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Palo Verde Nuclear
Generating Station

James M. Levine
Senior Vice President
Nuclear

TEL (602)393-5300
FAX (602)393-6077

Mail Station 7602
P.O. Box 52034
Phoenix, AZ 85072-2034

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102-03947-JML/SAB/TNW
May 30, 1997

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-37
Washington, DC 20555-0001

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Response to NRC Request for Additional Information (RAI) for
Improved Technical Specification (ITS) Section 3.7, "Plant Systems"**

Dear Sirs:

Enclosed please find the response to your request for additional information, received by PVNGS on April 16, 1997, regarding ITS Section 3.7, "Plant Systems."

The NRC "Description of Issues" and the corresponding PVNGS response are provided as Enclosure 1 in a similar tabular format to which it was received. The enclosed responses reflect the telephone conversation with members of your staff on April 22, 1997. ITS Section 3.7, as modified by the responses to the RAI, is provided as Enclosure 2.

Please contact Mr. Scott Bauer at (602) 393-5978 if you have any questions or would like additional information regarding this matter.

Sincerely,

JML/SAB/TNW/mah

cc: E. W. Merschhoff
K. E. Perkins
J. W. Clifford
D. M. Orsini
C. R. Thomas

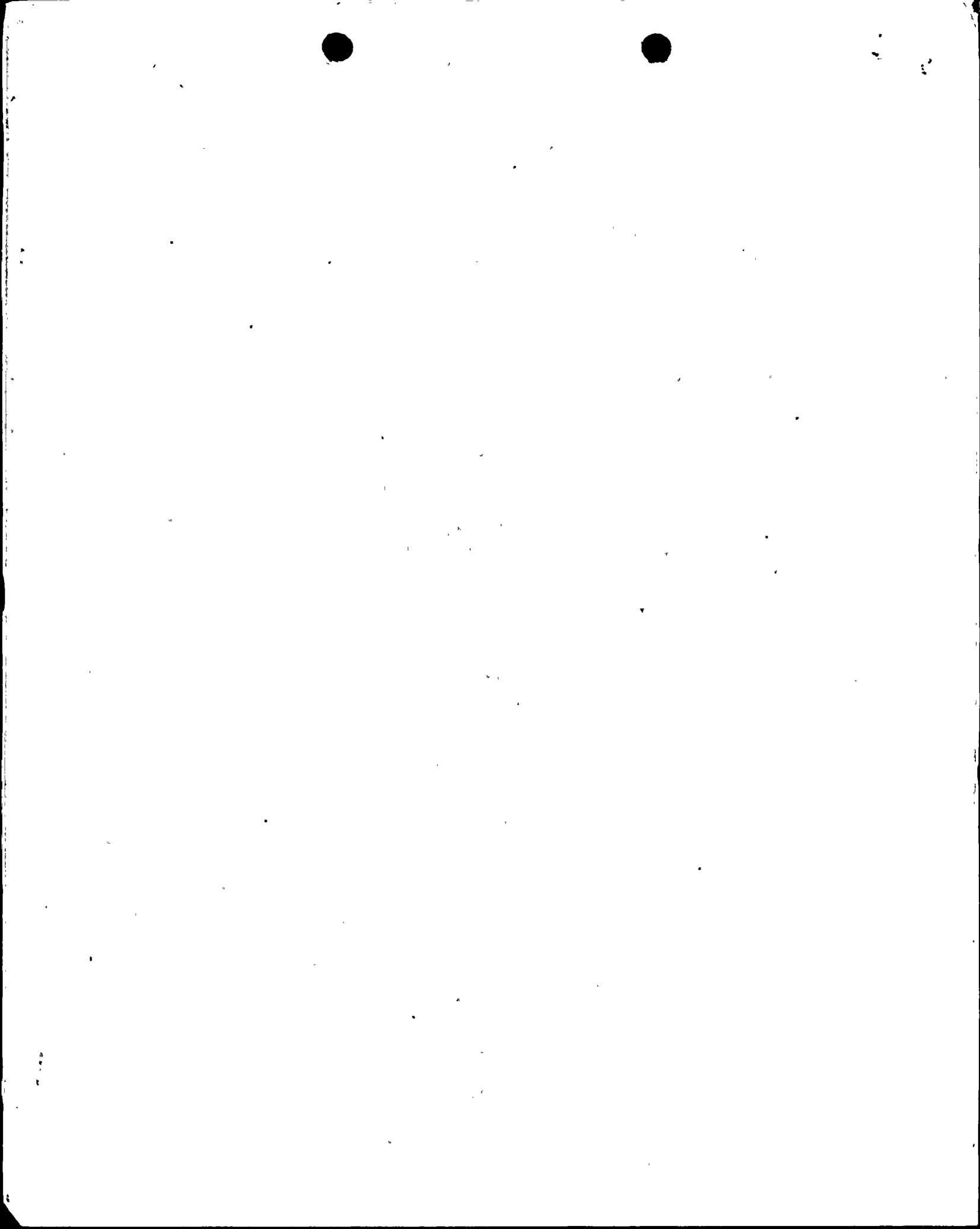
J.M. Levine
for JML

ADD

Enclosure 1 NRC Description of Issues and PVNGS Responses
Enclosure 2 ITS Section 3.7

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P PDR





STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, G. R. Overbeck, represent that I am Vice President - Nuclear Production, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority to do so, and that to the best of my knowledge and belief, the statements made therein are true and correct.

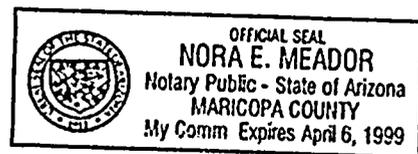
G. R. Overbeck
G. R. Overbeck

Sworn To Before Me This 30 Day Of May, 1997.

Nora E. Meador
Notary Public

My Commission Expires

April 6, 1999



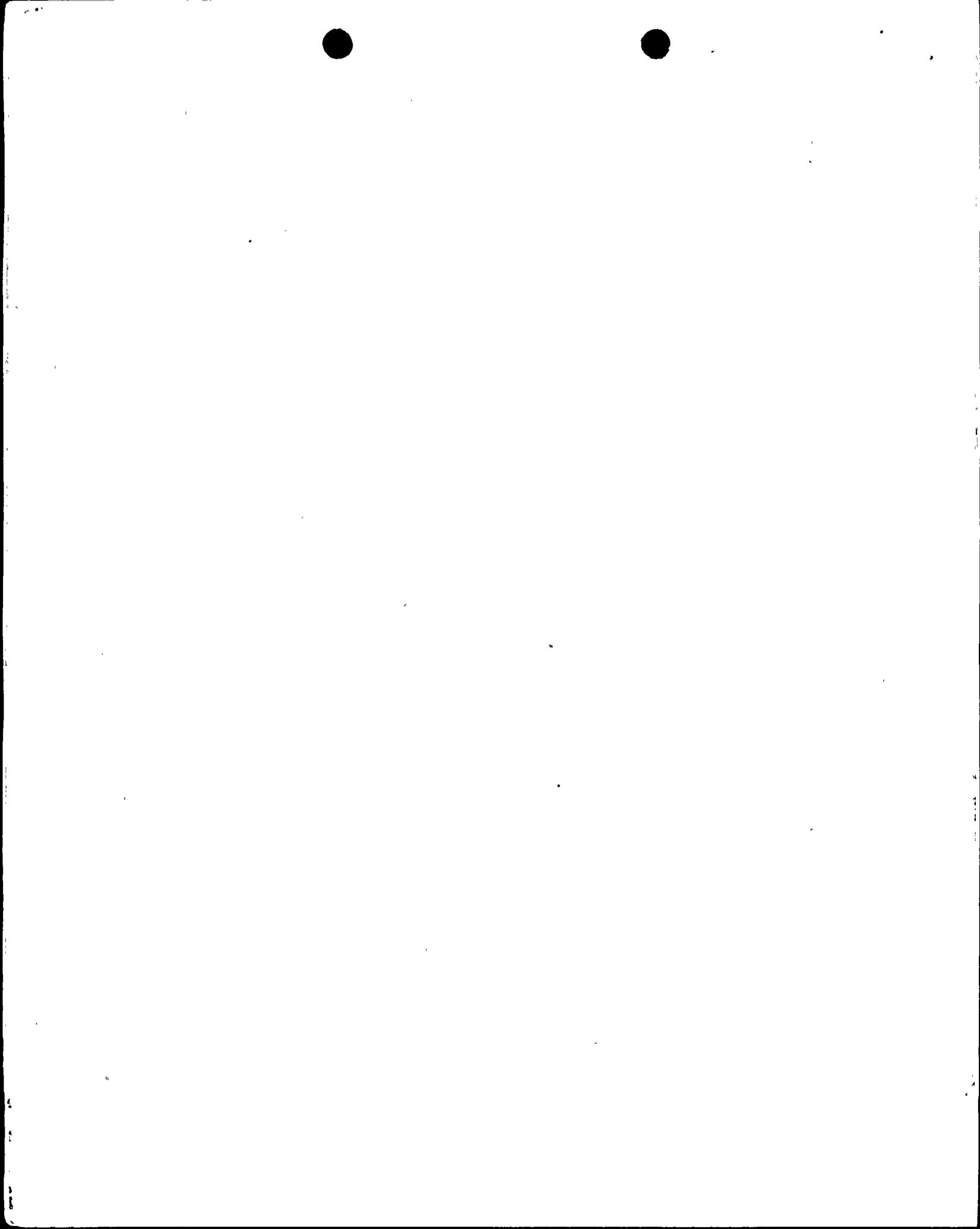


ENCLOSURE 1

Response to Request for Additional Information

RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.1-1	NONE	BASES 3.7.1	The formula and the BASES discussions would appear to allow more than 4 inoperable MSSVs per steam generator. What is the reason for only four?	<p>The plant specific analysis for PVNGS has only been performed to support operation with a maximum of 4 inoperable MSSV's per steam generator. The CTS specifically limits the maximum number of inoperable MSSVs to 4 per steam generator . A change to increase the number of inoperable MSSVs to greater than 4, may be possible with additional analyses, but would represent a change that would be beyond the scope of an ITS conversion.</p> <p>No changes to the ITS were necessary due to this comment.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

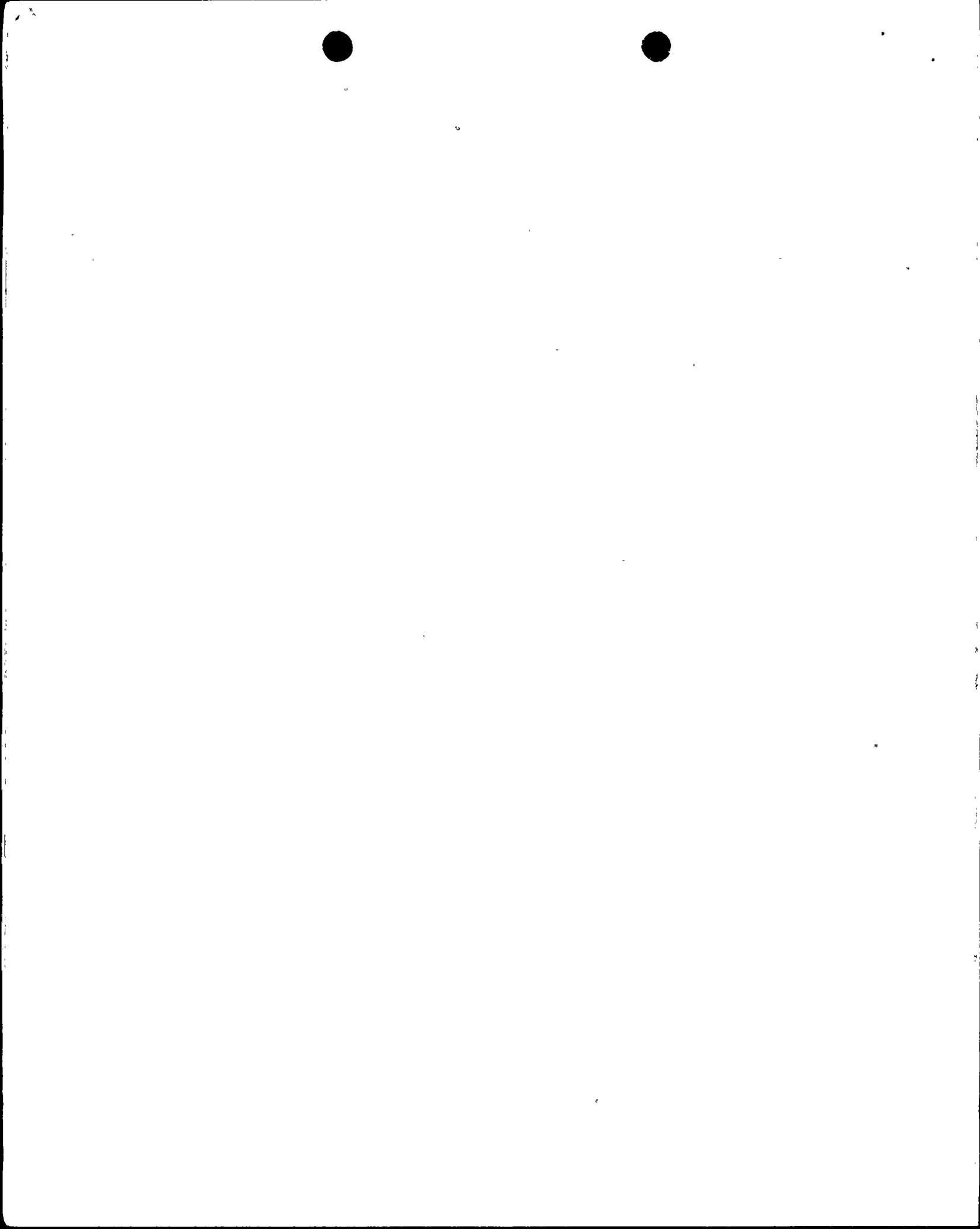
Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.1-2	A.7	CTS 3.7.1	<p>CTS 3.7.1 Action c) states that "The provisions of Specification 3.0.4 are not applicable". This is a deviation from the STS.</p> <p>Comment: DOC A-7 states that this has been submitted as a generic change. However, there is no justification for why the change needs to be made. Isn't it correct in the STS?</p>	<p>The note in the NUREG states the SR is: "only required to be performed in MODES 1 and 2". The NUREG Bases states that the note allows entry into and operation in MODE 3 prior to performing the SR. When testing of the MSSV's is required after an outage at PVNGS, the testing would be performed in MODE 3, not in MODES 1 and 2, as stated in the note. During the review of the ITS at PVNGS, it was determined that the wording of the note did not adequately reflect that the provisions of specification 3.0.4 were not applicable and did not convey the purpose as described in the NUREG Bases. In addition, the testing of the MSSV's at PVNGS did not correlate to the plant conditions described in the note. This was submitted as generic change number CEOG 71, but was not approved by the TSTF committee. It is PVNGS' understanding that the TSTF committee is preparing a generic change that will similarly revise this note, but it is not expected until after the need date for the PVNGS ITS.</p> <p>No changes to the ITS were necessary due to this comment.</p>

RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.1-3	A.7 JFD1	STS SR 3.7.1.1	<p>STS SR 3.7.1.1 Note stipulated that the SR was only required to be performed in MODES 1 and 2. A replacement note states, "Not required to be performed prior to entry into MODE 3." ITS SR 3.7.1.1 replaces this STS note to improve clarity. This is a deviation from the STS.</p> <p>Comment: No indication that this clarification of the NOTE has been submitted as a generic change, which it should be.</p>	See response to issue number 3.7.1-2.
3.7.1-4	LA.2	CTS 3.7.1.1	<p>CTS 3.7.1.1 Table 3.7-1 contains an asterisk footnote regarding safety valve lift pressures and the corresponding ambient temperature at the valve location. This requirement is moved to the ITS Bases and the Plant Procedures. Discussion of where in the BASES this information was relocated to is discussed. Where in plant procedures the remaining information was relocated to is not.</p>	<p>PVNGS has committed in letter number 102-03890 dated March 16, 1997, to provide a matrix to the NRC of all relocated requirements identified in the ITS with the designator "La". The information in the matrix is intended to supersede the information in the Discussion of Changes (DOC's) of the PVNGS ITS submittal. The matrix will identify where the requirement is being relocated and the method by which it will be controlled (10CFR50.59, etc).</p>

RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.2-1	A.3 JFD2	ITS SR 3.7.2.1	<p>ITS SR 3.7.2.1 replaces a STS note to improve clarity. STS SR 3.7.2.1 Note stipulates that the SR was only required to be performed in MODES 1 and 2. A replacement note states, "Not required to be performed prior to entry into MODE 3." This is a deviation from the STS submitted as a generic change.</p> <p>Comment: DOC A-3 indicates that this has been submitted as a generic change. However, what is not explained in the DOC is what is inadequate with the present STS note.</p>	<p>The note in the NUREG states the SR is: "only required to be performed in MODES 1 and 2". The NUREG Bases states that the note allows entry into and operation in MODE 3 prior to performing the SR. When testing of the MSIV's is required after an outage at PVNGS, the testing would be performed in MODE 3, not in MODES 1 and 2, as stated in the note. During the review of the ITS at PVNGS, it was determined that the wording of the note did not adequately reflect that the provisions of specification 3.0.4 were not applicable and did not convey the purpose as described in the NUREG Bases. In addition, the testing of the MSIV's at PVNGS did not correlate to the plant conditions described in the note. This was submitted as generic change number CEOG 72 but was not approved by the TSTF committee. It is our understanding that the TSTF committee is preparing a generic change that will similarly revise this note, but it is not expected until after the need date for the PVNGS ITS. No changes to the ITS were necessary due to this comment.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.2-2	L.3	CTS 4.7.1.5.2	<p>CTS 4.7.1.5.2 allows entry into MODE 3 or 4 to perform surveillance testing of the MSIV's provided the testing is performed within 12 hours. ITS 3.7.2 deletes the 12 hour requirement resulting in an unlimited period of time allowed with the SR not completed. This is an extension of the AOT which is consistent with the STS. However, the justification in L.1 needs to be improved. What actual performance data supports the change? "Most probable outcome" only means it is more likely than any other outcome, hardly a persuasive reason.</p>	<p>The test history of the MSIV's at PVNGS supports the proposed change which deletes the requirement to perform this testing within 12 hours after establishing normal operating pressure and temperature in the steam generators. The performance data is from the ASME Section XI testing program and includes results from stroke timing tests. The requirement to perform this testing after reaching normal operating pressure and temperature would not be affected, only the 12 hour time constraint would be removed.</p>
3.7.2-3	L.2	CTS 4.7.1.5.1	<p>CTS 4.7.1.5.1 requires measurement of the closing stroke times of the MSIVs. ITS SR 3.7.2.1 also requires measuring the stroke times but allows the flexibility of using an actual actuation signal to initiate the valve closure. Use of an actual actuation signal may be appropriate if valve stroke time can be measured. However, L.2 states if it properly "actuates". The issue isn't only actuation, it is also stroking closed in the required time.</p>	<p>The proposed change allows the use of an actual system actuation signal to fulfill certain Surveillance Requirements. The option of using the actual system actuation signal does not alter any of the acceptance criteria associated with the Surveillance Requirements; only the method of initiating the actuation is changed. At PVNGS the Emergency Response Facility Data Acquisition and Display System (ERFDADS) can supply real time and historical information on certain valve position, pump parameters, etc. If the required data is not available from results of the actual actuation signal, the Surveillance Requirement will not have been met and the Surveillance Test must be performed using a simulated actuation signal.</p>

RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.3-1	JFD3 A.3	ITS 3.7.3	<p>STS SR 3.7.3, Actions, Note allows separate entry for each valve. The Note to 3.7.3, Actions, is modified by A.3 replacing each valve by each penetration flowpath. ITS 3.7.3, Actions, replacement note allows separate entry for each flowpath. The discussion of JFD 3 may be acceptable however, the BASES discussion of the system is incomplete. The BASES only describe the location and functioning of the "Downcomer" MFIVs. To judge the adequacy of the change the location and function of the "Economizer" MFIVs needs to be added.</p>	<p>The MFIV's are containment isolation valves. General Design Criteria 57 requires one containment isolation valve for piping with a closed loop inside containment whereas the main feedwater piping at PVNGS contains two MFIVs and two check valves per penetration. Action B of specification 3.7.3 could apply to a plant that has only one MFIV per penetration. In that case, the existing note would be correct in that separate condition entry for each valve would be equivalent to separate condition entry for each penetration. For the PVNGS plant specific design with two MFIVs per penetration, the appropriate application of Actions A and B makes revision of the note, as written in the NUREG, necessary. ITS 3.7.3 Bases will be revised to add clarification for the location and function of the economizer FWIV's.</p>
3.7.3-2	M.2	CTS 3.6.3	<p>CTS 3.6.3.d, directs a shutdown to Hot Standby in 6 hours if an Inoperable FWIV cannot be isolated. In the event 2 FWIVs are inoperable in the same flowpath, ITS 3.7.3 Action B becomes the governing action. Given the change made in the Applicability "closed power operated valve", if both MFIVs in a flow path are inoperable but not closed can this action be complied with?</p>	<p>The PVNGS design for both the economizer and downcomer FWIV's incorporates motor operated valves which can be used to isolate the penetration if needed. These motor operated valves are in addition to the two MFIVs, two check valves and feedwater control valves. There are no manual valves available to isolate these lines. So the action can be complied with by isolating the penetration with a closed power operated valve.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.4-1	L.2	ITS SR 3.7.4.2	<p>CTS SR 4.7.1.6.a requires operating the ADVs following a refueling outage or a cold shutdown greater than 30 days. ITS SR 3.7.4.1 extends the CTS Surveillance time to 18 months. L.2 states "there is no reason to believe" the valves would degrade faster during shutdown conditions than during power operations. That reasoning is very qualitative. Does the overall performance history of these valves support going to the extended interval?</p>	<p>The ADVs are part of the ASME Section XI Inservice Testing Program and are subject to testing under CTS 4.0.5/ITS 5.5.8 as well as CTS 3.7.1.6/ITS 3.7.4. The ASME Section XI Inservice Testing Program at PVNGS requires these valves to be full stroke tested on a quarterly basis. The CTS only requires that the ADV's be tested following any refueling shutdown or a cold shutdown of 30 days or longer. The ITS requires the ADV's to be cycled once every 18 months. The testing required by the PVNGS ASME Section XI Inservice Testing Program is more restrictive than both the CTS and the ITS. The ASME Section XI Inservice testing Program requirements are controlled in accordance with the requirements of 10 CFR 50.55a and 10 CFR 50.59. Although the testing specified in the ITS will be less restrictive than the testing specified in the CTS, the testing performed in accordance with the ASME Section XI requirements are not impacted and will remain in affect. The performance history for the ADV's does not need to be considered for extension of the test interval since the frequency for testing in the ASME Section XI program is more restrictive than both the ITS and the CTS. Since there are adequate regulatory controls to maintain the effectiveness of the ASME Section XI requirements, this change is acceptable.</p>

RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.4-2	JFD5	ITS 3.7.4 STS 3.7.4 CTS 3.7.1.6	What is the last sentence of JFD 5 trying to say? More time to cool to Mode 4 using one method vs another? As written, cooling from Mode 3 to 4 regardless of the means requires the same amount of cooling.	The last sentence is trying to distinguish the difference between Mode 4 entry conditions and being in Mode 4 without reliance on the steam generator for heat removal. Being in Mode 4 without reliance on the steam generator for heat removal requires additional cooling to achieve the conditions required for placing the shutdown cooling system into service.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# orJFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.5-1	LA.2	CTS 4.7.1.2.a .1	<p>CTS 4.7.1.2.a.1 requires verifying the position of manual valves that are locked or sealed in position. Verification of sealed or locked valves is controlled by the Locked Valve, Breaker, and Component Control Program. 1) What is meant by the statement that the information is not required to determine operability? Valve position does not affect operability? 2) The regulatory requirement that controls the Locked Valve, Breaker, and Component Control Program is not discussed.</p>	<p>The statement, "This information is not required to determine the operability of a system, component or structure..." refers to the periodic verification of the position of valves which are locked or sealed in position. These valves are initially verified to be in the correct position prior to securing from operation and are controlled in that position by the Locked Valve, Breaker and Component Control Program. What was meant by the statement above is that the surveillance of these components does not establish operability, but verifies continued operability. The Locked Valve, Breaker and Component Control Program identifies applicable components and the controls necessary to assure they are secured from unintended operation. The requirement to verify the position of the valves was initially dispositioned to be relocated to PVNGS plant procedures. This has been changed to be relocated to the Technical Requirements Manual (TRM) which will be controlled in accordance with the provisions of 10 CFR 50.59. Sufficient regulatory controls exist under 10CFR50.59 to maintain the effectiveness of the provisions of this program. See the response to issue number 3.7.1-4.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# orJFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.5-2	M.2	CTS 3.7.5.2 3.7.5.3 3.7.5.4	STS SRs 3.7.5.2, 3.7.5.3, and 3.7.5.4 are modified by a note which allows 24 hours to perform the Surveillance Requirement for the Turbine Driven AFW pump after reaching normal operating steam generator pressure. ITS SR 3.7.5.2 extends the allowed time to 72 hours. 1) What makes Palo Verde unique that 72 hours instead of 24 hours are necessary? 2) Why isn't a specific pressure indicated (consistent with the STS) rather than normal operating pressure?	The proposed time of 72 hours allowed to complete the surveillance is based upon the current licensing basis of the PVNGS CTS having an SR 3.0.4 (4.0.4) exclusion without a specified time constraint. The notes in the ITS provide a similar, more specific, effect to the SR 3.0.4 exception; the 72 hours is a plant specific requirement. Testing activities being performed that necessitate the need for 72 hours include installation of measuring and test equipment for the SR, and completion of other testing during Mode 3 including testing of MSSV's (ITS 3.7.1), MSIV's (ITS 3.7.2), and RCS PIV's (ITS 3.4.15). If a test parameter is determined to be outside of the acceptance criteria, the pump is declared INOPERABLE immediately without regard to the exclusion to complete the SR. The plant conditions have been added to the note to indicate that testing is not required to be performed until 72 hours after reaching 532 degrees F in the Reactor Coolant System (RCS). This corresponds to a Steam Generator (SG) pressure of approximately 900 psia. Below 900 psia, there is inadequate steam pressure to perform the testing. It is preferable to use RCS temperature as the reference point since that is the current operational practice at PVNGS for verifying that the initial conditions for testing are established. Using RCS temperature in lieu of SG pressure is acceptable since both parameters are instrumented in the control room and both will ensure that the same plant conditions are initially established so that the testing is performed with adequate steam pressure in the SG.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# orJFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.5-3	None	ITS 3.7.5 Bases	The use of the terms essential pumps, non-essential pumps and pumps needs to be reviewed as the use appears inconsistent. For example, in the second Background paragraph, the first sentence discusses both essential and non-essential pumps. The second sentence discusses only essential and then the final sentence discusses simply the pumps (all or only essential?). Similarly, the third paragraph discusses the capabilities of the essential pumps and the added language discusses the capabilities of the nonessential pump. That is followed by a discussion of the essential pump capacity but then there is no similar discussion for the non-essential pump.	Clarification will be provided to discuss the capacity of the non-essential pump. Specifically, that the non-essential pump is not designed to provide 100% capacity with the recirculation valve open. Also the third sentence in the second paragraph of the Bases will be revised to clarify that it applies to all three pumps.
3.7.5-4	LA.1	CTS 3.7.1.2 a and b	CTS 3.7.1.2.a and b provides information needed to verify Operability of the Auxiliary Feedwater System. These requirements are moved to the Plant Procedures. No discussion is provided to indicate specifically where the information is relocated to or specifically how it is controlled under the PVNGS Procedure Control Program.	See the response to issue number 3.7.1-4.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.6-1	M.1	ITS 3.7.6	<p>CTS 3.7.1.3 footnote, provides an exclusion when starting a cooldown with the CST at minimum level. A generic change is submitted requesting the same exclusion to ITS 3.7.6.</p> <p>Comment: Acceptance of the requested generic change is contingent upon NRC approval.</p>	The exclusion from CTS 3.7.1.3 has not been included in the PVNGS ITS.
3.7.6-2	LA.1	CTS 4.7.1.3. 2 ITS 3.7.6 Bases	<p>CTS 4.7.1.2 provides information needed to verify Operability of the Reactor Makeup Water Tank when it is used as a source of water to the AFW system. These requirements are moved to the ITS Bases. The ITS Bases do not provide RMWT volume required to accommodate the condensate system and primary coolant system cooldown makeup needs.</p>	The ITS Bases will be revised to include the necessary reference to the Reactor Makeup Water Tank volume. See the response to issue number 3.7.1-4.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.7-1	LA.1	CTS 4.7.3.d	CTS 4.7.3.d requires verifying the position of valves that are locked or sealed in position. Verification of sealed or locked valves is controlled by the Locked Valve, Breaker, and Component Control Program and the PVNGS Procedure Control Process. No discussion is provided as to how changes under the Locked Valve, Breaker, and Component Control Program are controlled.	See the response to issue number 3.7.1-4.
3.7.7-2	A.3	CTS 4.7.3.b 4.7.3.c	It is not clear that allowing automatic actuation of the pumps and valves to fulfill the Surveillance Requirements provides all the necessary Operability data required by a simulated actuation test. Specifically, how will actual actuation times be recorded and compared to required values?	See the response to issue number 3.7.2-3.

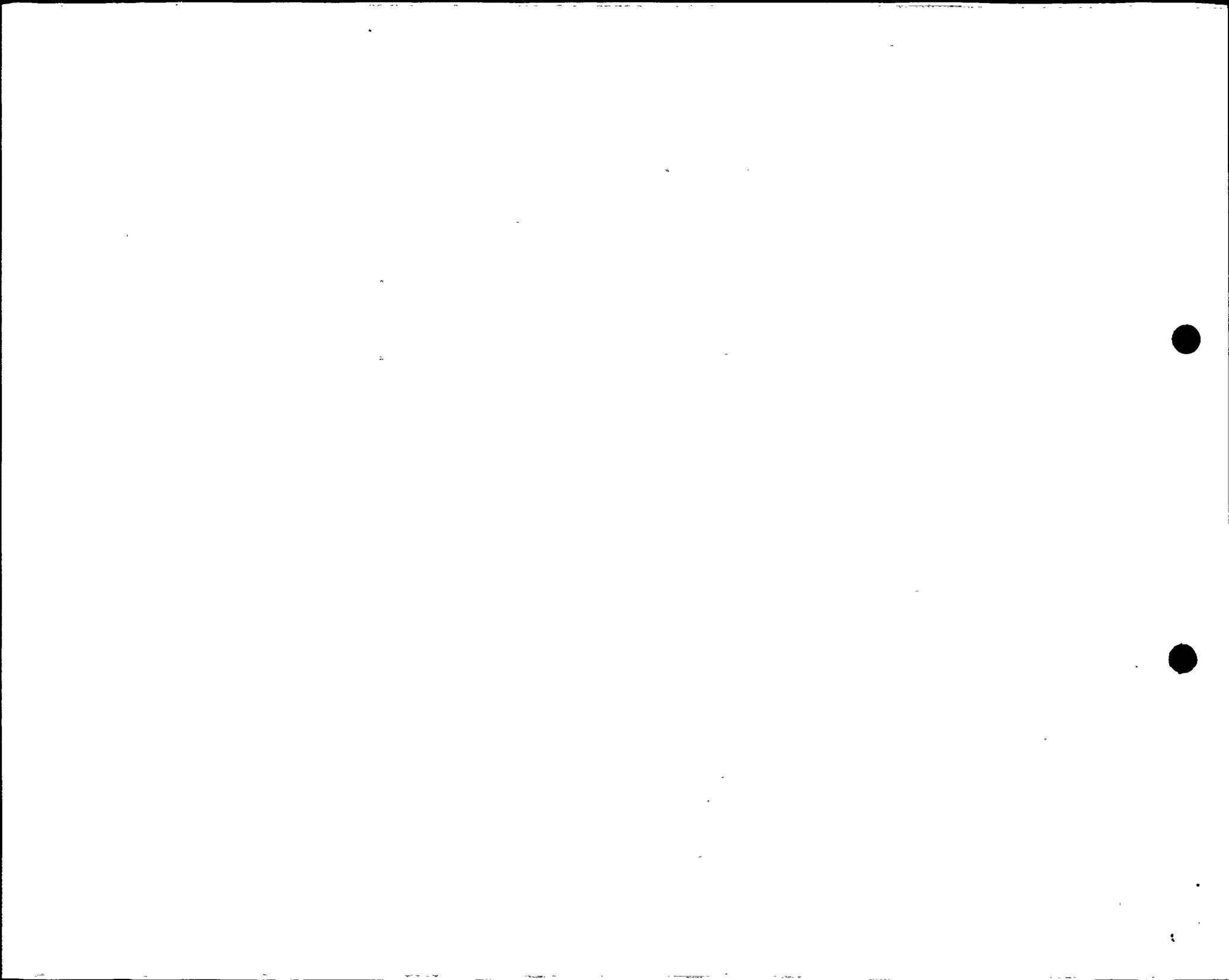
RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.8-1	LA.1	CTS 4.7.4.2	CTS 4.7.4.2 requires verifying the position of valves that are locked or sealed in position. Verification of sealed or locked valves is controlled by the Locked Valve, Breaker, and Component Control Program and the PVNGS Procedure Control Process. No discussion is provided as to how changes to the program are controlled.	See the response to issue number 3.7.1-4.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	GTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.9-1	NONE	ITS SR 3.7.9.1	The surveillance requires that the operator verify that there are 12 ft of useable water. Is that how it reads on the indicator or is the operator reading actual feet and doing the conversion?	A useable water depth of 12 feet requires 13'-6" of actual water depth. The implementing procedure requires the operator to verify that the level is greater than or equal to 13'-6" measured locally at the spray pond or 14' indicated in the control room using installed instrumentation. The difference is a result of instrument uncertainty.
3.7.9-2	NONE	ITS SR 3.7.9.2	The SR Bases state that it is the UHS temperature (indicating a single reading). However, the LCO discusses Average UHS temperature (indicating some kind of averaging of various readings). Which is it?	The spray pond temperature is verified from the control room and is indicated on one indicator for each train. Circulation of the spray pond water through filtering, chemistry control and performance of other Surveillance Tests assures the indicated temperature is representative of the bulk temperature. The word "average" is therefore being removed to avoid this confusion.
3.7.9-3	NONE	ITS 3.7.9 Bases	The Bases state that a 26 day supply meets the intent of a 30 day supply as required in the Reg Guide. Has the NRC accepted that position, if so where?	The NRC has reviewed and accepted the use of a 26-day supply of cooling water for the PVNGS Ultimate Heat Sink in Technical Specification Amendment Numbers 93, 81, and 64 for Units 1, 2, and 3, respectively.



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.10-1	M.1	CTS 4.7.6.1	<p>CTS 4.7.6.1 stipulates a verification of valve positions for valves that service safety-related equipment. ITS SR 3.7.10.1 requires checking all valves in the flowpath but deletes the safety-related stipulation. According to the description in the Bases the EC system does not service any non-safety equipment (the WC does). Therefore, the discussion of how this is a more restrictive change is confusing. Further, the CTS required verification of all valves servicing safety-related equipment (that would include instrument valves etc). The ITS only requires the checking of flowpath valves which seem to be a less restrictive portion of this change.</p>	<p>This change was classified as a more restrictive change since it requires testing of valves in the flowpath whether they service safety related equipment or non-safety related equipment. Since the EC System does not service any non-safety related equipment at PVNGS, this DOC will be changed to an administrative change. Valves such as instrumentation root valves are not considered as servicing safety related equipment or as being in the flow path and are therefore not included within the CTS scope and not included within the ITS scope. Their position is verified as part of the normal operating procedure for the system.</p>
3.7.10-2	LA.1	CTS 3.7.6.b	<p>CTS 3.7.6 Action b stipulates other safety system verifications with one EC system inoperable. These required verifications are now provided by ITS LCO 3.0.6 and ITS 5.5.15, "Safety Function Determination Program". Completion times associated with the moved evaluations are moved to plant procedures. Changes to plant procedures are governed by the PVNGS Procedure Control Process. No discussion is provided as to which procedures the information is relocated and how the control process controls future changes to that information.</p>	<p>See the response to issue number 3.7.1-4.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.11-1	M2	3.7.7 ACTION a	<p>CTS 3.7.7 ACTION for MODES 5 and 6 states in part, "...initiate and maintain operation of the remaining OPERABLE control room essential filtration system." ITS 3.7.11 ACTION C requires the OPERABLE CREFS train placed in operation or CORE ALTERATIONS suspended and movement of irradiated fuel assemblies suspended. This is not an additional requirement, but an allowance as it relieves the requirement to start the other CREFS train. This is a less restrictive requirement.</p>	<p>The Condition for Modes 5 and 6 will be separated from the Condition for during movement of irradiated fuel. The Required Action for a single train inoperable in Modes 5 and 6 will be to start the Operable train. This is not a change from the CTS. The required Action for a single train inoperable during movement of irradiated fuel will be to suspend movement of irradiated fuel. These Actions either exit the applicability or provide assurance that the remaining unit is available by eliminating an active failure (i.e. failure to start on demand). With one train inoperable, separate Actions requiring suspension of Core Alterations are not required and are being deleted from the ITS since Core Alterations are within the scope of the Applicability of Modes 5 and 6. This is more restrictive change since the addition of the required actions during movement of irradiated fuel is an additional requirement not currently contained in the CTS.</p>



RESPONSE TO NRC RAI ON PVNGS ITS 3.7, "PLANT SYSTEMS"

Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.11-2	L2	CTS 4.7.7.a	<p>CTS 4.7.7.a requires testing of the CREFS every 31 days on a STAGGERED TEST BASIS. ITS SR 3.7.11.1 does not require testing to be performed on a STAGGERED TEST BASIS. ITS SR 3.7.11.1 also requires "each" CREFS train tested at the 31 day interval; thus each train is tested twice as often as required in the CTS. These changes result in a more restrictive change. The discussion in L-2 seems backward.</p>	<p>The definition of STAGGERED TEST BASIS has changed between CTS and ITS. Both ITS and CTS require testing of each train every 31 days. In the CTS, testing is required every 31 days on a STAGGERED TEST BASIS. In accordance with the CTS definition, this requires all (both) trains to be tested every 31 days. In the ITS the requirement to stagger the test schedule of the trains has been deleted, but the frequency of testing remains at 31 days. The interval for the testing of the CTS and ITS is the same and does not represent a change. The elimination of the requirement to perform the testing on a STAGGERED TEST BASIS is a less restrictive change.</p>

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Issue #	DOC# or JFD#	CTS/STS REF:	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.12-1	L4	CTS 3.7.7 ACTION	<p>CTS 3.7.7 ACTION for MODES 5 and 6 states in part, "...initiate and maintain operation of the remaining OPERABLE control room essential filtration system." ITS 3.7.12 ACTION C requires the OPERABLE CREATCS train placed in operation or CORE ALTERATIONS suspended and movement of irradiated fuel assemblies suspended. The justification discusses the removal of the initiators of a fuel handling accident by this added ACTION option. However, OPERABILITY of the CREATCS is required in MODES 5 and 6 irrespective of fuel movements. This requirement is not satisfied nor the Applicability exited by the added ACTION option.</p> <p>This comment is similar to 3.7.11-1.</p>	See the response to issue number 3.7.11-1.



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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.13-1	L1	CTS 4.7.8.a	<p>CTS 4.7.8.a states in part, "At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers." ITS SR 3.7.13.1 also requires this test performed every 31 days but does not allow testing on a STAGGERED TEST BASIS. The ITS SR 3.7.13.1 requirement now includes testing "each" train every 31 days, whereas the CTS only required one train tested every 31 days. This is a more restrictive requirement.</p> <p>This comment is similar to 3.7.11-2</p>	See the response to issue number 3.7.11-2.
3.7.13-2	LA1		The CTS 4.7.8 b. details for performance of system functional testing are moved to plant procedures. The discussion does not indicate which plant procedures the requirements are moved to.	See the response to issue number 3.7.1-4.

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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.13-3	M.1	CTS 4.7.8a	New Issue	<p>The original PVNGS ITS submittal increased the amount of time that the ESF PREACS system had to operate in order to perform surveillance ITS 3.7.13.1. The change was from 15 minutes (as specified in the CTS) to 10 hours (as specified in the ITS and NUREG). This is being revised to specify 15 minutes in accordance with the PVNGS current licensing basis. This will no longer be identified as a change in the ITS since it will be consistent with the CTS. The justification for maintaining the PVNGS currently licensing basis is contained in UFSAR section 1.8. This section identifies an exception to Regulatory Guide 1.52 to indicate that 15 minutes is an acceptable alternative to run the system due to the arid climate and dry conditions at the PVNGS site.</p>



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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.14-1	None	ITS 3.7.14 Bases	It is unclear from the discussion whether all the rods in the bundle failing is assumed as well as the shielding approximation.	As stated in the Background section of the ITS Bases, the assumptions of a fuel handling accident are given in the UFSAR, Section 15.7.4 and also discussed in the corresponding SER. The PVNGS analysis assumes that the first 4 rows of fuel rods fail. In the PVNGS accident evaluation, the damaged fuel rods are the four rows nearest the spent fuel racks and are 22 feet 6 inches below the low water level.
3.7.14-2	LA1	CTS 3.9.11	CTS 3.9.11 states in part, "With the requirement of the Specification not satisfied, suspend ...all crane operations with loads in the fuel storage areas..." ITS 3.7.14 moves this restriction on crane operations to a Licensee Controlled Document. The discussion does not indicate which documents the requirement is moved to.	See the response to issue number 3.7.1-4.

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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.15-1	L1	CTS 3.9.13	<p>CTS 3.9.13 is applicable whenever fuel assemblies are in the spent fuel storage pool. ITS 3.7.15 is applicable when fuel assemblies are stored in the fuel storage pool and a fuel storage pool verification was not performed since the last movement of fuel assemblies in the fuel storage pool. This change is a NUREG exception which has been submitted as traveller TSTF-70.</p> <p>Comment: The NRC has approved TSTF-70.</p>	TSTF 70 has been approved by the NRC. No additional action is necessary.

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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.16-1	LA1	CTS 4.7.1.4	CTS 4.7.1.4 requires a gross activity determination to be performed on the secondary coolant once per 72 hours. This requirement is moved to a plant procedure which is not specified.	See the response to issue number 3.7.1-4.

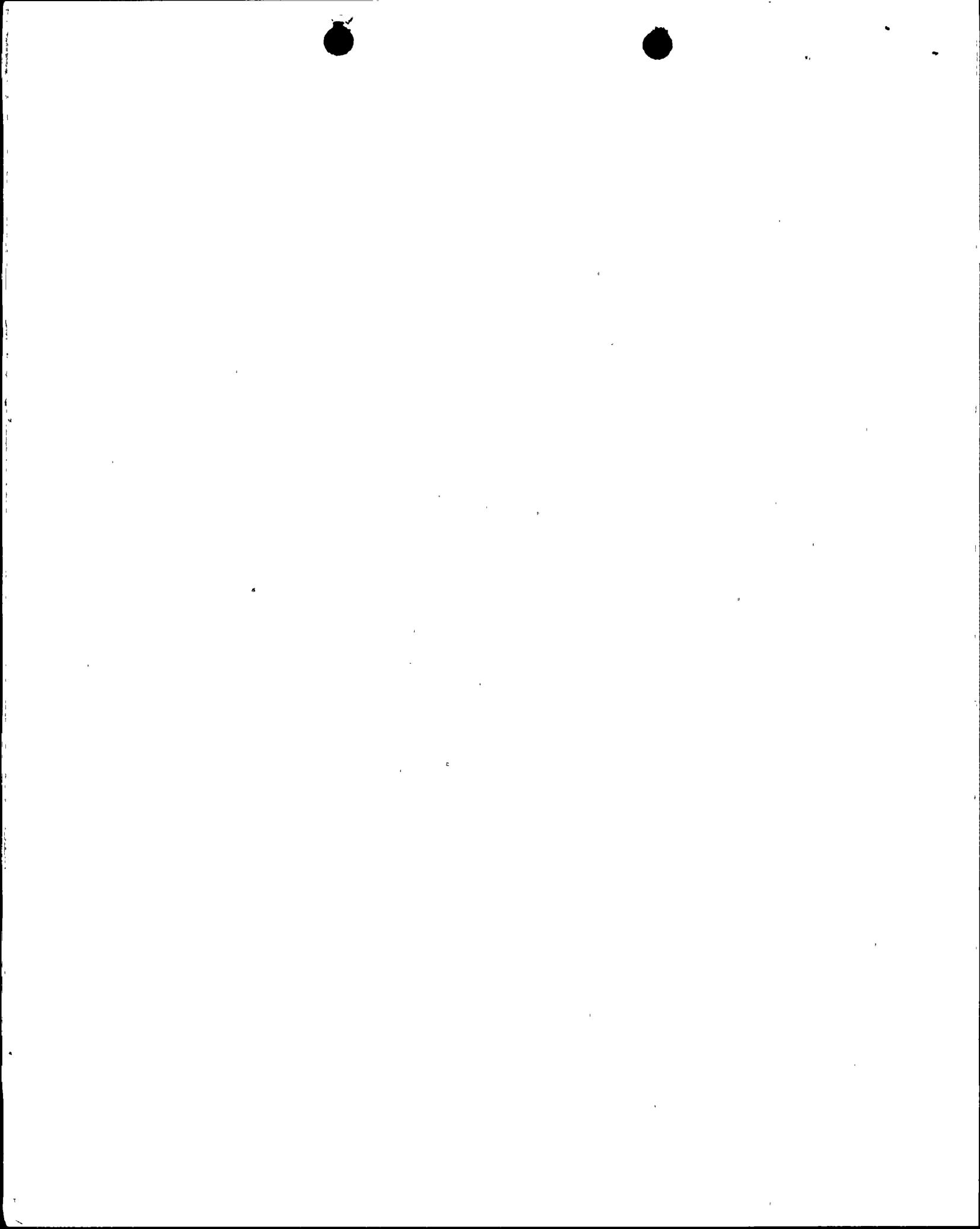
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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.17	NA	NA	No Comments	No response necessary.



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Issue #	DOC# or JFD#	CTS/STS REF.	DESCRIPTION OF ISSUE	PVNGS RESPONSE
3.7.R-1	R.1	CTS 3.7.2	CTS 3.7.2 requires the temperature of the secondary coolant in the steam generator to be greater than 120°F when the pressure of the secondary coolant in the steam generator is greater than 230 psig. This requirement is relocated to plant procedures. The justification does not specify which procedures, or describe associated controls.	The Current Technical Specifications that do not satisfy the criteria of 10CFR50.36(c)(2)ii are identified in the PVNGS ITS Split Report. These specifications do not need to be retained in the CTS and are being relocated to the PVNGS Technical Requirements Manual (TRM). The TRM will be incorporated by reference into the UFSAR and therefore changes to the TRM will be governed by the provisions of 10CFR50.59. Sufficient regulatory controls exist under 10CFR50.59 to maintain the effectiveness of the provisions of these specifications.
3.7.R-2	R.2	CTS 3.7.9	CTS 3.7.9 requires all hydraulic and mechanical snubbers OPERABLE. This requirement is relocated to other plant controlled documents. The justification does not specify which documents or describe associated controls.	See the response to issue number 3.7.R-1.
3.7.R-3	R.3	CTS 3.7.10	CTS 3.7.10 requires each sealed source containing radioactive material either in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material to be free of greater than or equal to 0.005 microcuries of removable contamination. This requirement is relocated to other plant controlled documents. The justification does not specify which documents or describe associated controls.	See the response to issue number 3.7.R-1.



ENCLOSURE 2

ITS Section 3.7

