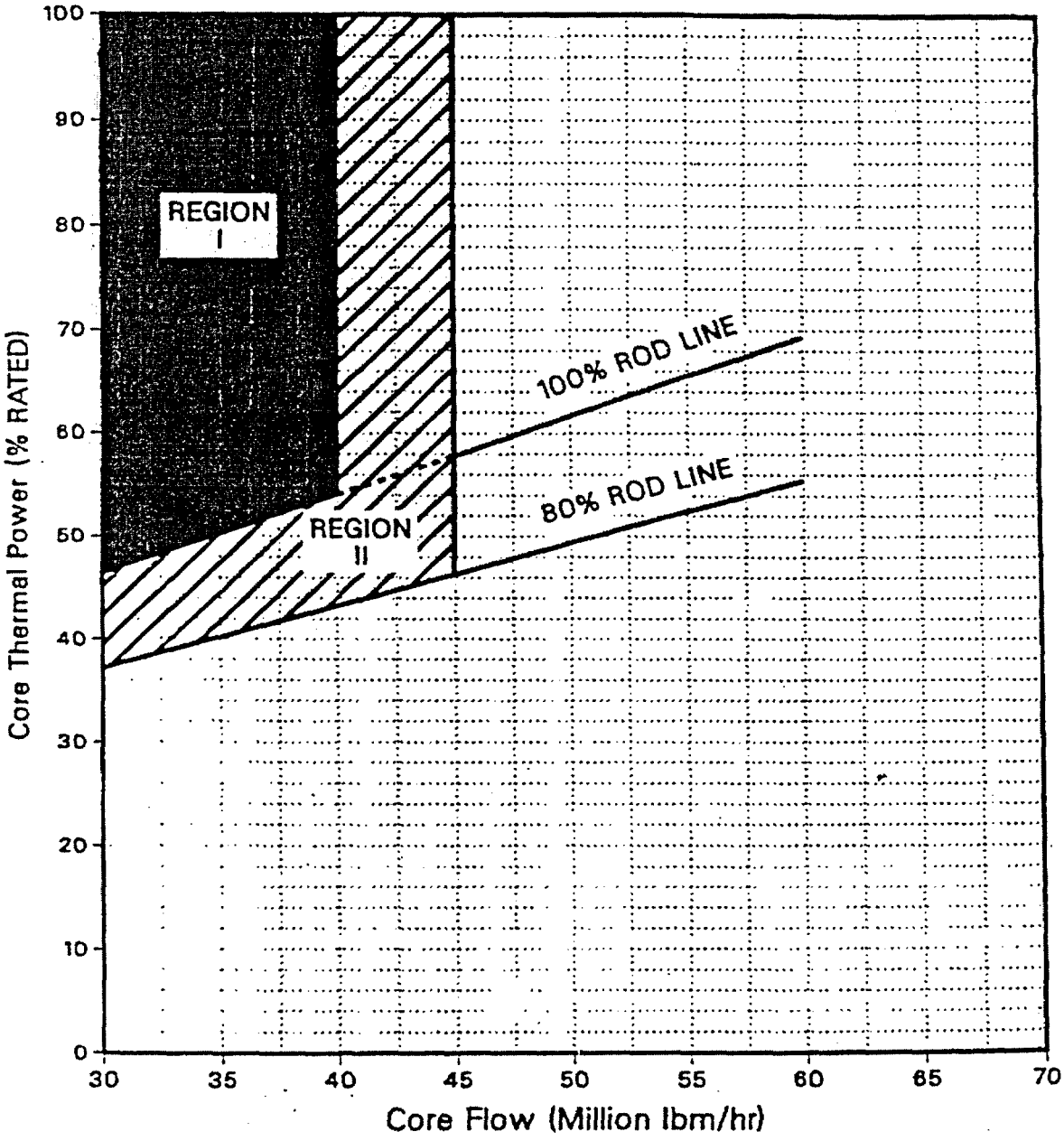

Figure 3.4.1-1

Thermal Power Stability Restrictions

Attachment 3 to PLA-5629

List of Regulatory Commitments

(Units 1 & 2)

LIST OF REGULATORY COMMITMENTS

REGULATORY COMMITMENTS	Due Date/Event
There are no new commitments associated with this submittal.	NA