



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 6, 1997

50-528/529/530

Mr. James M. Levine  
Senior Vice President, Nuclear  
Arizona Public Service Company  
Post Office Box 53999  
Phoenix, Arizona 85072-3999

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - SECTION 3.3 OF THE PROPOSED  
LICENSE AMENDMENT TO IMPLEMENT IMPROVED STANDARD TECHNICAL  
SPECIFICATIONS FOR PALO VERDE NUCLEAR GENERATING STATION (PVNGS)  
UNIT NO. 1 (TAC NO. M96672), UNIT NO. 2 (TAC NO. M96673), AND UNIT  
NO. 3 (TAC NO. M96674)

Dear Mr. Levine:

By letter dated October 4, 1996, and supplemented by letter dated March 16, 1997, Arizona Public Service Company (APS) submitted a request to convert the current Technical Specifications (TSs) for PVNGS Units 1, 2, and 3, to make them consistent with NUREG-1432, Revision 1, "Standard Technical Specifications Combustion Engineering Plants," dated April 1995.

In a meeting with the NRC staff on April 30, 1997, the staff stated that generally, ISTS Section 3.3 was good; however, there were some weaknesses in the discussion of changes (DOC) for ISTS 3.3. In the discussions of the less restrictive (L) and more restrictive (M) changes, APS did not show why NUREG-1432 applied specifically to Palo Verde Units 1, 2, and 3. The APS representative stated that he would review all the L and M DOCs in ISTS Section 3.3, and would provide additional justification in the response to the staff's enclosed request for additional information.

In order for the staff to complete its review, the additional information listed in the enclosed tables under the heading "Comments" is required. The enclosure reflects the staff's comments on Section 3.3. To assist the staff in meeting its review schedule, it is requested that you respond to this request for additional information in accordance with your revised completion schedule submitted to the NRC staff on June 6, 1997.

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Mr. James M. Levine

- 2 -

June 6, 1997

If you have any questions, please contact me at (301) 415-1325.

Sincerely,

Original Signed By

Charles R. Thomas, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-528, STN 50-529  
and STN 50-530

DISTRIBUTION:

Docket File

PUBLIC

Enclosure: Request for Additional  
Information

PDIV-2 Reading

JRoe

cc w/encl: See next page

EAdensam

WBateman

JClifford

CThomas

EPeyton

ACRS, TWFN

OGC, 015B18

KPerkins, WCFO

PGwynn, RIV

DKirsch, WCFO

MReinhart

DOCUMENT NAME: 33RAI.PV

OFC	PDIV-2/PM	PDIV-2/LA	NRR:TSB
NAME	CThomas <i>JA</i>	EPeyton <i>EP</i>	MReinhart <i>MR</i>
DATE	6/6/97	6/6/97	6/6/97

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Mr. James M. Levine

- 2 -

June 6, 1997

c w/encl:

Mr. Steve Olea  
Arizona Corporation Commission  
1200 W. Washington Street  
Phoenix, Arizona 85007

Mr. David Summers  
Public Service Company of New Mexico  
414 Silver SW, #0604  
Albuquerque, New Mexico 87102

Douglas Kent Porter,  
Senior Counsel  
Southern California Edison Company  
Law Department, Generation Resources  
P.O. Box 800  
Rosemead, California 91770

Mr. Robert D. Bledsoe  
Southern California Edison Company  
14300 Mesa Road, Drop D41-SONGS  
San Clemente, California 92672

Senior Resident Inspector  
USNRC  
P. O. Box 40  
Buckeye, Arizona 85326

Mr. Robert Henry  
Salt River Project  
6504 East Thomas Road  
Scottsdale, Arizona 85251

Regional Administrator, Region IV  
U. S. Nuclear Regulatory Commission  
Harris Tower & Pavillion  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011-8064

Terry Bassham, Esq.  
General Counsel  
El Paso Electric Company  
123 W. Mills  
El Paso, Texas 79901

Chairman, Board of Supervisors  
ATTN: Chairman  
301 W. Jefferson, 10th Floor  
Phoenix, Arizona 85003

Mr. Aubrey V. Godwin, Director  
Arizona Radiation Regulatory Agency  
4814 South 40 Street  
Phoenix, Arizona 85040

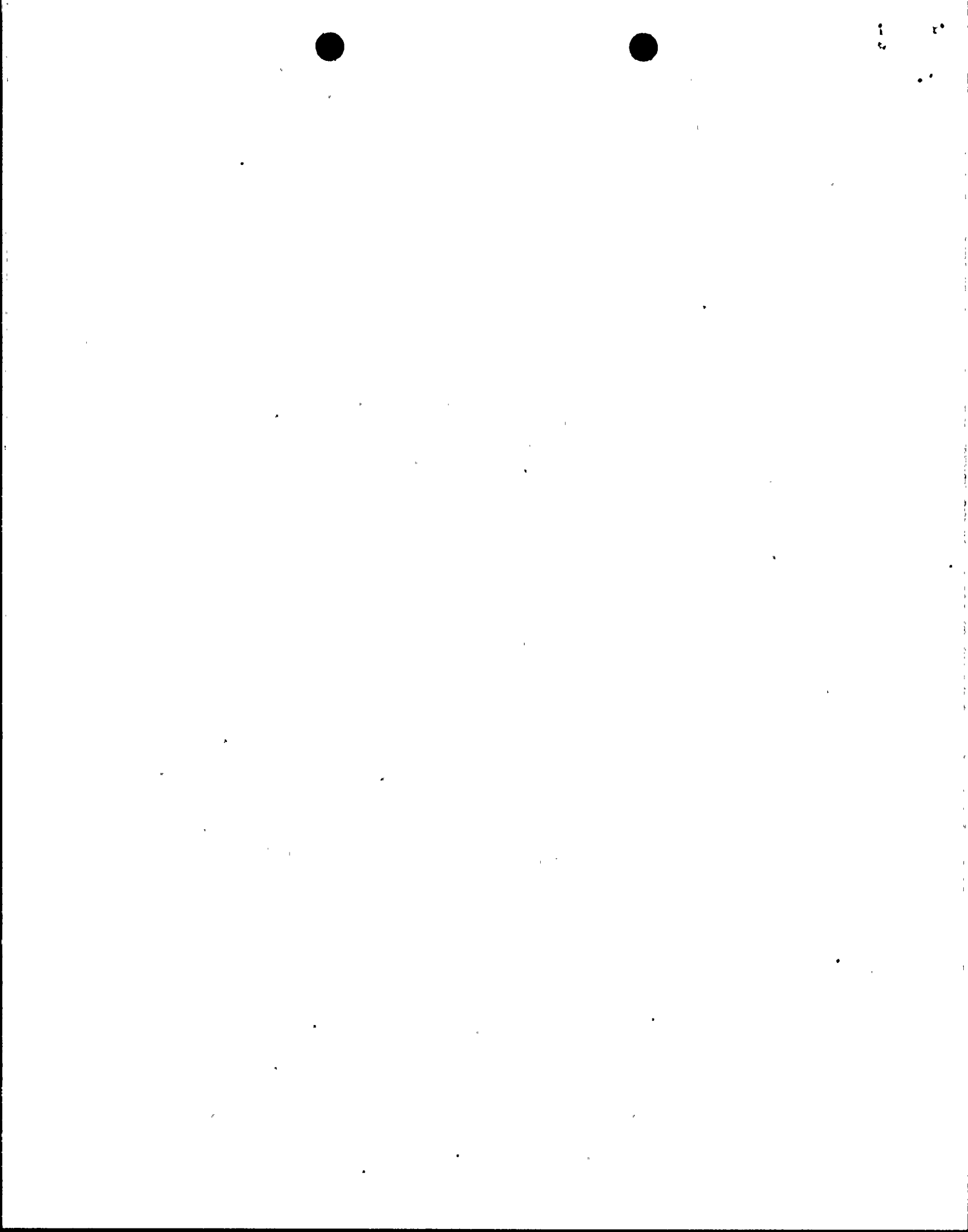
Ms. Angela K. Krainik, Manager  
Nuclear Licensing  
Arizona Public Service Company  
P.O. Box 52034  
Phoenix, Arizona 85072-2034

Mr. John C. Horne, Vice President  
Power Supply  
Palo Verde Services  
2025 N. Third Street, Suite 220  
Phoenix, Arizona 85004

Mr. Robert Burt  
Los Angeles Department of Water & Power  
Southern California Public Power Authority  
111 North Hope Street, Room 1255-B  
Los Angeles, California 90051

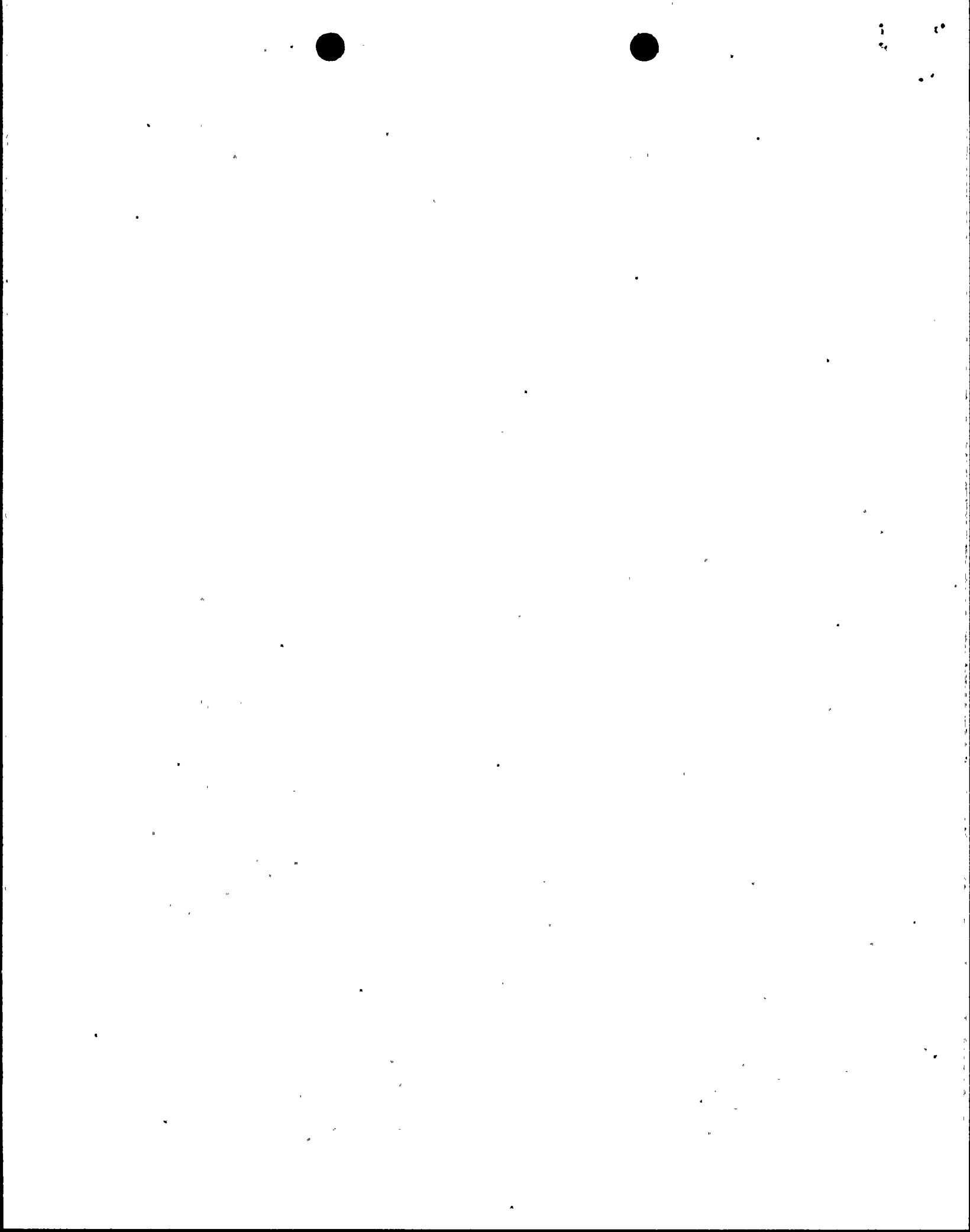
**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING**  
**Table 3.3.1 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-1	L.4	CTS Table 4.3-1, Note 2	CTS Table 4.3-1, Note 2, requires adjusting Linear power levels, CPC delta T power, and CPC nuclear power signals when above 15% RTP. ITS SR 3.3.1.4, Note 1, does not require testing until 12 hours after THERMAL POWER $\geq$ 20% RTP. There is inadequate justification for changing the CTS requirement from 15% RTP to 20% RTP.	3/11/97		Provide additional discussion and justification for changing the CTS testing requirement from 15% to 20%.
3.3.1-2 OOS	L.5	CTS Table 4.3-1 Notes 3, 7, and 8	CTS Table 4.3-1 Notes 3, 7, and 8 require performing testing above specific power levels. There is no specific time allowed after reaching the power level to perform the testing. ITS SRs 3.3.1.2, 3.3.1.5, and 3.3.1.6 allow 12 hours after reaching the power level to perform testing. This is an extension of the CTS STI.	3/11/97		Provide additional DOC justification to support the STI extension.
3.3.1-3	L.4	CTS Table 4.3-1, Note 2	CTS Table 4.3-1, Note 2, requires adjusting Linear power levels, CPC delta T power, and CPC nuclear power signals when above 15% RTP. ITS SR 3.3.1.4, Note 1, does not require testing until 12 hours after THERMAL POWER $\geq$ 20% RTP. This is an extension to the CTS STI from immediately to after 12 hours.	3/12/97		Provide additional DOC discussion to support the CTS Surveillance Test Intervals.



**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING**  
**Table 3.3.1 Rev.1**

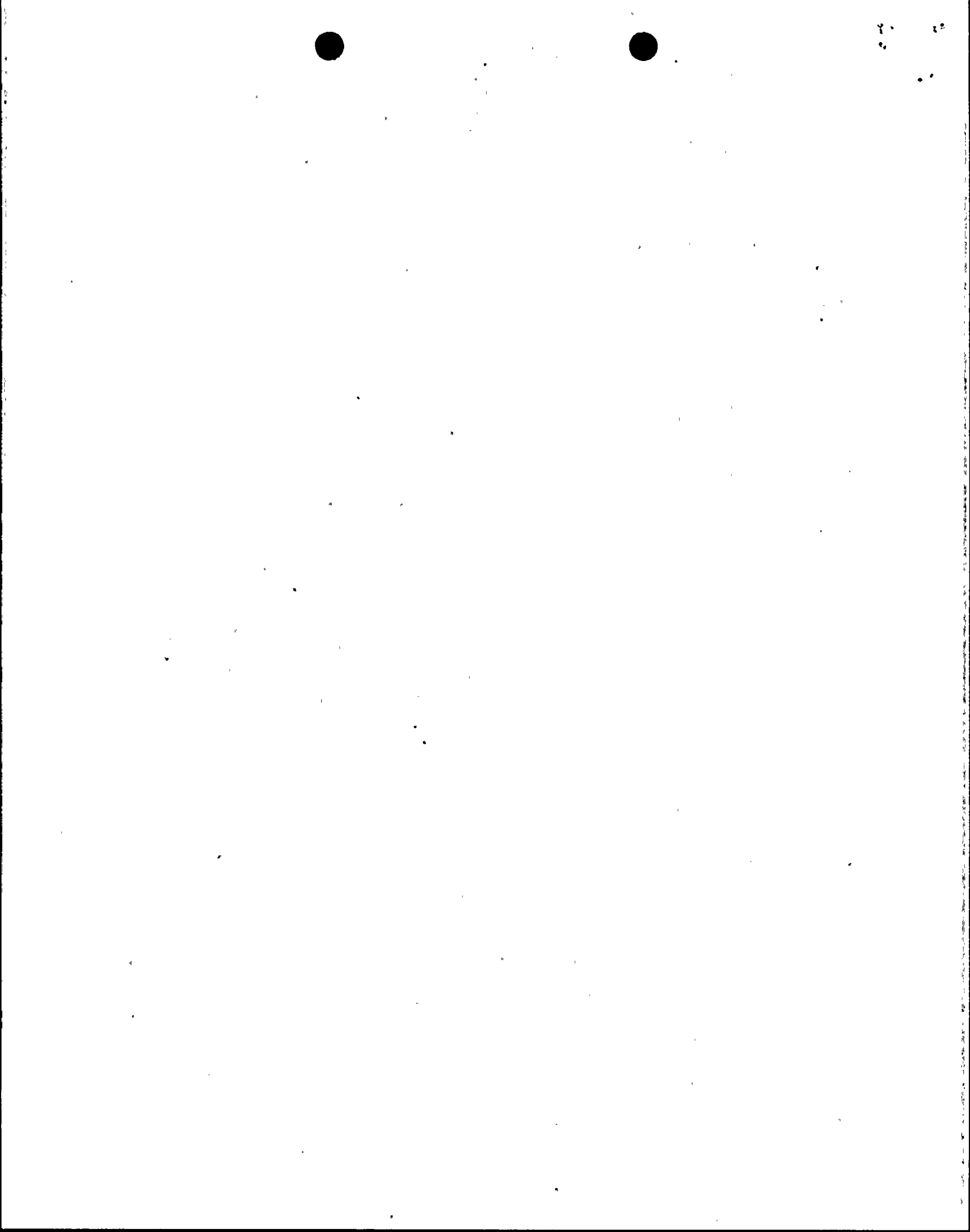
ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-4	JFD 1 LA.10	ITS Actions	<p>CTS Table 3.3-1, Action 2, requires a special Plant Review Board review of the desirability of maintaining an inoperable channel bypassed, in accordance with CTS 6.5.1.6.g.</p> <p>A similar review and audit requirement is contained in ITS Action Notes LCO 3.3.1. Furthermore, the staff concluded that all review and audit programmatic requirements can be relocated to owner-controlled documents because sufficient control exists within the framework of current regulations. Therefore, a note should be added to ITS LCO 3.3.1 that retains CTS requirements for prior review and approval of placing channels in bypass.</p>			Provide additional discussion and justification, identifying the licensee controlled documents this CTS requirement is moved to.
3.3.1-5	JFD 10	ITS Table 3.3-1, RC Flow - Low	<p>This JFD states in part that separate RC Flow - Low functions for each SG are needed because otherwise bypassing both RC low parameters in a single channel would not be allowed. However, JFD 5 states that PVNGS does not have a bypass function for RC Flow-Low. Provide additional information to explain the meaning of the DOCs.</p>	5/6/97		Provide additional information.





**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING -**  
**Table 3.3.1 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-6	JFD 12  LA.9	ITS SR 3.3.1.4  CTS Table 4.3-1 Note (2)	Proposed SR additions make the TS limits ambiguous. Clarify the proposed SR. State in the justification that the changes are consistent with the current licensing basis.	5/6/97		Provide additional information.
3.3.1-7	None	ITS Table 3.3.1-1	The Allowable Value for Variable Overpower includes a decreasing rate > 5% per minute RTP. This change is not discussed in the JFDs.	5/6/97		Provide a JFD.
3.3.1-8	JFD 13	ITS Table 3.3.1-1	Logarithmic Power Level - High discussion requires a plant specific justification for deviation from the STS.	5/6/97		Provide a plant specific discussion giving a design basis or operational limitation justification for proposed changes.
3.3.1-9 OOS	JFD 14  LA.3	ITS Table 3.3.1-1 footnote (c)  CTS Table 3.3.1 Note (b)	Proposed deletion of Pressurizer Pressure Low function footnote requires a design basis discussion for deviation from the NUREG. This is a change to the CTS and a change to the NUREG.	5/6/97		Provide additional discussion based on PVNGS design.



**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING**  
**Table 3.3.1 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-10	None	Reactor Coolant Flow - Low Ramp AV	The CTS units psi/sec are changed to psid/sec without a presentation of a DOC.	5/6/97		Provide a DOC for the proposed change.
3.3.1-11	LA.X LA.2 LA.4 LA.6 LA.7 LA.8 LA.11 LA.12	DOC boilerplate; generic to all 3.3 LA.X DOCs  CTS Table 4.3-1 Note (6)	The DOC states that the relocated portion of the CTS requirement is "not required to determine the operability of the system ...." Explain the meaning of this justification. There is insufficient detailed safety analysis to support the proposed changes.			Provide justification for each proposed change.
3.3.1-12	A.13	Table 2.2-1, Note (2) & (3)	Requirements are deleted from the CTS without an appropriate less restrictive discussion of safety questions that may result from operating the plant without the operational limits.	5/6/97		Provide an L-DOC.
3.3.1-13	A.3	CTS SR 4.3.1.2	The DOC states that the CTS requirement to demonstrate the logic for the bypasses is operable is equivalent based on the ITS definition for a CFT. Stating that the requirements are equivalent doesn't make them so. Explain why the proposed changes are equivalent.	5/6/97		Provide additional information to support the proposed change.

**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING**  
**Table 3.3.1 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-14	L.3	ITS SR 3.3.1.7	Note 2 to ITS SR 3.3.1.7 is inconsistent with the proposed ITS. NUREG Note (b) to Table 3.3.1-1, which modifies the Log Power Monitor applicability by requiring the RTCBs to be closed is proposed to be deleted, thus the DOC is incorrect since the trip function is required to be operable in Mode 2 regardless of breaker position.	5/6/97		Provide a revised DOC.
3.3.1-15	L.8	CTS Action 2  ITS 3.3.1 Condition C	The L.8 DOC is confusing. Statements about how the bypass removal function affects channel operability are unclear. Provide a rewritten DOC that states the proposed change and explain why there is not a significant safety question in the operation of the plant with the proposed ITS.	5/6/97		Provide a revised DOC.
3.3.1-16	L.6	CTS Action 2, ITS Action C	The generalized discussion in L.6 does not explain why there is not a significant safety question in the operation of the plant with the proposed ITS.	5/6/97		Provides a revised DOC.
3.3.1-17	A.11	ITS Action G	The ITS requirement to enter Action E to shut down the plant and the CTS requirement to enter LCO 3.0.3 are stated to be equivalent with no resulting (technical) changes. Are these requirements equivalent in all respects including reporting requirements? Explain.	5/6/97		Provide additional explanation why the proposed change is administrative.



**PVNGS ITS 3.3.1 REACTOR PROTECTIVE SYSTEM INSTRUMENTATION - OPERATING**  
**Table 3.3.1 Rev.1**

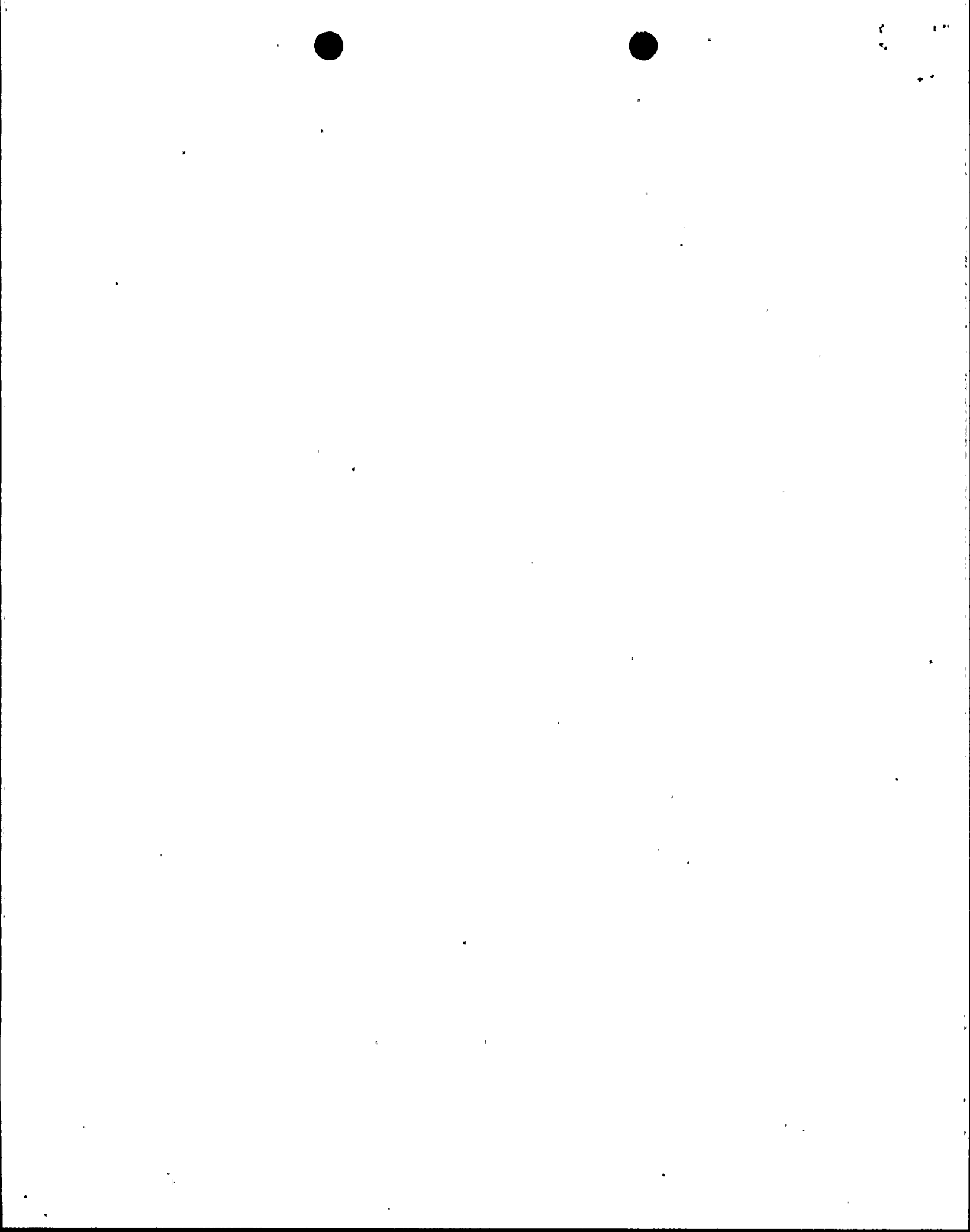
ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-18	None	CTS Note 4	Daily channel calibrations for Local Power Density and DNBR are deleted without justification.	5/76/97		Provide DOC discussion for each proposed change.
3.3.1-19	None	CTS Note 8 ITS SR 3.3.1.5	SR 3.3.1.5 is added to DNBR-low without safety analysis justification.	5/6/97		Provide DOC discussion for each proposed change.
3.3.1-20	None	CTS Table Notes 4, 5 and 6	CTS daily and refueling channel calibrations for the CPC System and CPC refueling channel functional tests are deleted without discussion.	5/6/97		Provide DOC discussion for each proposed change.
3.3.1-21	A.10	CTS Note (9)	CTS applies Note (9) to only the CPCs quarterly CFT whereas the ITS applies this SR to all RPS functions without a justification.	5/6/97		Provide DOC discussion for each proposed change.
3.3.1-22	M.2	CTS Table 4.3-1 Note (2)	DOC M.2 is used to justify changes that includes a lower limit for performing ITS SR 3.3.1.4 without providing discussion of the change.	5/6/97		Provide DOC discussion for each proposed change.



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**Table 3.3.1 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.1-23	JFD	ITS	<p>B 3.3-12: Explain the deletion of the Mode 3, 4, 5 discussion.</p> <p>Insert 1 to the Bases for Applicable Safety Analysis: What is the relationship between the insert limiting values and the TS limits?</p> <p>Insert 1 to Bases for Action Statement: Clarify the meaning of the first sentence.</p>	5/6/97		Provide additional information.





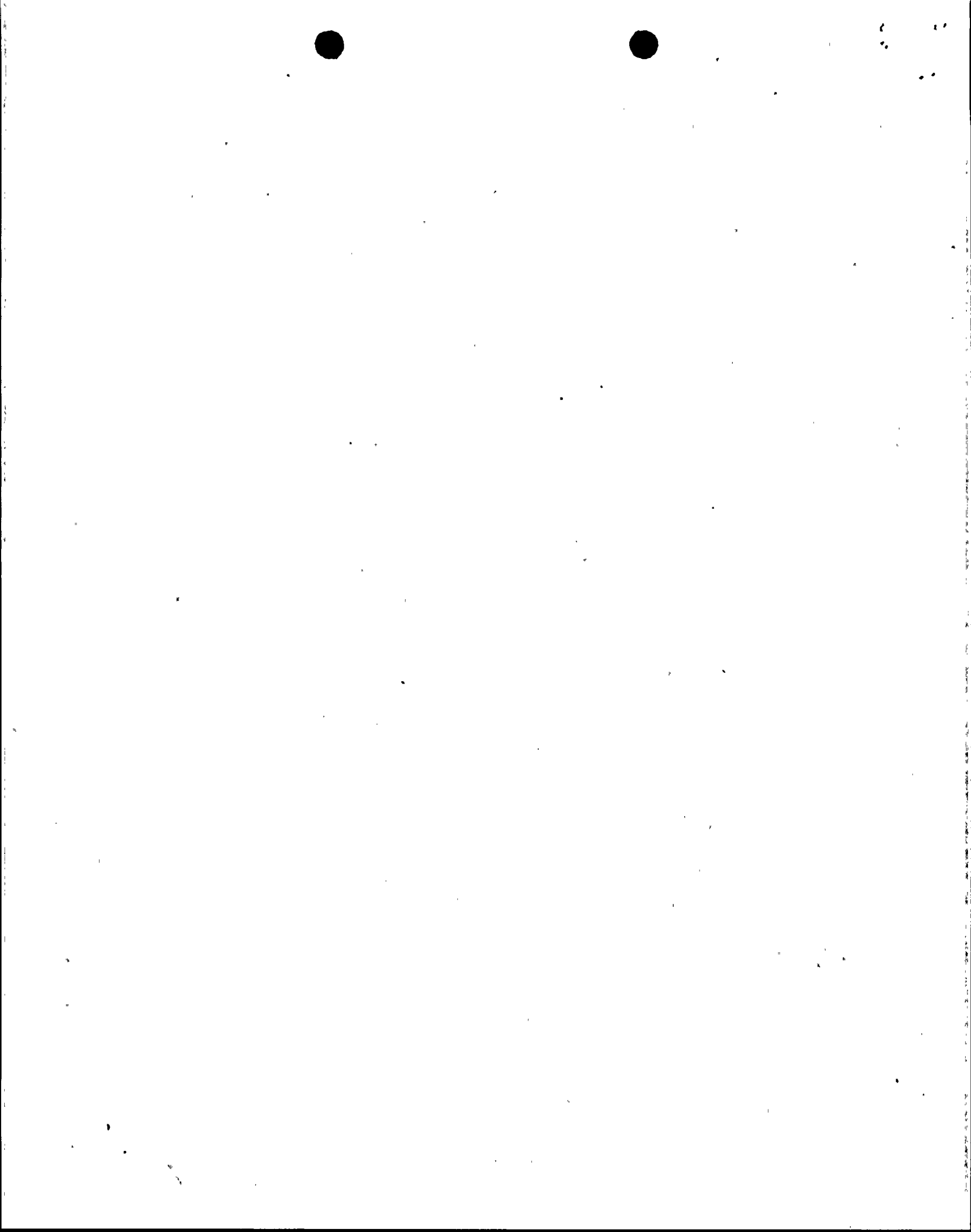
**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-1	L.5	CTS Table 3.3-1, Action 2	The L5 DOC is confusing. Statements about how the bypass removal function affects channel operability are unclear. Provide a rewritten DOC that states the proposed change and explain why there is not a significant safety question in the operation of the plant with the proposed ITS.	3/3/97		Provide a revised justification for this less restrictive change.
3.3.2-2	JFD 2	STS 3.3.2, Actions NOTE	<p>CTS 3.3.1, Action 2, requires a special Plant Review Board review of the desirability of maintaining an inoperable channel bypassed, in accordance with CTS 6.5.1.6.g.</p> <p>A similar review and audit requirement is contained in ITS LCO NOTES to LCO 3.3.2. Furthermore, the staff concluded that all review and audit programmatic requirements can be relocated to owner-controlled documents because sufficient control exists within the framework of current regulations. Therefore, a note should be added to ITS LCO 3.3.2 that retains CTS requirements for prior review and approval of placing channels in bypass.</p>	3/3/97		Revise the ITS to adopt the STS.
3.3.2-3	L.2	CTS Table 3.3-1 STS 3.3.2, Condition C	The generalized discussion in L2 does not explain why there is not a significant safety question in the operation of the plant with the proposed ITS.	3/3/97		Provide justification for this less restrictive change.



**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-4	M.1	CTS Table 3.3-1, Action 10	<p>CTS Table 3.3-1, Functional Unit 1.C.2, requires the Core Protection Calculators (CPCs) operable in Modes 3, 4, and 5 unless, per Action 10, the Logarithmic Power Level - High function is operable and the Trip Setpoint is lowered to <math>\leq 10^{-4}</math>% of Rated Thermal Power (RTP).</p> <p>ITS 3.3.2 removes the requirement for the CPCs to be operable in Modes 3, 4, and 5, and instead requires the allowable value of the Logarithmic Power Level - High function normally set at <math>\leq 0.011</math>% RTP in Modes 3, 4, and 5 to be lowered to <math>\leq 10^{-4}</math> % RTP. The proposed format is to change the function applicability by establishing a new ITS setpoint <math>\leq 10^{-4}</math> % RTP if 4 RCPs are running. Consult the Writers Guide for the recommend format for changes to I&amp;C functional unit applicabilities. The safety basis for replacing <u>CPC operability</u> requirements with a more restrictive allowable value is not justified.</p> <p>In addition CTS Action 10 requires the trip setpoint to be lowered and the ITS requires the Allowable Value to be lowered to the same value. Explain how the terms allowable value and trip setpoint can be used interchangeably within the context of the approved setpoint methodology.</p>	3/4/97		Provide revised DOC discussion.

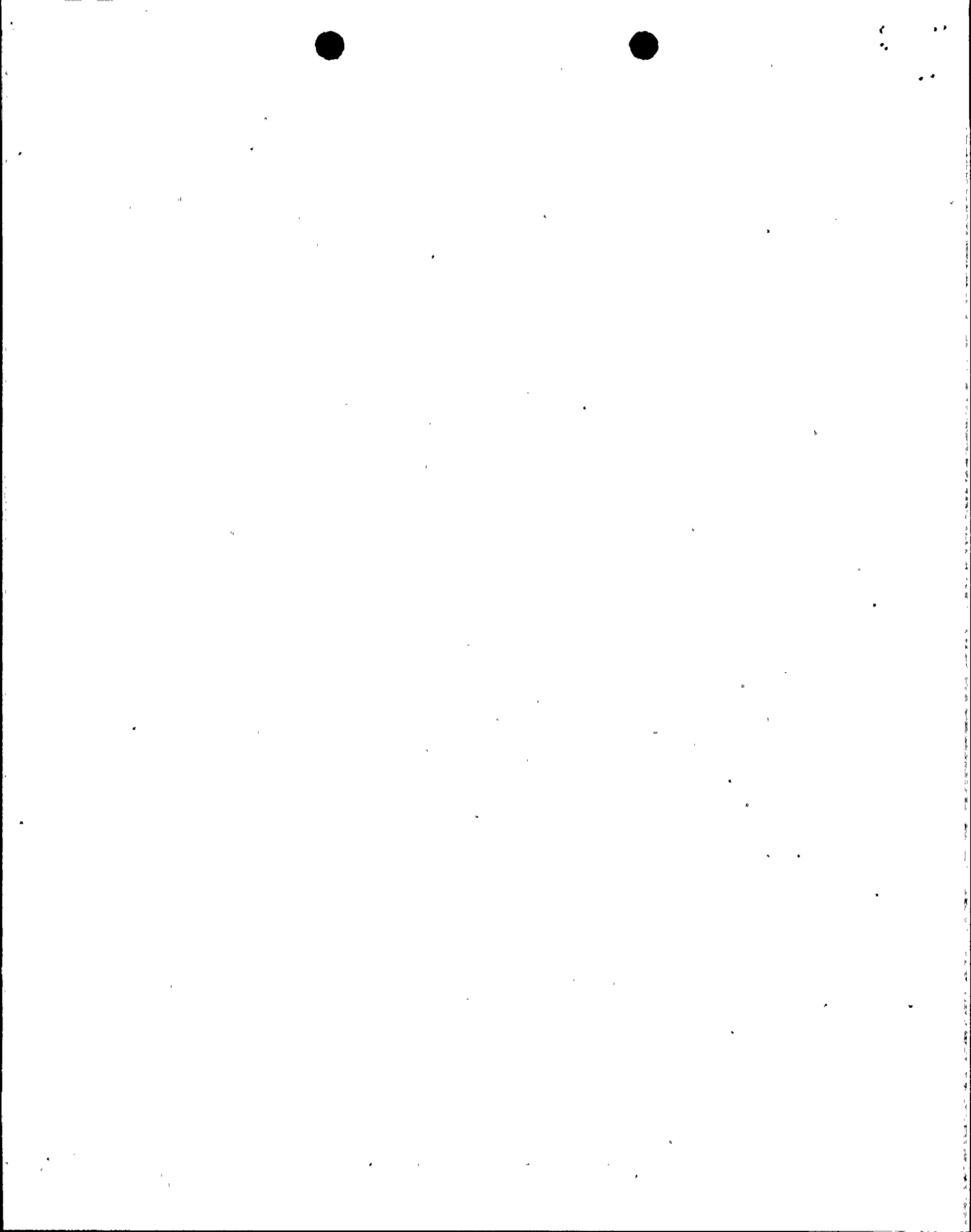


**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-5	M.1	CTS Table 3.3-1, Action 10	CTS Table 3.3-1, Functional Unit C.2, requires the Core Protection Calculators (CPCs) to be operable in Modes 3, 4, and 5, unless, per Action 10, the Logarithmic Power Level - High Trip Setpoint is lowered. ITS 3.3.2 removes the requirement for operable CPCs in Modes 3, 4, and 5. The change appears to eliminate a CTS requirement and is therefore a less restrictive change. The safety analysis to support the acceptability of this less restrictive change is not given.	3/4/97		Provide justification for this less restrictive change.
3.3.2-6	L.7	CTS Table 3.3-1 and Table 4.3-1, Item 1.A.5	CTS Table 3.3-1 and Table 4.3-1, Item 1.A.5, requires the OPERABILITY of the low steam generator pressure reactor trip functions in Modes 3 and 4. ITS Table 3.3.2-1 requires this instrumentation in Mode 3, but not in Mode 4. The justification states that in Mode 4, the steam generator temperature is lower and the resultant energy release and cooldown following a MSLB is less than is required in Mode 3. The licensee has not provided sufficient analysis justification to show that there is not a significant safety question in the operation of the plant such that the current licensing basis can be changed, i.e., that the lesser steam generator temperature and resultant energy release and cooldown following a MSLB is bounded by the safety analysis without the Steam Generator Pressure - Low trip in Mode 4 as required in CTS Table 3.3-1 and Table 4.3-1, Item 1.A.5.	3/4/97		Provide additional description and justification for this less restrictive change.

**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

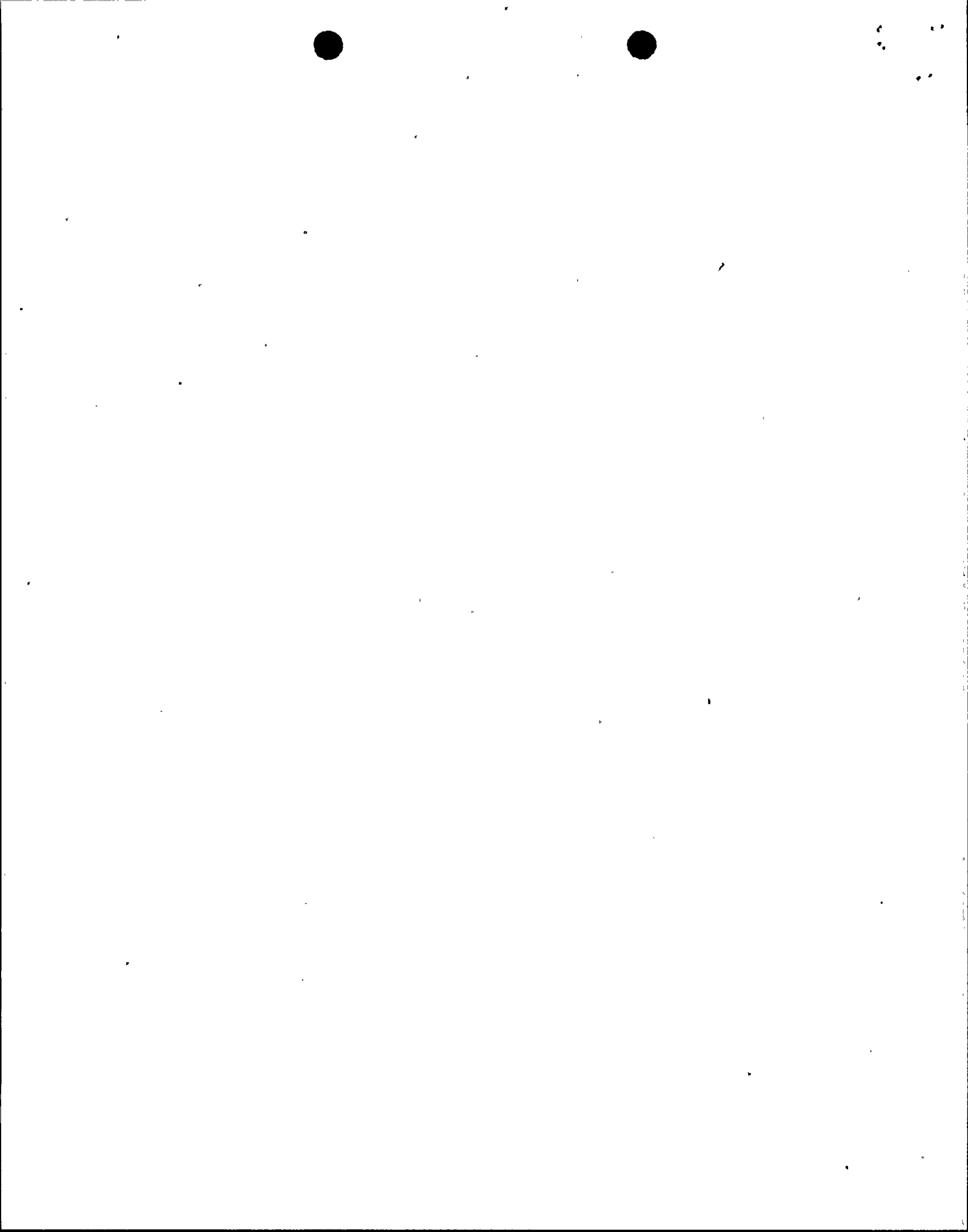
ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-7	LA.4  JFD 2	CTS Table 3.3-1, Action 2	<p>CTS Table 3.3-1, Action 2, requires a special Plant Review Board review of the desirability of maintaining an inoperable channel bypassed, in accordance with CTS 6.5.1.6.g.</p> <p>A similar review and audit requirement is contained in Note 2 to LCO 3.3.1. Furthermore, the staff concluded that all review and audit programmatic requirements can be relocated to owner-controlled documents because sufficient control exists within the framework of current regulations. Therefore, a note should be added to ITS LCO 3.3.2 that maintains CTS 3.3.1 requirements for prior review and approval of placing channels in bypass.</p>	3/4/97		Provide a revised ITS.





**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-8	None	CTS Table 3.3-1, Actions 2 and 3, CTS 3.0.3	ITS 3.3.2, Condition E, requires opening all RTCBs within 1 hour of failure to meet the required Actions and completion times (1 hour) for Conditions A, B, C, and D. This is in contrast with CTS Table 3.3-1, Actions 2 and 3, which require immediate entry into CTS 3.0.3 if the 1 hour completion time is not met. CTS 3.0.3 allows 1 hour to begin a shutdown, to Mode 3 in an additional 6 hours and to Mode 5 in an additional 30 hours. The ITS opening of all RTCBs is not equivalent, rather it is less restrictive, than a requirement to enter a lower power with a reduction in the reactor Mode, because there are no requirements to reduce RCS temperature. Additionally, the time to remove the reactor from the APPLICABILITY is changed, from the CTS 37 hours to the ITS 1 hour, which is more restrictive. These changes are not justified.	3/6/97		Provide DOC justification for opening all RTCBs instead of reducing the reactor Mode as in the CTS.
3.3.2-9	None	ITS Table 3.3.2-1	The ITS adds Table 3.3.2-1 and associated notes to the STS. Note b to that table allows lowering the steam generator pressure - low setpoints as the steam pressure is reduced. There is no discussion or justification for adding Note b of ITS Table 3.3.2-1 to the STS.	3/7/97		Provide justification for the STS deviation based on current licensing basis, system design, and operational constraints.



**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-10	None	ITS Table 3.3.2-1	The ITS adds Table 3.3.2-1 to the STS. This table has an Allowable Values column, but no discussion of where these Allowable Values come from, or the acceptability of the allowable values.	3/7/97		Provide justification for the STS deviation based on current licensing basis, system design, and operational constraints, justifying any change from CTS setpoints to ITS Allowable Values.
3.3.2-11	None	ITS Table 3.3.2-1	The ITS adds Table 3.3.2-1 and associated notes to the STS. Note d to that table allows bypassing the Logarithmic Power Level - High trip when the THERMAL POWER is > 1E-4% RTP, and requires automatic removal of the bypass when THERMAL POWER is ≤ 1E-4% RTP. There is no discussion or justification for adding Note d of ITS Table 3.3.2-1 to the STS.	3/7/97		Provide justification for the STS deviation based on current licensing basis, system design, and operational constraints.
3.3.2-12	LA.2 LA.3	See item 3.3.1-11	Insufficient safety basis justification.	5/5/97		Provide additional justification.

**PVNGS ITS 3.3.2 REACTOR PROTECTION SYSTEM (RPS) INSTRUMENTATION - SHUTDOWN**  
**Table 3.3.2 Rv.1**

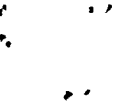
ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.2-13	L.6	ITS Action D  CTS Action 3	L.6 is applied to changes in CTS Action 3 that discuss "two automatic bypass removal functions inoperable" but the justification discusses logarithmic power setpoints. Provide corrected DOC and CTS/ITS markup for submittal changes.	5/5/97		Provide a revised submittal.
3.3.2-14	Bases Insert #5	ITS B 3.3-42	The addition of Bases background discussion that states "a CEA is considered capable of withdrawal when power is applied to the CEDM" is generic to the NUREG and requires a staff approved TSTF. The proposed Bases clarification is an operability discussion and therefore belongs in the Bases LCO section.	5/6/97		Provide an appropriate TSTF change.
3.3.2-15	Bases insert 2	ITS Bases B 3.3-43	Bases insert 2 does not discuss the applicable safety analysis basis for the addition.	5/6/97		Provide a revised Bases.



11  
12

**PVNGS ITS 3.3.3 CONTROL ELEMENT ASSEMBLY CALCULATORS**  
**Table 3.3.3 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.3-1	None	CTS 3.1.3.6.a	CTS 3.1.3.6.a requires, With one or more CEAC's Inoperable.... ITS 3.3.3 Action A requires with one CEAC inoperable. There is no discussion or justification for the change to the CTS requirement.	2/19/97		Provide additional discussion and justification for the change to the CTS requirement of Inoperable CEAC's.
3.3.3-2	JFD5 JFD7	ITS Applicability Note	A new note is proposed to allow bypass of the CEACs during testing pursuant to special test exception LCO 3.1.10. Provide a revised LCO 3.1.10 that lists this proposed TS exception with existing exceptions in the LCO.	5/1/97		Cross references have been deleted from STS. Revise ITS LCO 3.3.3 to eliminate cross references to Special Test Exceptions.
3.3.3-3	JFD6	ITS RA B.1	Proposed changes include moving part of ITS Action B1 requirements "Disable the Reactor Cut Back System" to a new Action B6. The completion time is unchanged. The intent of the STS format is to organize required Actions by placing the most important Actions first in the list. The proposed alternate format is generic and requires a staff approved industry TSTF Traveller.	5/1/97		Provide an industry traveller for staff review.



**PVNGS ITS 3.3.3 CONTROL ELEMENT ASSEMBLY CALCULATORS**  
**Table 3.3.3 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.3-4	JFD1	ITS Action B.2	Proposed changes include deletion of the Action to perform SR 3.1.5.4 because it is not applicable since performance of a functional test of each RSPT requires the reactor to be in shutdown. The proposed alternate format is generic and requires a staff approved industry TSTF Traveller.			Provide an industry traveller for staff review.
3.3.3-5	LA.2	CTS SR 4.3.1.5	The DOC applies to a CTS requirement to verify the CPC is operable. DOC LA2 states that this SR becomes two SRs in the ITS. LCO 3.3.3 includes only the CEAC portion of the SR. The CPC portion is included in the LCO 3.3.1. DOC LA2 states that "when the autorestart count on the CPC is checked, the codes 30 and 33 are not included in the count." Revise the justification to address only changes made to the CEAC.	5/2/97		Provide a revised DOC that addresses changes to the CEACs.
3.3.3-6	L.1	CTS SR 4.3.1.6	DOC L1 states that the "other CEAC channel has not been exposed to the high temperature and therefore a FUNCTIONAL TEST is not needed for the other channel." Provide additional facts to support this conclusion.	5/2/97		Provide a revised L.1 DOC.



**PVNGS ITS 3.3.3 CONTROL ELEMENT ASSEMBLY CALCULATORS**  
**Table 3.3.3 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.3-7	DOC A.6	ITS Action E	The ITS requirement to enter Action E to shut down the plant and the CTS requirement to enter LCO 3.0.3 are stated to be equivalent with no resulting (technical) changes. Are these requirement equivalent in all respects including reporting requirements? Explain.	5/2/97		Provide additional facts to support the proposed change as being administrative.
3.3.3-8	DOC A.4	CTS Action 6.b.2.a) & 6.b.2.c)	There is not sufficient presentation of facts in the DOC to conclude that adopting the STS action requirements with the addition of "fully withdrawn and maintained fully withdrawn" is a purely administrative change. The changes made to CTS 6.b.2.c) are noted by use of DOC A4 but the DOC contains no analysis of the changes. Provide additional facts to support the proposed changes to the CTS.	5/2/97		Provide additional facts to support the proposed change as being administrative.
3.3.3-9	DOC A.1	CTS Action 6.b.2.a)	DOC A1 is for editorial rewording changes. In the markup of CTS Action 6 additions and <u>deletions</u> are justified with the A1 DOC. Provide appropriate discussion for each proposed change.	5/2/97		Provide discussion for proposed changes.



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**PVNGS ITS 3.3.3 CONTROL ELEMENT ASSEMBLY CALCULATORS**  
**Table 3.3.3 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.3-10	DOC L.4	Action 6.2.c)	DOC L4 addresses deletion of requirements that allow use of the CEDMCS in the manual group or manual individual Modes but does not provide a safety analysis discussion.	5/2/97		Provide safety analysis discussion for changes proposed by L.4.
3.3.3-11	JFD8	ITS Bases	Changes to B2 appear to alter the intent of the LCO. Provide additional explanation to support the change as descriptive.	5/16/97		Provide additional justification.



**PVNGS ITS 3.3.4 REACTOR PROTECTION SYSTEM LOGIC AND TRIP INITIATION**  
**Table 3.3.4 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.4-1	M.1	CTS Table 3.3-1 Action 1  ITS Matrix Logic	<p>CTS Table 3.3-1, Action 1, requires entering Mode 3 in 6 hours <u>AND/OR</u> opening the RTCBs if conditions are not met. ITS 3.3.4, ACTION E requires entering Mode 3 <u>AND</u> opening the RCTBs under the same conditions. There is no discussion or justification for the change to CTS requirements.</p> <p>Provide additional justification stating why the proposed more restrictive ITS requirement for ITS Matrix Logic does not present a safety concern.</p> <p>In addition, the M1 DOC of Table 3.3-1 does not discuss Action A. The CTS Action 1 becomes Actions A and E in the ITS. The DOCs need to discuss all CTS changes contained in the markups.</p>	2/25/97		Provide discussion and justification for removing the option for opening the RTCBs in the ITS ACTION E.



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**PVNGS ITS 3.3.4 REACTOR PROTECTION SYSTEM LOGIC AND TRIP INITIATION**  
**Table 3.3.4 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.4-2	LA.3	CTS Table 4.3-1 Note 10	CTS Table 4.3-1, Note 10, requires a CFT at least once per 18 months and following maintenance or adjustment of the RTCB.... ITS SR 3.3.4.2 removes the portion of the requirement, "following maintenance or adjustment of the RTCBs".... this information is moved to unspecified plant procedures.	2/25/97		Provide discussion which specifies why there is no safety question in the operation of the plant if the post maintenance testing requirements now contained the CTS are relocated to plant procedures.
3.3.4-3	L.1	CTS 3.3.1, Action 9	CTS 3.3.1, Action 9, requires restoring an inoperable channel within 48 hours or opening the RTCBs within the next hour. ITS 3.3.4, ACTION A, under the same conditions extends the time for opening the RTCBs to 6 hours. The DOC presentation of the safety significance of the proposed extension is confusing.	2/25/97		Provide discussion on the safety significance of the proposed change.
3.3.4-4	None	CTS 3.3.1, Action 8	CTS 3.3.1, Action 8, allows 48 hours to restore an inoperable channel before action is required. ITS 3.3.4, Action C, under the same conditions, allows no restoration time before action is required. There is no discussion or justification for the change to CTS requirements.	2/25/97		Provide discussion and justification for the change to CTS restoration time requirements.

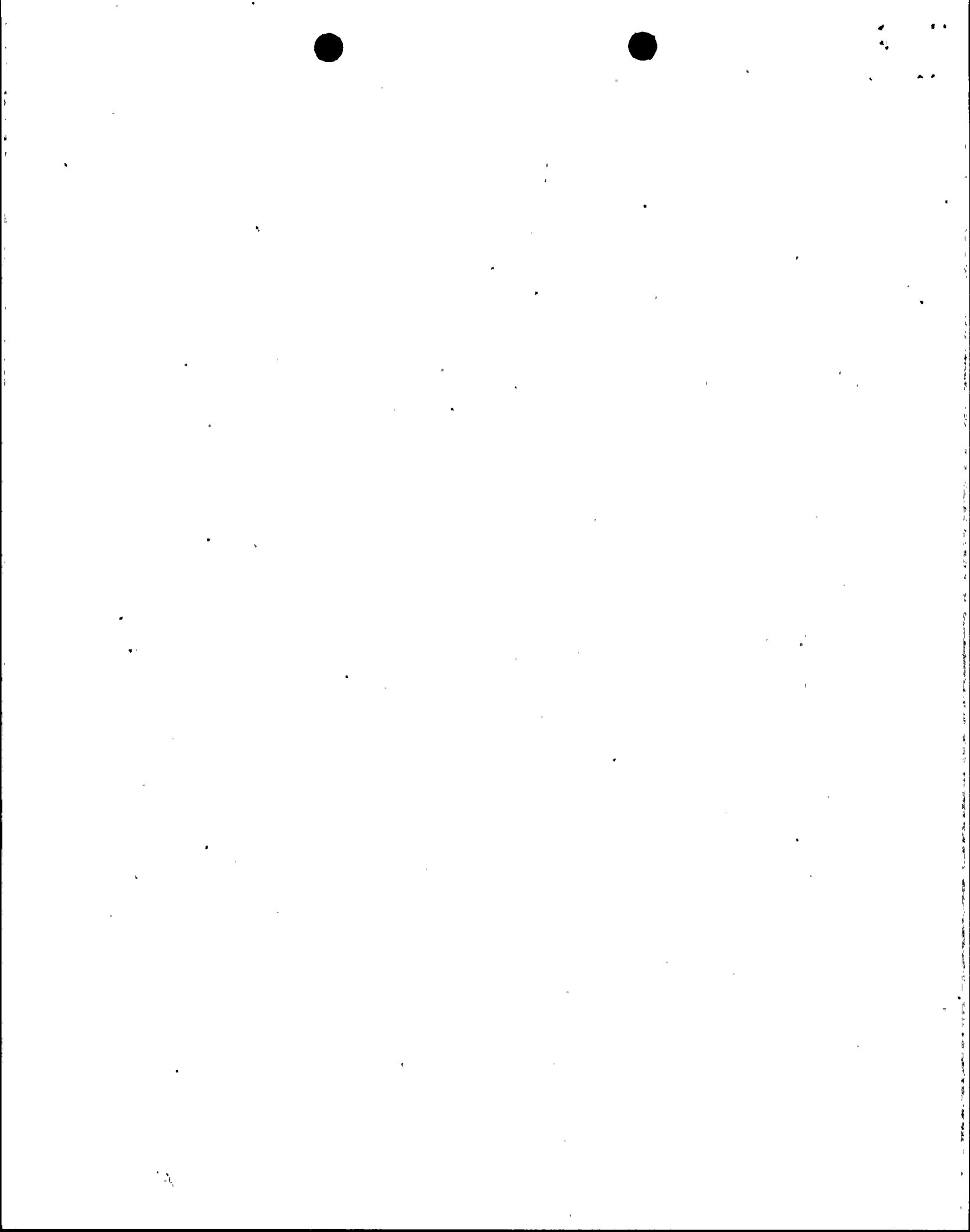


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**PVNGS ITS 3.3.4 REACTOR PROTECTION SYSTEM LOGIC AND TRIP INITIATION**  
**Table 3.3.4 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.4-5 OOS & Generic to submittal	L.4  JFD 4	CTS Table 3.3-1, Action 5	<p>CTS Table 3.3-1, Action 5, requires placing an Inoperable RTCB in the tripped position within 1 hour or be in Mode 3 within 6 hours. ITS 3.3.4, ACTION B proposed to add an option to open the redundant RTCB in the affected trip leg within 1 hour AND open the affected (inoperable) RTCB within 48 hours. This extends the CTS AOT from 1 hour to 48 hours in the ITS.</p> <p>This is a change to the CTS and to the STS and requires an approved TSTF. Explain the meaning of "failure evidence" as used in the L-DOC. CTS Action 5 allows startup or power operations to continue if the inoperable channel is tripped. Does this provide an allowance to startup with inoperable channels.?</p>	2/25/97		<p>This extension of the CTS Allowed Outage Time is also a change to the STS. Provide a plant specific design or operational hardship justification for not adopting the STS. Explain how the plant implements the operational allowances provided by CTS Action 5.</p>
3.3.4-6	JFD 6  JFD 1	Condition A  Required Action C.1	<p>Changes proposed to incorporate the NUREG note into the Condition.</p> <p>Changes proposed to NUREG Required Action.</p>	4/30/97		<p>Change requires an industry and NRC approved TSTF.</p>



**PVNGS ITS 3.3.4 REACTOR PROTECTION SYSTEM LOGIC AND TRIP INITIATION**  
**Table 3.3.4 Rev.1**

ISSUE #	DOC # or JFD #:	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.4-7	JFD 2	ITS SRs	Certain parts of the justification are unclear. The application of LTR CEN-327 in the NUREG is stated to be inconsistent with the PVNGS licensing basis and adoption of the LTR. Explain this discussion in more detail. Relate the discussion to the staffs SER on the Licensing Topical Report.	4/30/97		Clarify the discussion points in JFD 2.
3.3.4-8	A.2	CTS/ITS Applicability	The DOC states that the ITS prevents the interpretation that closing some, but not all RTCBs, or some, but not all CEAs capable of withdrawal does not meet the Mode applicability. Does the CTS maintain some but not all positions by procedure? Or are there some other instruction to the operators?	4/30/97		Provide additional discussion to support the A.2 DOC.
3.3.4-9	L.3	ITS Condition D	The statement of acceptability of the ITS for PVNGS is unclear.	4/30/97		Provide additional discussion to support the L.3 conclusions.
3.3.4-10	L.2	CTS Table 3.3-1 Actions 5 & 8	The proposed change justifies an allowance to close open circuit breakers for one hour in order to perform required surveillance testing. The discussion does not address the safety analysis basis for the proposed change.	5/1/97		Provide discussion for the proposed change that addresses safety questions in the operation of the plant.

**PVNGS ITS 3.3.4 REACTOR PROTECTION SYSTEM LOGIC AND TRIP INITIATION**  
**Table 3.3.4 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.4-11	A.4	ITS Action E	The ITS requirement to enter Action E to shut down the plant and the CTS requirement to enter LCO 3.0.3 are stated to be equivalent with no resulting (technical) changes. Are these requirements equivalent in all respects including reporting requirements? Explain.	5/1/97		Provide additional explanation why the proposed change is administrative.
3.3.4-12	JFD 8	ITS Bases	Proposed changes include addition of operability statements to the Background discussion. Statements regarding operability belong in the LCO section of the ITS. JFD 8 does not provide a safety analysis basis for the proposed change to the STS. The staff considers these proposed changes to be generic.	5/1/97		Provide a markup of the LCO section, a revised bases and industry approved TSTF change.

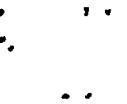
ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
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**PVNGS ITS 3.3.5 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM (ESFAS) INSTRUMENTATION**  
**Table 3.3.5 Rev.1**

ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.5-1	A.1	CTS 4.3.2.2	CTS 4.3.2.2 requires demonstrating the operability of "total bypass function" every 18 months. ITS 3.3.5.3 requires calibration of the bypass removal channels every 18 months and ITS SR 3.3.5.5 requires a CHANNEL FUNCTIONAL TEST of each automatic bypass removal channel within 92 days prior to each reactor startup. There is no indication that the total bypass function is tested in ITS 3.3.5 as required by CTS 4.3.2.2. This less restrictive change is not justified.	2/25/97		Provide discussion and justification for this less restrictive change.
3.3.5-2	LA.8 JFD 1	CTS Table 3.3-3, Action 13	<p>CTS Table 3.3-3, Action 13, requires a special Plant Review Board review of the desirability of maintaining an inoperable channel bypassed, in accordance with CTS 6.5.1.6.g.</p> <p>A similar review and audit requirement is contained in Note 2 to STS LCO 3.3.5. Furthermore, the staff concluded that all review and audit programmatic requirements can be relocated to owner-controlled documents because sufficient control exists within the framework of current regulations. Therefore, a note should be added to ITS LCO 3.3.5 that maintains CTS requirements for prior review and approval of placing channels in bypass.</p>	2/26/97		Revise the ITS to adopt the STS.



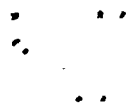
**PVNGS ITS 3.3.5 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM (ESFAS) INSTRUMENTATION**  
**Table 3.3.5 Rev.1**

ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.5-4 (Generic)	L.2	STS 3.3.5, Condition C	The L2 DOC is confusing. Statements about how the bypass removal function affects channel operability are unclear. Provide a rewritten DOC that states the proposed change and explain why there is not a significant safety question in the operation of the plant with the proposed ITS.	2/26/97		Provide a revised DOC.
3.3.5-5 (OOS)	A.1	CTS Table 3.3-4, IV.A	CTS Table 3.3-4, Function IV.A (Main Steam Line Isolation), Steam Generator pressure - low, has an allowable value of $\geq 911$ psia. ITS Table 3.3.5-1, Functions 4.a and 4.b (Steam Generator 1 and 2, respectively, pressure - low), have allowable values of $\geq 890$ psia. This more restrictive change from $\geq 911$ psia to $\geq 890$ psia is not noted nor justified.	2/26/97		This change to the CTS Allowable Value requires staff review.



**PVNGS ITS 3.3.5 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM (ESFAS) INSTRUMENTATION**  
**Table 3.3.5 Rev.1**

ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.5-6	JFD 2  L.5	STS SR 3.3.5.2 and SR 3.3.5.5	STS SR 3.3.5.2 requires a CFT of each ESFAS channel including each automatic bypass removal channel every 92 days when in MODE 1, 2, or 3. Further, STS SR 3.3.5.5 requires a CFT of each automatic ESFAS bypass removal channel once within 92 days prior to power ascension from MODE 4. ITS 3.3.5.2 does not propose to require a CFT of each automatic ESFAS bypass removal channel every 92 days when in MODE 1, 2, or 3. Specifically, this applies only to the pressurizer pressure - low bypass. The justification is based on the similarity to the automatic RPS bypass removal channels which do not require CHANNEL FUNCTIONAL TESTING in MODE 1, 2, or 3. Testing bypass removal function is applicable to both the RPS and the ESFAS if the automatic bypass removal functions have the potential to render safety systems inoperable during specified Modes of applicability.	2/26/97		Provide justification for the STS deviation based on current licensing basis, system design, and operational constraints, showing why the CFT of the automatic bypass removal channels is not possible every 92 days while in MODE 1, 2, or 3.



**PVNGS ITS 3.3.5 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM (ESFAS) INSTRUMENTATION**  
**Table 3.3.5 Rev.1**

ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.5-7	None	CTS Table 3.3-3 Notes (a) & (b)  ITS Table 3.3.5-1 Notes (a) & (b)	Changes are made to the CTS table notes which are not documented in a CTS/ITS discussion of change.	4/29/97		Provide a revised markup and a DOC for each change to CTS Table 3.3-3 Notation (a)
3.3.5-8	LA.2 LA.4 LA.5 LA.7  LA.X (generic)	DOC boilerplate in most Sections	The DOC states that the relocated portion of the CTS requirement is "not required to determine the operability of the system ...." Explain the meaning of this justification. There is insufficient detailed safety analysis to support the proposed changes.	4/29/97		Provide justification for each proposed change.
3.3.5-9	L.1	Table 3.3-3 Action 13	The changes made to CTS Action 13 in the ITS is not presented by DOC L1 in a meaningful discussion that addresses each change individually and provides a safety analysis justification for each change.	4/29/97		Provide justification for each proposed change.
3.3.5-10	none	Table 3.3-3 Note *	Note * modifies both Actions 13 and 14 in the CTS, the ITS proposes to delete Note *. Changes are proposed to the CTS table note which are not documented in a CTS/ITS discussion of change.	4/29/97		Provide justification for this proposed change.



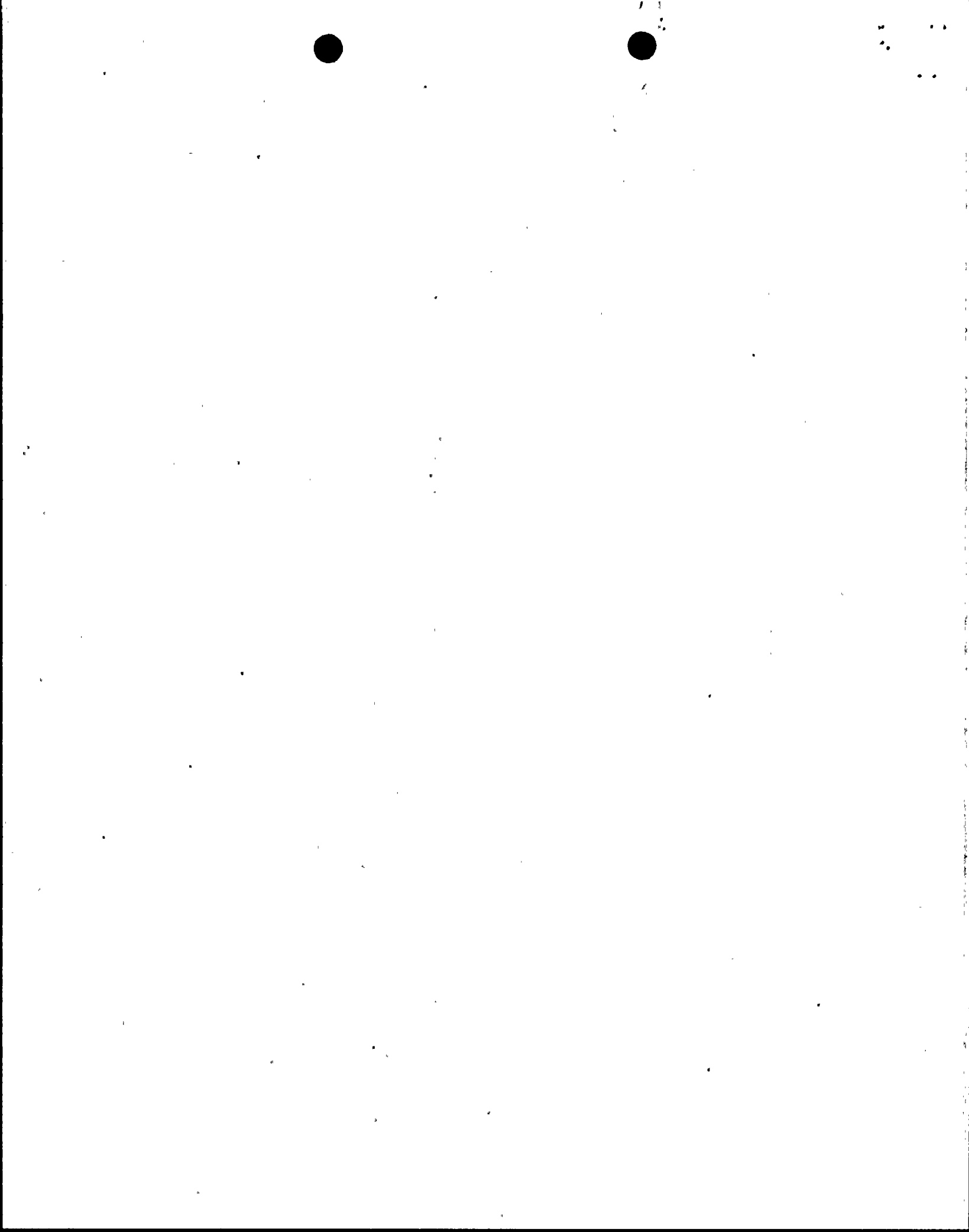
**PVNGS ITS 3.3.5 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM (ESFAS) INSTRUMENTATION**  
**Table 3.3.5 Rev.1**

ISSUE #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.5-11	LA.7	Table 3.3-4 Notes (2) & (4)	Each of the notes proposed to be relocated establish a reference for the TS allowable value limits without which the TS numbers have no meaning. Explain why the details are "not required to determine operability."	4/29/97		Provide justification for the proposed change.
3.3.5-12	A.7	ITS Action E	The ITS requirement to enter Action E to shut down the plant and the CTS requirement to enter LCO 3.0.3 are stated to be equivalent with no resulting (technical) changes. Are these requirements equivalent in all respects including reporting requirements? Explain.	4/29/97		Provide additional explanation why the proposed change is administrative.



**PVNGS ITS 3.3.6 ESFAS LOGIC AND MANUAL TRIP**  
**Table 3.3.6 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.6-1	L.1	Addition of Action C	CTS is changed to include an action for the condition of two actuation logic or two manual channels inoperable and which affect the same trip leg. The L1 DOC does not give a safety analysis of the one hour time limit to open a trip breaker vice the CTS requirement to enter LCO 3.0.3.	4/27/97		Provide a revised DOC L.1.
3.3.6-2	L.5	CTS Table 3.3-3 Action 16	<p>CTS Table 3.3-3, Action 16 requires if one less than the total number of channels is Inoperable, be in Mode 3 within 6 hours and Mode 4 within the following 6 hours. ITS 3.3.6 Action D allows a restoration period of 48 hours before the Mode changes are required. This is an extension of the CTS AOT.</p> <p>DOC L5 discusses changes made to CTS Action 18. The L5 discussions are not relevant to Action 18.</p>	2/17/97		The extension of CTS Allowed Outage Time to 48 hours requires staff approval. Correct the L.5 DOC to include justifications consistent with the proposed CTS markup.





**PVNGS ITS 3.3.6 ESFAS LOGIC AND MANUAL TRIP**  
**Table 3.3.6 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.6-3	LA.3	CTS Table 4.3-2 Note 3	<p>CTS Table 4.3-2 Note 3 includes a list of Actuation Devices that are not tested at power and a list of Actuation Devices that are partially tested at power. ITS 3.3.6 does not include this information. The DOC states that the ITS refer to the UFSAR for this information. ITS 3.3.6 does not refer to the UFSAR for the information.</p> <p>For the list of relays that are now included in the UFSAR, provide a UFSAR reference to the list in the Bases for SR 3.3.6.2.</p> <p>There is inadequate justification for removing the detailed information from the CTS.</p>	2/17/97		Provide additional justification for removing the detailed list of Actuation Devices from the CTS including where in the ITS the reference to the UFSAR is located.
3.3.6-4	L.3	CTS Table 3.3-3 Action 12	The CTS Action 12 changes justified in the ITS by DOC L3 needs to discuss each change individually and provide a safety analysis basis for each change.	2/17/97		Provide additional justification for changing the Mode requirements in the CTS.



**PVNGS ITS 3.3.6 ESFAS LOGIC AND MANUAL TRIP**  
**Table 3.3.6 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.6-5	L.4	CTS Table 3.3-3 Action 17	<p>CTS Table 3.3-3 Action 17 requires restoration of an Inoperable Matrix Logic Channel within 48 hours or entry into Mode 3 in 6 hours and Mode 5 in the next 30 hours. ITS 3.3.6 Action E for the same conditions requires entry into Mode 3 within 6 hours and Mode 4 within 12 hours.</p> <p>The CTS Action 17 changes justified in the ITS by DOC L4 needs to address each change and provide an adequate safety analysis justification for each change.</p>	2/17/97		Provide additional justification for changing the Mode requirements in the CTS.
3.3.6-6	JFD 11	Bases p. B3.3-10	Proposed changes include addition of operability statements to the Background discussion. Statements regarding operability belong in the LCO section of the ITS. JFD 11 does not provide a safety analysis basis for the proposed change to the STS. The staff considers these proposed changes to be generic.	4/27/97		Provide a markup of the LCO section, a revised bases and industry approved TSTF change.
3.3.6-7	JFD 9	ITS Action A	Changes proposed to incorporate the NUREG note into the Condition.	4/27/97		Change requires an industry and NRC approved TSTF.



**PVNGS ITS 3.3.6 ESFAS LOGIC AND MANUAL TRIP**  
**Table 3.3.6 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.6-8	JFD 6  L.7	ITS Table 3.3.6-1	Proposed note (a) states that if the valves isolated by MSIS are closed then the actuation function is not required.	4/27/97		Change requires an industry and NRC approved TSTF.
3.3.6-9	M.1	ITS required matrix channels	DOC M1 discusses the note to Condition A which applies to three matrices inoperable due to inoperable power supplies.	4/27/97		Correct the ITS Action A markup to include the note.
3.3.6-10	M.2		The M2 bubble in the CTS markup includes the MSIS which is not discussed in the DOC. The DOC discussion does not address any safety questions with regard to the proposed addition of requirements.	4/27/97		Provide revised submittal pages.



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**PVNGS ITS 3.3.7 DIESEL GENERATOR - LOSS OF VOLTAGE START**  
**Table 3.3.7 Rev.1**

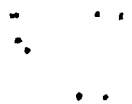
ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.7-1	M.4	CTS 3.3.2 Action 19a	CTS 3.3.2, Action 19a requires 8 hours restoration time for a degraded voltage relay. ITS 3.3.7 Action C reduces the restoration time to 1 hour. There is inadequate justification for reducing the restoration period.	2/17/97		Provide additional justification for the reduction in restoration time for degraded voltage relays.
3.3.7-2	M.2	CTS SR 4.3.2.3	M2 states that the CTS required ESF response time test is the same test as the delay time test in the ITS. While there may be common elements in both tests the statement is not an adequate justification for delay time testing additions to the ITS.	4/24/97		Provide a revised justification for proposed CTS changes.
3.3.7-3	A.3 JFD2 JFD3	CTS 3.3.2	Proposed ITS 3.3.7 deletes CTS requirements for degraded voltage instrumentation. CTS require 4 channels per bus of loss of voltage instruments and 4 channels per bus of degraded voltage instruments. The JFD fails to make the case that representing the design as four channels with inputs from two different functions is consistent with the current licensing basis approved by the staff.	4/24/97		Revise ITS LCO to include 4 channels of degraded voltage instrumentation.





**PVNGS ITS 3.3.7 DIESEL GENERATOR - LOSS OF VOLTAGE START**  
**Table 3.3.7 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.7-4	M.1	CTS Table 3.3-2 and Table 3.3-4	Proposed ITS Mode 4 LOV & Degraded Voltage applicability requirement are less restrictive than CTS requirements because instrument operability in the CTS was at all times in Mode 4, whereas ITS requirements only include those conditions when the associated DG is required to be operable.	4/24/97		Provide a L DOC for this proposed change.
3.3.7-5	A.2	CTS Table 3.3-3, note (e)	The A2 DOC is confusing. The design information provided by CTS note (e) is described most aptly in the Bases. The movement of design information to the Bases is an "LA" change.	4/24/97		Provide an "LA" DOC for the proposed CTS change.
3.3.7-6	M.3	ITS 3.3.7	Is it PVNGS practice to enter all applicable CTS conditions that apply at times specified by proposed ITS Actions B and D? If not, revise the M3 DOC to clarify any differences in practices between current and proposed requirements.	4/24/97		Provide revised DOC as necessary.



**PVNGS ITS 3.3.7 DIESEL GENERATOR - LOSS OF VOLTAGE START**  
**Table 3.3.7 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.7-7	L.3	CTS Action 19	The second and fourth sentences of the DOC don't appear to be germane to the justification for the less restrictive change. The DOC needs to discuss why there are no safety questions in the operation of the plant in adopting the less restrictive ITS.	4/24/97		Provide a revised DOC for the proposed changes.
3.3.7-8	M.4	CTS 3.3.2 Action 19.a	The DOC needs to provide a safety basis discussion for adopting the more restrictive changes.	4/24/97		Provide a revised DOC justification.
3.3.7-9	LA.4	CTS figure 3.3-1	The LA.4 DOC needs to justify why the deleted figure is not required to determine operability. If the figure is not required why is the CTS figure relocated? Additional explanation citing specific reasons for this conclusion are needed to support the proposed changes.	4/24/97		Provide additional justification.



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**PVNGS ITS 3.3.7 DIESEL GENERATOR - LOSS OF VOLTAGE START**  
**Table 3.3.7 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.7-10	JFD1	CTS Action 13	Before TS ESF channels can be placed in bypass the CTS require review and audit procedures to be implemented for approval. A similar requirement is in the STS. In addition, the staff concluded that all review and audit programmatic requirements can be relocated to owner-controlled documents because sufficient control exists within the framework of current regulations. Add a note to PVNGS ITS that maintains CTS requirements for prior review and approval of placing channels in bypass.	4/24/97		Revised the ITS to include a note for plant review board approval prior to placing a channel in bypass.
3.3.7-11	JFD5	ITS SR 3.3.7.3	Additional discussion is required to prove that the proposed ITS channel calibration allowable values and time delay relay allowable values are consistent with CTS.	4/24/97		Provide additional discussion.



**PVNGS ITS 3.3.7 DIESEL GENERATOR - LOSS OF VOLTAGE START**  
**Table 3.3.7 Rev.1**

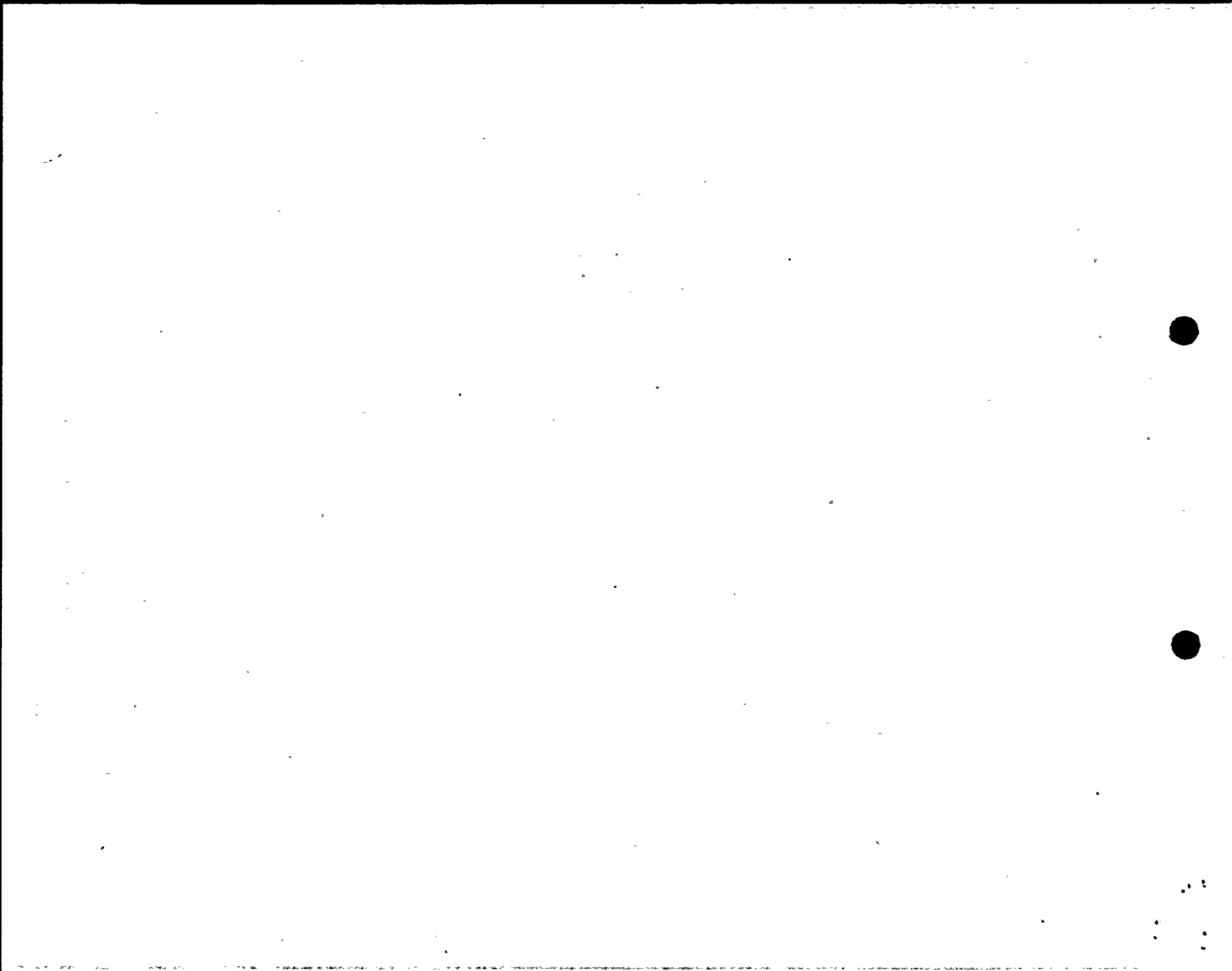
ISSUE #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.7-12	JFD2  M2	ITS LCO  CTS delay relay times	Proposed ITS deletes CTS requirements for 4 channels of degraded voltage relays. The CTS markup includes degraded voltage time delay settings. FSAR page 8.3-42 Revision 7 (1995) states that each 4.16kV bus has 4 induction disc undervoltage relays with built in time delays and 4 solid state undervoltage relays with built in time delay. The solid state relay time delays are shown in the CTS markup as the degraded voltage TS functions.	4/27		Revise the ITS LCO to include both loss of voltage and degraded voltage relays.

**PVNGS ITS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL**

**Table 3.3.8 Rev.1**

<b>ISSUE #</b>	<b>DOC # or JFD #</b>	<b>CTS/STS REF</b>	<b>DESCRIPTION OF ISSUE</b>	<b>DATE OPENED</b>	<b>DATE CLOSED</b>	<b>COMMENTS</b>
3.3.8-1	M.3	CTS 4.9.9	CTS requires verification that containment purge isolation occurs on manual initiation and on CPIAS. ITS SR 3.9.3.2 is identified as encompassing the testing requirements of ITS 3.3.8. ITS SR 3.9.3.2 does not verify Containment Purge Valve Isolation on a manual initiation.	2/19/97		Provide corrected discussion and justification for the change.
3.3.8-2	M.4	CTS 3.3.3.1	CTS Surveillance Requirement 3.3.3.1 requires restoration of an out of tolerance radiation monitoring channel setpoint within 4 hours or declare the channel inoperable. ITS does not specify time to restore the set point to the proper values. Additional safety basis justification for this change to CTS requirements is needed.	2/19/97		Provide additional discussion and justification for changing restore times in the CTS requirements.
3.3.8-3	M.5	CTS 3.3.3.1 Action c	CTS 3.3.3.1, Action c, allows an exemption from CTS 3.0.3 and 3.0.4. ITS 3.3.8 does not retain this allowance. Provide additional safety analysis justification for the change to CTS requirements.	2/19/97		Provide additional discussion and justification for applying ITS 3.0.3 and 3.0.4 to this requirement.





**PVNGS ITS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL**

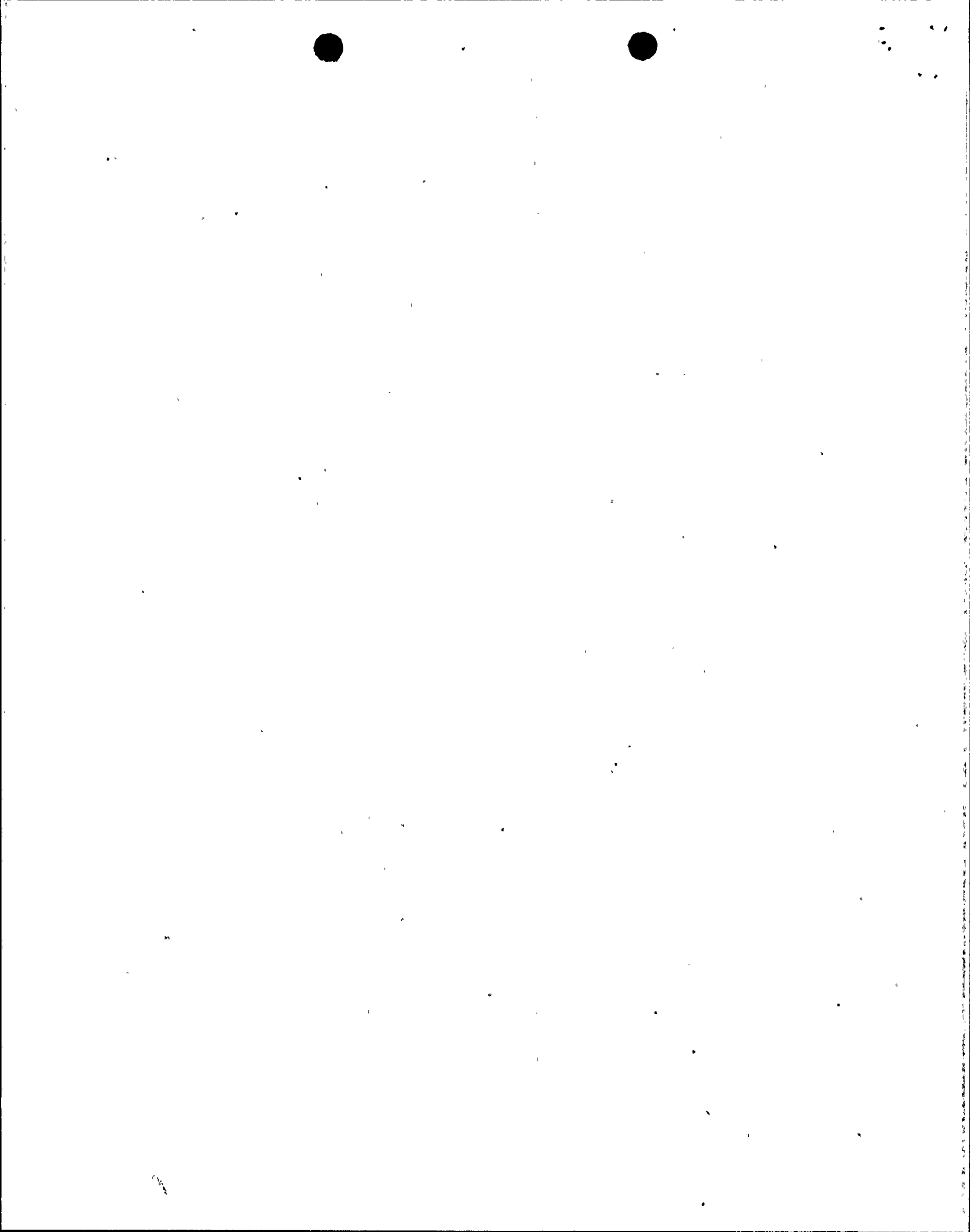
**Table 3.3.8 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.8-4	L.2	CTS 4.3.3.1	CTS SR 4.3.3.1 requires a CHANNEL FUNCTIONAL TEST of the radiation monitors prior to a release with ### note and weekly with ## note. There is inadequate safety analysis justification for this extension of the CTS STI. The CTS ### and ## notes are not analyzed as part of the DOCs.	4/22/97		This extension of the CTS DOCs require additional justification.
3.3.8-5	M.6	None	ITS 3.3.8, Action A, specifies the REQUIRED Actions for CPIAS Manual Trip, Actuation Logic, or radiation monitor in MODES 1, 2, 3, and 4. There are no CTS requirements for the same conditions. Provide additional safety analysis justification for the change to the CTS requirements.	2/19/97		Provide additional discussion and justification for the change to CTS requirements for CPIAS Manual Trip and Actuation Logic or radiation monitor in MODES 1-4.
3.3.8-6	LA.2	CTS Table 3.3-6	Provide additional safety analysis justification for moving CTS requirements to plant procedures.	4/22/97		Provide additional justification for proposed changes.



**PVNGS ITS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL**  
**Table 3.3.8 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.8-7	L.3	CTS Table 3.3-6	CTS Applicability is during purge operations. The ITS proposes to adopt STS Applicabilities. The DOC discussion does not clearly identify what is less restrictive about the proposed ITS.	4/22/97		Provide a clear statement of the less restrictive nature of the proposed ITS.
3.3.8-8	L.1	CTS Table 3.3-6 Action 26	The underlying justification for alternate actions to closing the purge valves is to exit the Mode of applicability, which is always an option for complying with LCOs.	4/22/97		Provide clarification of the proposed DOC.
3.3.8-9	A.2	CTS Table 3.3-6 Action 26	Explain the administrative nature of the addition of manual and logic element to the CTS limits in adopting the ITS.	4/22/97		Provide clarification of the proposed DOC.



**PVNGS ITS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL**  
**Table 3.3.8 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.8-10	A.5	CTS Table 4.3-3 Function 1.c, CH. CK.	<p>DOC A.5 discusses the equivalence of current channel check requirements as compared to proposed ITS testing.</p> <p>ITS SR 3.0.4 ensures surveillance testing is met prior to entering the LCO. Therefore, proposed ITS changes are less restrictive than CTS SR 4.3.3.1 since there is no ITS mechanism to ensure testing is performed just prior to release and if purge is in service for greater than 12 hours.</p>	4/22/97		Provide revised discussion of change justification.
3.3.8-11	M.1	ITS Action C	Provide additional DOC discussion to identify what is more restrictive about the proposed ITS.	4/22/97		Provide revised DOC justifications.
3.3.8-12	M.2	ITS Action B	M.2 is not consistent with the NUREG as stated. Revise the condition to adopt the STS.	4/22/97		Provide revised ITS and DOCS.

**PVNGS ITS 3.3.8 CONTAINMENT PURGE ISOLATION ACTUATION SIGNAL**  
**Table 3.3.8 Rev.1**

ISSUE #	DOC # or JFD #	CTS/STS REF	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.8-13	JFD5 JFD6	ITS	Deviations from the STS are limited to those necessary based on design, or operational constraints. Proposed ITS actions result in the same actions that would be taken if the STS were adopted.	4/22/97		Provide operational constraint or design justification for each proposed deviation from STS.
3.3.8-14	Bases	ITS	The Bases state that setpoints in accordance with the Allowable Values will ensure the safety limits are not violated.... yet the Safety Analysis Bases state these functions are not assumed in mitigating containment radiation releases and Criterion 3 applies. How are these positions consistent with one another.	4/23/97		Provide additional explanation.





**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-1	M.1	CTS 3.3.3.1, Action a	CTS 3.3.3.1, Action a, requires that with a radiation monitoring channel alarm/trip setpoint exceeding the value shown in Table 3.3-6, adjust the setpoint to within the limit within 4 hours or declare the channel inoperable. This statement is not entirely included in ITS 3.3.9. ITS 3.3.9, Required Action A.1, requires the setpoints within the allowable value or declaring the channel inoperable. ITS 3.3.9 does not allow 4 hours to restore the setpoint to the proper value. The removal of this CTS restoration time constitutes a more restrictive change. The discussion of the change is inadequate in that it does not include a safety analysis justification for changing the AOT.	2/27/97		Provide additional discussion and justification for the more restrictive change.
3.3.9-2	M.3	STS SR 3.3.9.3  CTS 4.3.2.1	ITS SR 3.3.9.3 requires a CHANNEL FUNCTIONAL TEST of the CREFAS Actuation Logic. This channel test is not a requirement in the CTS. The discussion of the change is inadequate in that it does not include a safety analysis justification for adding the SR.	2/18/97		Provide additional discussion and justification for the more restrictive change.
3.3.9-3	M.4	STS SR 3.3.9.5  CTS 4.3.2.1	ITS SR 3.3.9.5 requires a CHANNEL FUNCTIONAL TEST of the CREFAS manual trip Function. There is no requirement for this test in the CTS. The discussion of the change is inadequate in that it does not include a safety analysis justification for adding the SR.	2/18/97		Provide additional discussion and justification for the more restrictive change.



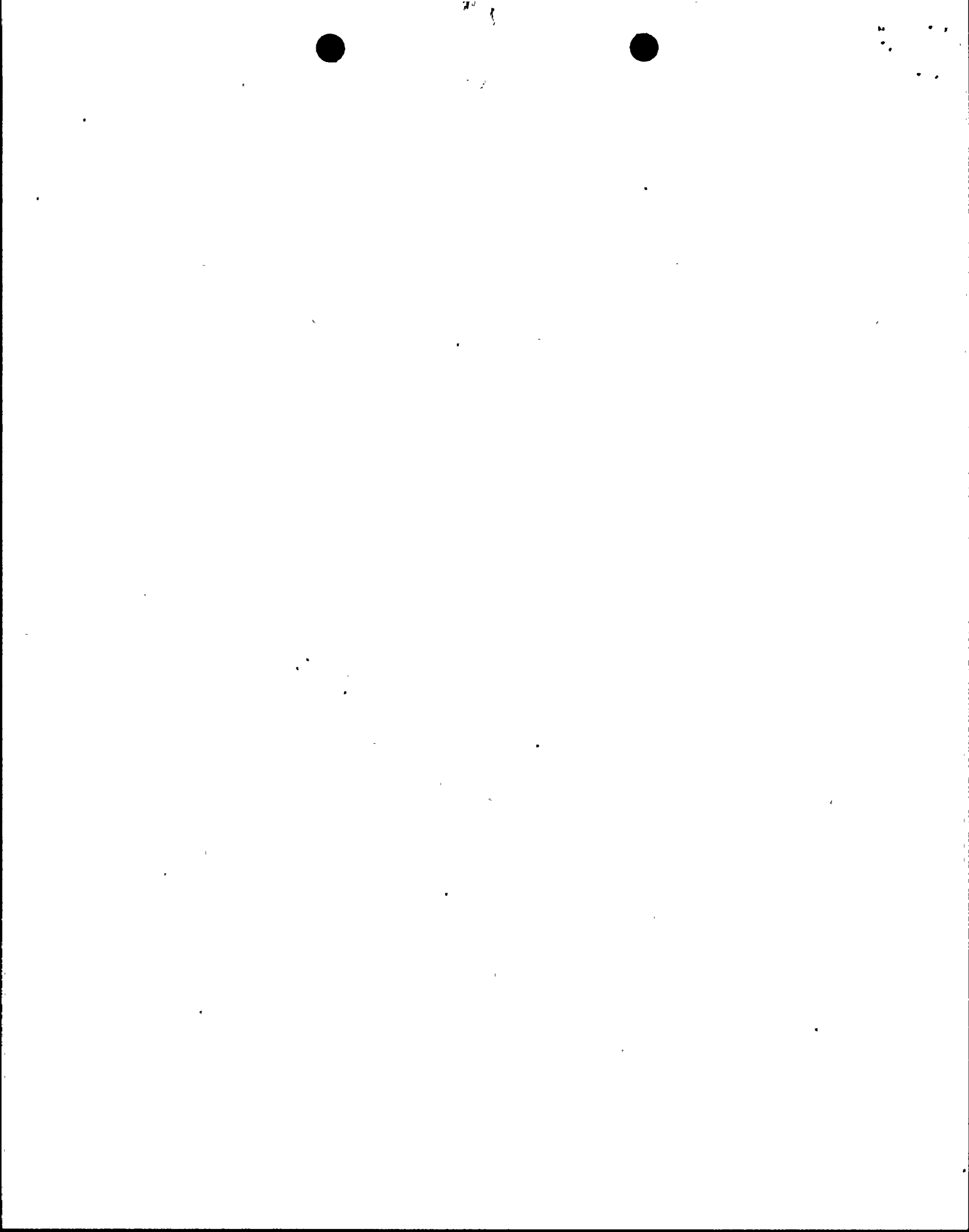
**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-4	M.5	CTS Tables 3.3-6 and 4.3-3 Item 2B  CTS Table 3.3-3 IX	<p>CTS Tables 3.3-6 and 4.3-3 Item 2B requires the radiation monitors for the CREFAS to be Operable in all Modes, and CTS Table 3.3-3 Item IX, CREFAS requires the CREFAS automatic actuation logic operable in all Modes. ITS 3.3.9 Applicability requires the CREFAS to be operable in Modes 1, 2, 3, 4, 5, and 6, during movement of irradiated fuel assemblies.</p> <p>This change reduces the requirement of <u>all MODES</u> to MODES 1 through 5, and 6 if fuel movement is in progress. This is a less restrictive change which is not analyzed.</p>	2/11/97		Provide additional discussion and justification for the less restrictive change.



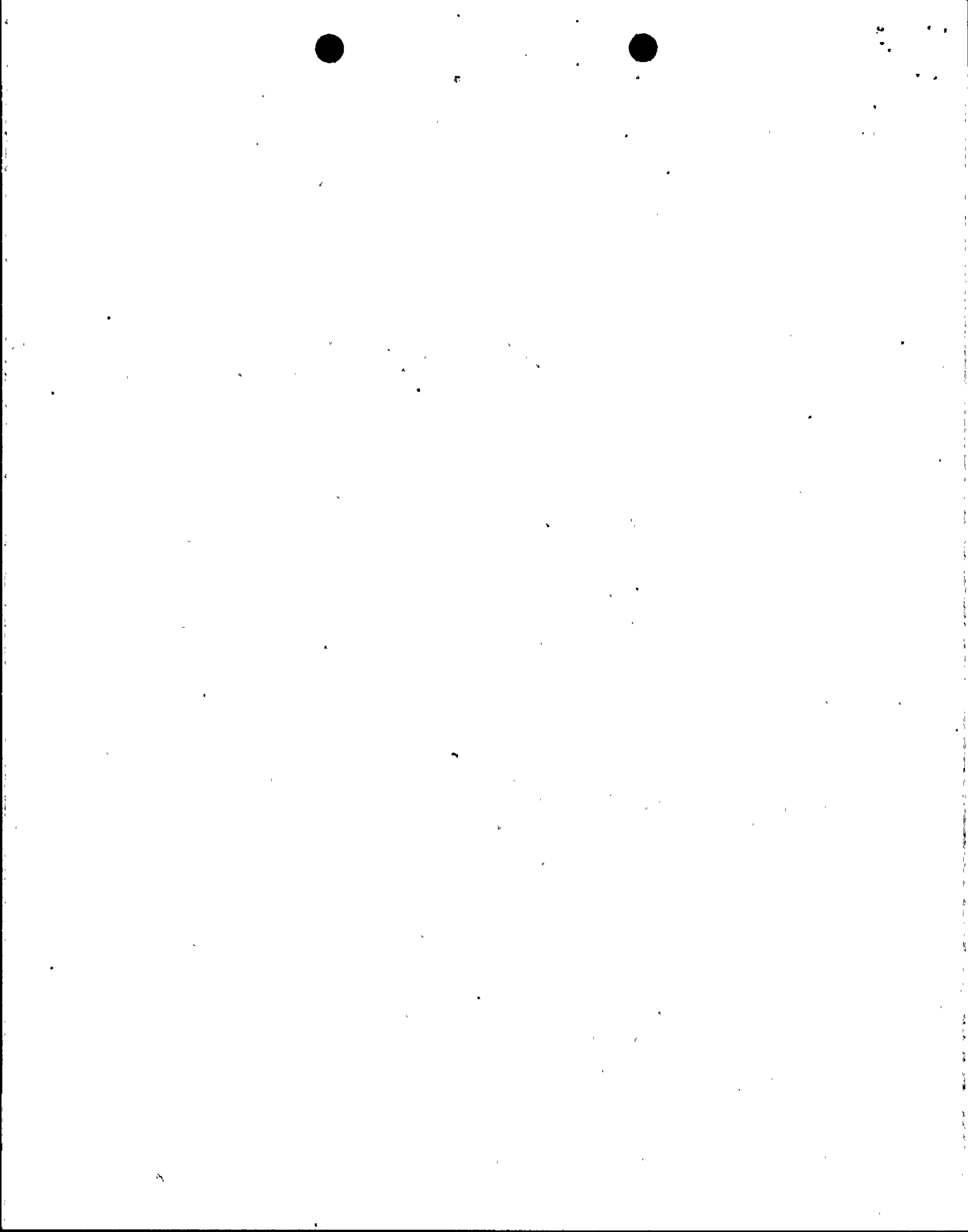
**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-5	M.7 M.6	CTS Table 3.3-3 Action 18	<p>CTS Table 3.3-3 Action 18 states in part that operation may continue for up to 6 hours with an inoperable channel provided at least 1 train of essential ventilation is in operation; otherwise action is to be taken to shutdown the plant. ITS 3.3.9 Required Actions A and B state that the essential ventilation must be placed in operation in one hour otherwise shut down the plant.</p> <p>CTS 3.3-6 Action 26 requires the same Action as ITS 3.3.9 Required Action A.1, but not Action B.1 and B.2 but it appears to apply to the same equipment.</p> <p>ITS 3.3.9 requirements try to unify these actions. However, the 6 hour AOT for putting CREFAS into operation is not analyzed by the DOC for Action 26. Both M6 and M7 DOCs require additional justification of the safety enhancements that will result from adding the proposed more restrictive actions.</p>	2/11/97		Provide additional discussion and justification for the more restrictive change.
3.3.9-6	LA.3 LA.4 LA.5	CTS 3.3.2	The DOC states that the relocated portion of the CTS requirement is "not required to determine the operability of the system ...." Explain the meaning of this justification. There is insufficient detailed safety analysis to support the proposed changes.	4/21/97		Provide an appropriate safety basis discussion.



**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-7	LA.6	CTS 3.3.2, CTS Table 3.3-4	ITS SR 3.3.9.2 proposes to retain the trip setpoint and relocate the allowable value. In the CTS this is an ESFAS function. Explain why ESFAS function allowable values are retained in ITS 3.3.2 while the trip setpoint is relocated and the opposite is proposed for this LCO? The Bases for ITS 3.3.9 (retype) specifies Allowable Value as the controlling limit. The DOC states that instrument values for these limits is the same because the instrumentation is digital and is not subject to the setpoint drift present in analog instrumentation.	2/18/97		Provide additional justification.





**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-8	JFD 7 M.5 M.6	STS 3.3.9 Applicability	<p>ITS 3.3.9 Applicability proposes: "MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies." STS 3.3.9 Applicability included CORE ALTERATIONS that is deleted in the ITS. JFD7 states that CORE ALTERATIONS can only occur in MODE 6.</p> <p>ITS 3.3.9 Applicability as it is presented would permit CREFAS to be inoperable during CORE ALTERATIONS but not during movement of irradiated fuel. This appears to be an inconsistent practice. There is also inconsistency with commitments to maintain CORE ALTERATIONS as discussed in DOC M6 and JFD7. The CTS 3.3.3.1 proposed insert for Action 26 requires suspension of CORE ALTERATIONS if CREFAS cannot be placed in operation. This is inconsistent with proposed Applicability for ITS 3.3.9.</p>	2/12/97		Provide justification for the STS deviation and provide a consistent CTS to ITS markup with corresponding JFDs.
3.3.9-9	Bases	ITS B3.3-148	<p>The Bases Background discussion states that two CREFAS trains are actuated on a one-out-of-two channel logic, yet the proposed ITS require only one operable channel. Provide the safety analysis assumptions for PVNGS actuations for CREFAS. Are both trains credited, are both channels credited?</p>	4/18/97		Provide additional justification.

**PVNGS ITS 3.3.9 CONTROL ROOM ESSENTIAL FILTRATION ACTUATION SIGNAL**  
**Table 3.3.9 Rv.1**

ISSUE #	DOC # or JFD #	CTS/STS REF..	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.9-10	JFD4	CTS 3.3.3.1 Action 26	The JFD replaced CTS language, "place in essential filtration mode" with "place in operations" without sufficient discussion for the change.	4/21/97		Provide additional justification.
3.3.9-11	M6 M7	CTS 3.3.3.1 CTS 3.3.2	Explain how the CTS 3.3.3.1 action statements for monitors and the CTS 3.3.2 ESFAS action statements for actuation instrumentation both address the CREFAS function in ITS 3.3.9. Note that the STS retained only actuation instrumentation with the exception of the PAM LCO.	4/21/97		Provide appropriate discussion.
3.3.9-12	A.4	CTS 3.3-3	The DOC adds functions not specified but related to instrument loops. Provide an safety analysis of the equivalence of the CTS and ITS wording.	4/21/97		Provide additional justification.



**PVNGS ITS 3.3.10 POST ACCIDENT MONITORING (PAM) INSTRUMENTATION**  
**Table 3.3.10 Rv.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.10-1	LA.3	CTS 3.3.3.1	<p>CTS 3.3.3.1 states that the Radiation Monitors shown in Table 3.3-6 shall be operable with their alarm/trip setpoints within the specified limits. CTS 3.3.3.1, Table 3.3-6 also lists the Alarm/Trip setpoint and the measurement range for each Radiation monitor. The justification states that this detail and the part of this LCO requiring the alarm/trip setpoints is not required to determine the operability of the system and therefore is moved to the Bases.</p> <p>The requirements are not found in the Bases for ITS 3.3.10.</p>	2/20/97		Provide location of calibration requirements.
3.3.10-2 OOS	L.5, L.6	CTS SR 4.6.4.1	<p>CTS SR 4.6.4.1, requires a CHANNEL CHECK and a CHANNEL CALIBRATION of the Containment Hydrogen Monitor once per 12 hours and once per 92 days on a STAGGERED TEST BASIS respectively. ITS SR 3.3.10.1 requires this CHANNEL CHECK once per 31 days for each channel that is normally energized. ITS SR 3.3.10.2 requires a CHANNEL CALIBRATION of the Containment Hydrogen monitors every 18 months. Provide operational data to support the stated conclusions regarding the reliability of these instrument channels.</p>	2/14/97		This change to CTS Surveillance Test Interval requires additional justification.

**PVNGS ITS 3.3.10 POST ACCIDENT MONITORING (PAM) INSTRUMENTATION**  
**Table 3.3.10 Rv.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.10-3	L.7	CTS 3.3.3.1, SR 4.3.3.1	<p>CTS 3.3.3.1, requires the Containment Area Radiation Monitors to be operable in MODE 4. CTS 3.3.3.1, Action a, requires adjustment of an alarm/trip setpoint that exceeds the allowed value within 4 hours. These requirements are not included in ITS 3.3.10 but instead are included as part of the post accident monitoring instrument requirements. Information from accident monitoring instrumentation is used as an accident management tool.</p> <p>Provide additional L.7 discussion that explains why the radiation monitors moved to PAM instrumentation do not require the alarm or trip setpoint for operability.</p>	2/14/97		Provide discussion and justification for the less restrictive change.
3.3.10-4	L.8	SR 4.3.3.1	<p>CTS Surveillance Requirement 4.3.3.1 requires a CHANNEL FUNCTIONAL TEST (CFT) for the Radiation Monitors. The CFT is deleted in the ITS but the Channel Calibration is retained. The staff notes that the Channel Calibration encompasses the CFT. Provide justification for deleting the more frequent CTS CFT requirement while retaining the Channel Calibration.</p>	4/17/97		Provide discussion and justification for the less restrictive change.
3.3.10-5	L.9		<p>CTS 3.3.3.1, requires the Containment Area Radiation Monitors Operable in MODE 4. Additional justification is needed to support the safety basis for the proposed change.</p>	4/17/97		Provide safety basis discussion.



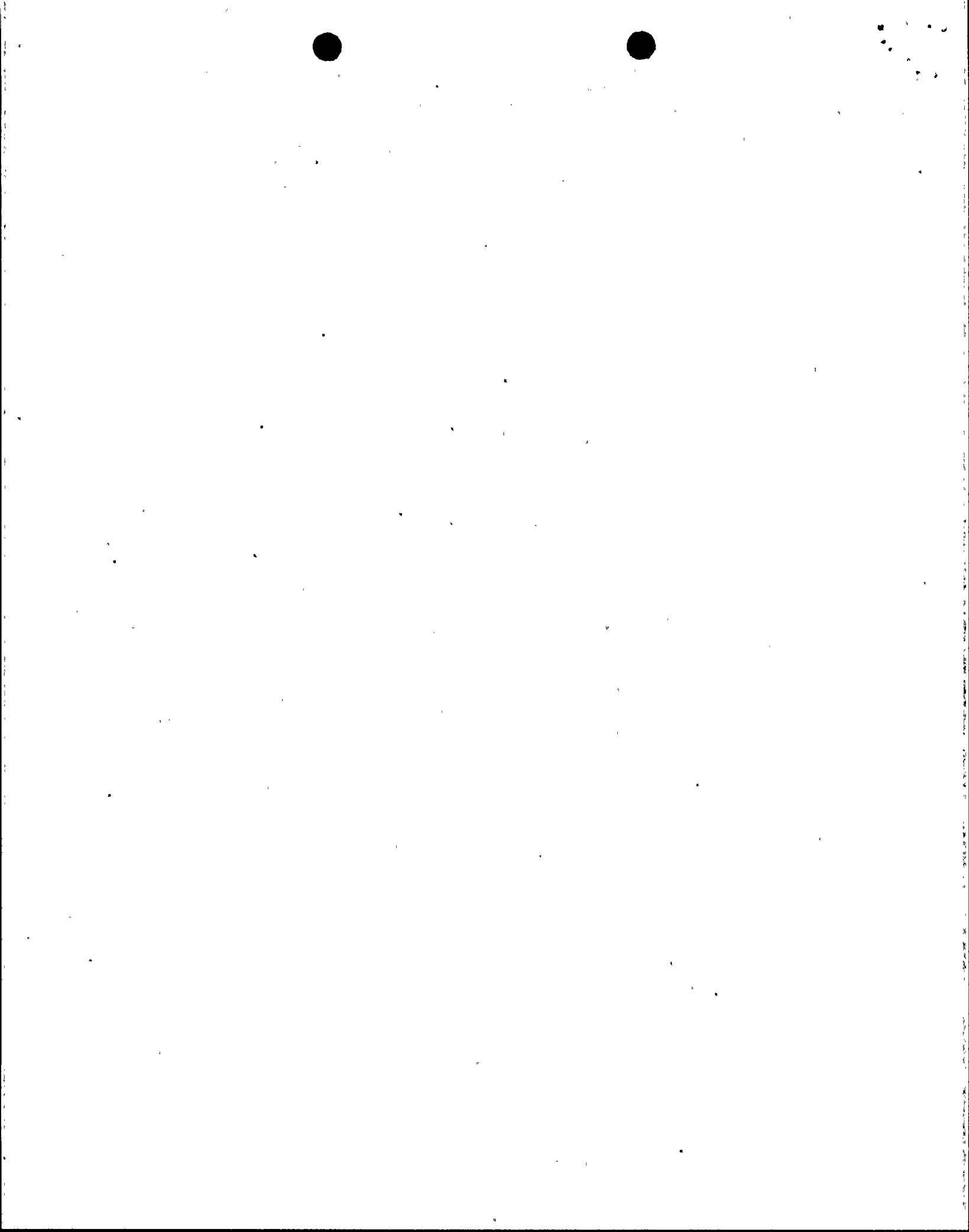
**PVNGS ITS 3.3.10 POST ACCIDENT MONITORING (PAM) INSTRUMENTATION**  
**Table 3.3.10 Rv.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.10-6	L.13	ITS SR 3.3.10.2	Provide a reference to proposed ITS calorimetric testing that includes the PAM function 16 detectors.	4/17/97		Provide stated reference.
3.3.10-7	L.3	CTS Table 3.3.10, function 15, Rx. Level	ITS action statements are less restrictive but the justification does not state why the proposed changes do not adversely affect safe operation of the plant.	4/17/97		Provide additional justification.
3.3.10-8	L.11	CTS 3.3.3.6,  CTS Table 4.3.3	CTS Table 4.3.3, requires a CHANNEL CHECK of the Containment Area Radiation Monitor once per 12 hours. ITS SR 3.3.10.1 requires this CHANNEL CHECK once per 31 days for each channel that is normally energized. The DOC states that a CHANNEL CHECK once per 31 days is required for the PAM instruments in CTS 3.3.3.6 as well as the ITS 3.3.10. This is based on experience that shows that failure of more than one channel of a given function in a 31 day period is a rare event. Clarify the DOC discussion related to experience for establishing the surveillance interval. It can't show that both 12 hours and 31 days are the correct test intervals.	2/20/97		Provide additional justification.

**PVNGS ITS 3.3.10 POST ACCIDENT MONITORING (PAM) INSTRUMENTATION**  
**Table 3.3.10 Rv.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.10-9	L.12  L.4	CTS 3.3.3.1 Action C  CTS 3.6.4.1	ITS action statements are less restrictive but the justification does not state why the proposed changes do not adversely affect safe operation of the plant.	4/17/97		Provide additional justification
3.3.10-10	M3	CTS 3.6.4.1	The more restrictive justification does not state why the proposed changes are an enhancement to safe operation of the plant. The safety analysis basis is unclear. Does the PVNGS safety analysis take credit for the functions in the proposed mode?	4/18/97		Revise the M3 DOC.
3.3.10-11	LA2	CTS 3.6.4.1	Removal of details that establish criteria for performing SRs <u>is</u> required for operability. In this case, it is a necessary requirement for performing a channel calibration.	4/18/97		Revise the LA2 DOC.
3.3.10-12	All DOCs and All Bases.	ITS B3.3.10 Insert 2	Search and replace all uses of "insure(s)" with "ensure(s)"	4/16/97		Revise the submittal
3.3.10-13	Bases	ITS B3.3.10 B3.3-175	Radial symmetry Bases text is deleted, yet other retained Bases state the need for radial distribution.	4/15/97		Revise the deleted text to support proposed Bases.





**PVNGS ITS 3.3.10 POST ACCIDENT MONITORING (PAM) INSTRUMENTATION**  
**Table 3.3.10 Rv.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.10-14	Bases	ITS B3.3.10 B3.3-180	Bases text additions for channel calibration of the containment isolation valves alter the TS definition of channel calibration and therefore is not permitted. Bases text references to the FSAR regarding radiation monitor channel calibration techniques need to be verified to meet the intent of the TS channel calibration definition.	4/18/97		Revise the Bases discussions and verify Bases additions do not alter the TS definitions.



**PVNGS 3.3.11 REMOTE SHUTDOWN SYSTEM**  
**Table 3.3.11 Rev.1**

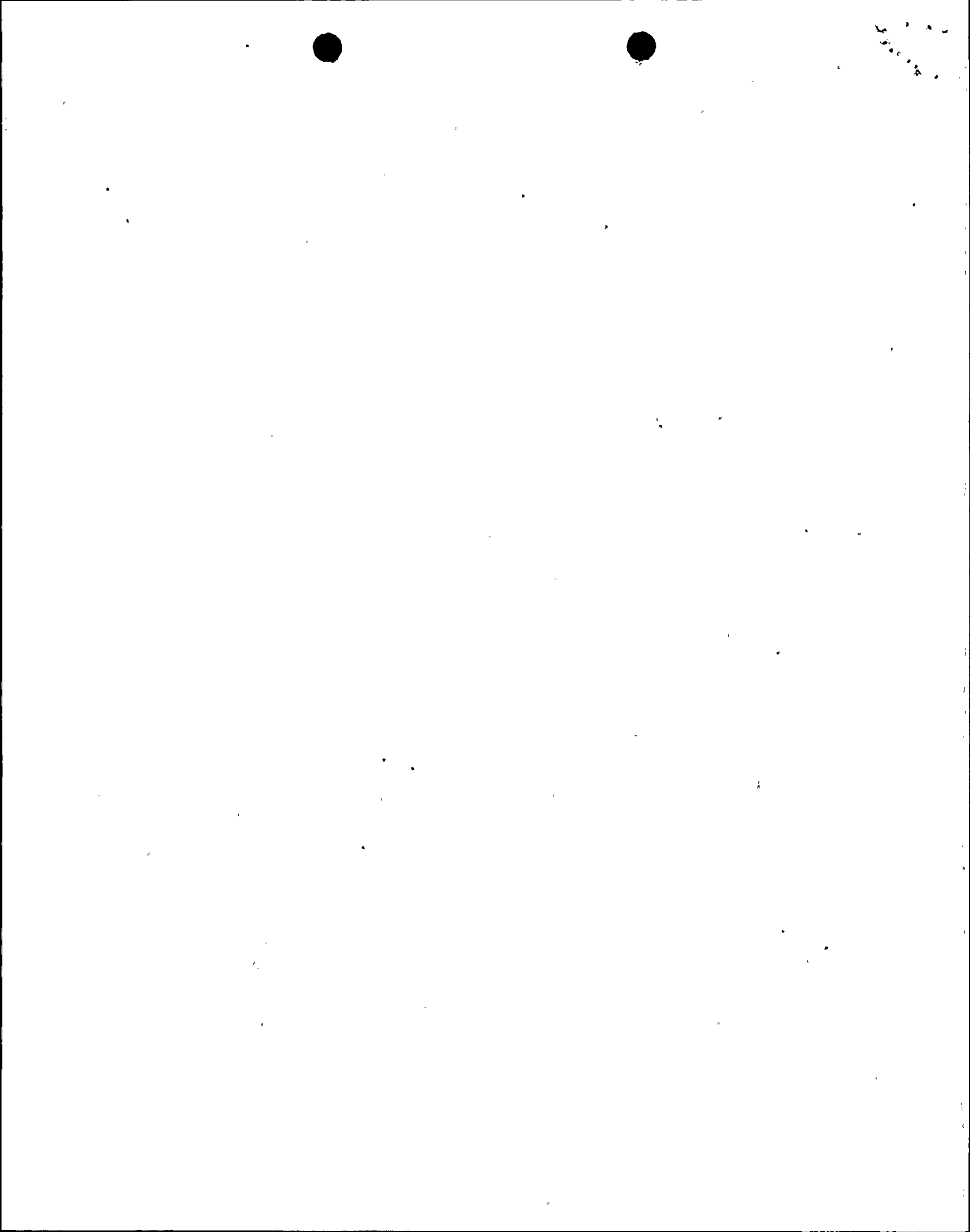
ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENE D	DATE CLOSE D	COMMENTS
3.3.11-1	JFD 1 JFD 2	ITS	Provide a design difference justification for not adopting the STS format to include the disconnect and control circuit switches in the Table 3.3.11.	4/18/97		Provide additional justification
3.3.11-2	L.3	CTS SR 4.3.3.5.b	<p>CTS Surveillance Requirement 4.3.3.5.b requires operating each remote shutdown system disconnect switch, power and control circuit including the actuated components. ITS SR 3.3.11.2 requires verifying each required control circuit and transfer switch is capable of performing the intended function. This change is less restrictive because the ITS wording allows the use of continuity checks to perform the SR. The CTS requires testing the actuated components. The use of a continuity check verifies that the disconnect switches are open when required to meet the requirements of 10 CFR 50 Appendix R.</p> <p>The change from a specific functional type test in the CTS to a optional continuity test in the ITS is not justified.</p>	2/24/97		Provide discussion and justification for the change to test methods.



**PVNGS 3.3.11 REMOTE SHUTDOWN SYSTEM**

Table 3.3.11 Rev.1

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENE D	DATE CLOSE D	COMMENTS
3.3.11-3	JFD 1	STS Table 3.3.12-1	STS Table 3.3.12-1 identifies functions of control parameters. JFD1 justifies deleting these control parameters in ITS Table 3.3.11-1 and the associated Bases because they are not CTS requirements. Justification for their removal from the STS is based in part on NRC Generic Letter 91-08 Removal of Component Lists from Technical Specifications. Although component lists are not required for Technical Specifications, some identification of control functions is needed to determine adequacy of controls. The proposed additions to LCO 3.3.11 are captured by the concept of operability in the STS, which is further clarified by ITS SR 3.3.11.2. The proposed ITS changes to the LCO are not required.	2/24/97		Revise ITS and CTS markup to adopt the STS LCO and Table format.
3.3.11-4	Bases	3.3.11 B3.3-184 insert 1	Change the insert to clarify that the disconnect and control switches are required for the Table 3.3.11-1 Functions.	4/18/97		Revise the Bases



**PVNGS ITS 3.3.12 BORON DILUTION ALARM SYSTEM (BDAS)**  
**Table 3.3.12 Rev.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.12-1	M.1	CTS 3.1.2.7 Action c	M1 deletes CTS 3.1.2.7 Action c: "The provisions of Specification 3.0.3 are not applicable". ITS does not have this exception, rather LCO 3.0.3 applies and requires the unit be placed in a Mode or condition outside the applicability of the LCO. M1 does not discuss the safety significance of these changes.	2/25/97		Provide safety basis discussion and justification for the more restrictive ITS requirements.
3.3.12-2	L.1	CTS 3.1.2.7 Action b.2	Correct the inaccurate DOC statements regarding CTS requirements and ITS Action requirements.  Provide a discussion that explains the safety basis for eliminating CTS Action b.2 limits. Include discussion about changes to frequencies for monitoring boron concentrations. Why is the COLR limit, "at least a 15 minute warning to criticality," acceptable? Also, explain the deletion of the requirements to suspend CORE ALTERATIONS.	4/16/97		Revise the DOC. Provide discussion and justification for the less restrictive change.
3.3.12-3	L.2	CTS 3.1.2.7 Applicability	Mode 6 neutron monitoring requirements are moved to ITS 3.9.2. This reorganization of CTS requirements does not constitute a less restrictive change.	4/16/97		Revise the submittal DOC.





11-11-66

**PVNGS ITS 3.3.12 BORON DILUTION ALARM SYSTEM (BDAS)**  
**Table 3.3.12 Rev.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.12-4	A.1  JFD 4	CTS 3.1.2.7, Action b.1  STS 3.3.13 Action B	<p>CTS 3.1.2.7, Action b.1 requires the RCS Boron Concentration to be monitored by redundant methods immediately if two startup channel high neutron flux alarms are inoperable. If monitoring methods cannot be accomplished immediately then core alterations or positive reactivity changes are to be suspended immediately.</p> <p>DOC A.1 is used to justify the CTS to ITS changes to this action requirement. The staff cannot make a determination that the proposed use of an alternate to STS format and requirements as provided in ITS Action B.1 and B.2 provides equivalent actions to CTS b.1. In addition, JFD4 does not provide an justification for deviation from STS requirements.</p>	2/25/97		Provide revised DOCs and appropriate discussion for deviation from the STS based on current licensing basis.



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**PVNGS ITS 3.3.12 BORON DILUTION ALARM SYSTEM (BDAS)**  
**Table 3.3.12 Rev.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.12-5	L.3  JFD 1  JFD 2	CTS Table 3.3-1 and CTS Table 4.3-1 Item 1.B.2  STS 3.3.13	<p>L.3 states that the ITS does not require Logarithmic Power channels to be operable and that this is consistent with the STS. However, the staff's copy of the STS specify log power monitor channels for LCO 3.3.13. Reconcile how the CTS requirements for log power channels, items B.2.a and B.2.b in Table 3.3-1 and LCO 3.1.2.7 requirements for startup high neutron flux alarms are met with the proposed ITS 3.3.12 requirements for an operable BDAS.</p> <p>Note that the CTS Table 3.3-1 markup retains the Logarithmic Power Mode 3, 4, 5 with the trip breakers closed requirements without a like requirement in LCO 3.3.12. In fact, these Logarithmic Power channels are still needed if the RTCB are closed. Note also that L.3 does not discuss the CTS markup deletions of the log power monitors for Modes 3, 4, 5 [without any table notation regarding breaker position].</p> <p>Furthermore, L.3 states that ITS 3.3.12 requires two startup channels and the BDAS alarms. This statement is not factual. ITS 3.3.12 requires an alarm system to be operable and does not specify that the alarm system is required to be actuated by startup channels.</p>	2/25/97		<p>Provide discussion and justification for the less restrictive change.</p> <p>Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.</p> <p>Revise the LCO to provide appropriate remedial actions.</p>

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PVNGS ITS 3.3.12 BORON DILUTION ALARM SYSTEM (BDAS)  
Table 3.3.12 Rev.1

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.12-6	JFD 3 M.3  JFD4 M.1	ITS 3.3.12 Action A Action B	The proposed format of Actions A and B do not provide an appropriate remedial action to not meeting the requirements to perform periodic boron concentration measurements. The ITS format proposes to use the <u>OR</u> logical connector as compared to the STS that uses an <u>AND</u> logical connector. With the OR once the option is chosen then the alternate action is not permitted. To establish an alternate remedial course a new Action should be proposed for the condition "Required Actions or associated completion time of Action A not met." This would provide an action to place the plant in a safe condition consistent with the requirements of STS.	4/17/97		Provide a revised ITS LCO to provide appropriate remedial actions.
3.3.12-7	JFD 6	ITS SR 3.3.12.2	Specified frequency is 31 days of cumulated operation during shutdown. Without an agreed to meaning of "cumulated operation during shutdown" the staff prefers a specified interval. Provide a justification based on system design or operational limitations for not adopting the specified STS frequency.	4/17/97		Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.

**PVNGS ITS 3.3.12 BORON DILUTION ALARM SYSTEM (BDAS)**  
**Table 3.3.12 Rev.1**

ITEM #	DOC # or JFD #	CTS/STS REF.	DESCRIPTION OF ISSUE	DATE OPENED	DATE CLOSED	COMMENTS
3.3.12-8	Bases	ITS B3.3-191	<p>The Safety Analysis Bases do not discuss the 15 minute lead time to a dilution event. Is this an assumption of the licensing basis? If not, then explain the Background Bases discussion of this assumed response time.</p> <p>Delete the proposed addition "This SR is an extension of SR 3.9.22....." it is an unnecessary reference.</p>	4/17/97		Provide additional justification and make appropriate changes.
3.3.12-9	LA.2		<p>LA.2 relocates redundant analysis methods but it also relocates CTS applicability requirements "when entering Mode 3, 4, or 5 or at the time both alarms are determined to be inoperable" which are not associated with analysis methods and which are not otherwise included in the ITS.</p> <p>Provide a DOC analysis of these CTS changes.</p>	6/14/97		Revise the submittal to address these CTS changes.

